August 18, 1986

Docket No. 50-286

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Mr. John C. Brons
Senior Vice President
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Power Authority of the State of
New York
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White Plains, New York 10601

Dear Mr. Brons:

The Commission has issued the enclosed Amendment No. 67 to Facility Operating License No. DPR-64 for the Indian Point Nuclear Generating Unit No. 3. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated July 1, 1985 and supplemented March 10, 1986.

The amendment revises the Technical Specifications to incorporate changes related to the Low Temperature Overpressure Protection System (LTOPS). Section 3.1 of the Technical Specifications has been expanded to include the requirements necessary to allow startup of a Reactor Coolant Pump under various operating conditions. Section 3.3 has been expanded to address overpressure protection system considerations related to safety injection pumps. Other sections have been revised to reflect these changes.

A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Original signed by:

Joseph D. Neighbors, Senior Project Manager
Project Directorate #3
Division of PWR Licensing-A

Enclosure:
Amendment No.67 to DPR-64

cc: See next page

PD#3	PD#3	OELD	PD#3
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8/4/86	8/4/86	8/11/86	8/18/86

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Power Authority of the State
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Indian Point Nuclear Generating
Unit No. 3

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

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-286

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 67
License No. DPR-64

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

   A. The application for amendment by Power Authority of the State of New York (the licensee) dated July 1, 1985 and supplemented March 10, 1986, 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-64 is hereby amended to read as follows:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 67 , 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 and shall be implemented within 90 days after its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Director
PWR Project Directorate #3
Division of PWR Licensing-A, NRR

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 18, 1986

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

ATTACHMENT TO LICENSE AMENDMENT NO. 67

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Revise Appendix A as follows:

Remove Pages	Insert Pages
List of Figures	List of Figures
3.1-1a	3.1-1a
------	3.1-1b
3.1-2a	3.1-2a
3.1-3	3.1-3
3.1-3a	3.1-3a
------	3.1-3b
------	Figure 3.1.A-1
------	Figure 3.1.A-2
------	Figure 3.1.A-3
------	Figure 3.1.A-4
------	Figure 3.1.A-5
------	Figure 3.1.A-6
3.3-1	3.3-1
3.3-5a	3.3-5a
3.3-19	3.3-19
------	3.3-19a
Table 3.5-3 (Sheet 3 of 3)	Table 3.5-3 (Sheet 3 of 3)
Table 4.1-1 (Sheet 5 of 5)	Table 4.1-1 (Sheet 5 of 5)
6-17	6-17

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Core Limits - Three Loop Operation	2.1-2
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Maximum Permissible RCS Pressure for RCP Start(s) with OPS Inoperable (SG Temp. > T_{cold} for additional pump starts, SG Temp. < T_{cold} for all pump starts)	3.1.A-2
RCS Pressure Limits for Low Temperature Operation	3.1.A-3
Maximum Pressurizer Level for OPS Inoperable and First RCP Start (SG Temp. > T_{cold})	3.1.A-4
Pressurizer Level for OPS Inoperable and One (1) Charging Pump Energized	3.1.A-5
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Facility Management and Technical Support Organization	6.2-1
Facility Organization	6.2-2

e. When the reactor is critical and above 2% rated power, except for natural circulation tests, at least two reactor coolant pumps shall be in operation.

f. The reactor shall not be operated at power levels above 10% rated power with less than four (4) reactor coolant loops in operation.

g. If the requirements of 3.1.A.1.e and 3.1.A.1.f above cannot be satisfied, the reactor shall be brought to the hot shutdown condition within 1 hour.

h. A reactor coolant pump (RCP) may not be started (or jogged) when the RCS cold leg temperature (T_{cold}) is at or below 326°F, with no other RCP's operating, unless RCS make up is not in excess of RCS losses, and one of the following requirements is met:

(1) The OPS is operable, steam generator pressure is not decreasing, and the temperature of each steam generator is less than or equal to the coldest T_{cold};

Or

(2) The OPS is operable, the temperature of the hottest steam generator exceeds the coldest T_{cold} by no more than 64°F, pressurizer level is at or below 75 percent, and T_{cold} is as per Figure 3.1.A-1;

Or

(3) The OPS is inoperable, steam generator pressure is not decreasing, the temperature of each steam generator is less than or equal to the coldest T_{cold}, pressurizer level is at or below 75 percent, and the RCS pressure does not exceed that given by Curve I on Fig. 3.1.A-2;

Or

(4) The OPS is inoperable, the temperature of the hottest steam generator exceeds the coldest T_{cold} by no more than 64°F, and pressurizer level and RCS pressure do not exceed the boundaries given on Fig. 3.1.A-4.

i. Additional pumps may not be started (or jogged) unless the OPS is operable and the pressurizer level is not increasing.

(1) Specification 3.1.A.1.i above may be modified to allow the OPS inoperable, providing the temperature of each steam generator has remained less than or equal to the coldest T_{cold} since the first RCP start, pressurizer level is at or below 75 percent, and the RCS pressure does not exceed that given by Curve I on Fig. 3.1.A-2.

Amendment No. ~~48~~, ~~53~~, 67

(2) Specification 3.1.A.1.i above may be further modified to allow the OPS inoperable and the temperature of the hottest steam generator to be no greater than 64°F higher than the coldest T_{cold}, provided that pressurizer level is at or below 75 percent and RCS pressure does not exceed that given by Curve II on Fig. 3.1.A-2.

j. Following the start of one or more RCP's and prior to reaching 326°F, the RCS pressure shall not exceed that given by Curves I and II on Fig. 3.1.A-3 as appropriate.

7. REACTOR VESSEL HEAD VENTS

Whenever the reactor coolant system is above 350°F, two reactor vessel head vent paths consisting of two valves in series with power available from emergency buses shall be OPERABLE.

a. If one of the above reactor vessel head vent paths is inoperable, startup and/or power operation may continue provided the inoperable vent path is maintained closed with power removed from the valve actuator of all the valves in the inoperable vent path. Restore the inoperable vent path to operable status within 90 days, or be in hot shutdown within 6 hours and be below 350°F within the following 30 hours.

b. With both reactor vessel head vent paths inoperable restore one vent path to operable status within 7 days or be in hot shutdown within 6 hours and be below 350°F within the following 30 hours.

8. OVERPRESSURE PROTECTION SYSTEM (OPS)

a. When the RCS temperature is below 326°F and the RCS is not depressurized and vented with an equivalent opening of at least 2.00 square inches, the OPS shall be "armed" and "operable". Both OPS PORVs shall have lift settings not to exceed those given by Curve III (OPS PORV setpoint limit curve) on Fig. 3.1.A-3.

b. The requirements of 3.1.A.8.a. may be modified to allow one PORV and/or its series MOV to be inoperable for a maximum of seven (7) consecutive days. If the single PORV and/or its series MOV are not restored to meet the requirements of 3.1.A.8.a. within the seven (7) day period, or if both PORVs and/or their series MOVs are inoperable when required to be operable by 3.1.A.8.a., then one of the following actions shall be performed:

(1) The RCS must be depressurized and vented with an equivalent opening of at least 2.00 square inches;

Or

(2) The RCS must be heated in accordance with Specifications 3.1.A.1.h(3) and (4) and maintained above 370°F;

Or

(3) Restrict pressurizer level as per the curves referenced below:

For up to 1 charging pump in operation with no SI pumps energized and aligned to feed the Reactor Coolant System, see Fig. 3.1.A-5.

For up to 3 charging pumps in operation concurrent with up to 1 SI pump energized and aligned to feed the Reactor Coolant System, see Fig. 3.1.A-6.

c. In the event the PORV's or the RCS vent(s) are used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2.k. within 30 days. The report shall describe the circumstances initiating the transient, the effect of the PORVs or vent(s) on the transient and any corrective action necessary to prevent recurrence.

Basis

When the boron concentration of the Reactor Coolant System is to be reduced the process must be uniform to prevent sudden reactivity changes in the reactor. Mixing of the reactor coolant will be sufficient to maintain a uniform boron concentration if at least one reactor coolant pump or one residual heat removal pump is running while the change is taking place. The residual heat removal pump will circulate the primary system volume in approximately one half hour. The pressurizer is of no concern because of the low pressurizer volume and because the pressurizer boron concentration will be higher than that of the rest of the reactor coolant.

Heat transfer analyses show that reactor heat equivalent to 10% of rated power (P-7) can be removed with natural circulation only (1); hence, the requirement for one operating RCP above 350°F and two operating RCP's above 2% rated power provides a substantial safety factor. In addition, a single RCP or RHR pump (connected to the RCS) provides sufficient heat removal capability for removing decay heat.

The reactor shall not be operated at power levels above 10% rated power with less than four (4) reactor coolant loops in operation until safety analyses for less than four loop operation have been submitted by the licensee and approval for less than four loop operation at power levels above 10% rated power has been granted by the Commission. (See license condition 2.C.(3))

Each of the pressurizer code safety valves is designed to relieve 420,000 lbs. per hr. of saturated steam at the valve set point.

If no residual heat were removed by the Residual Heat Removal System the amount of steam which could be generated at safety valve relief pressure would be less than half the capacity of a single valve. One valve therefore provides adequate protection for overpressurization.

The combined capacity of the three pressurizer safety valves is greater than the maximum surge rate resulting from complete loss of load (2) without a direct reactor trip or any other control.

The requirement that 150 kw of pressurizer heaters and their associated controls be capable of being supplied electrical power from an emergency bus provides assurance that these heaters can be energized during a loss of offsite power condition to maintain natural circulation at hot shutdown.

The power operated relief valves (PORVS) operate to relieve RCS pressure below the setting of the pressurizer code safety valves. These relief valves have remotely operated block valves to provide a positive shutoff capability should a relief valve become inoperable. The electrical power for both the relief valves and the block valves is capable of being supplied from an emergency power source to ensure the ability to seal off possible RCS leakage paths.

T_{cold} of 546.9°F at a flow of 323,600 gpm. Restricting maximum Tavg to 576°F (indicated) at all power levels will preserve the steady-state DNB margins assured in WCAP-10704.

Reactor vessel head vents are provided to exhaust noncondensible gases and/or steam from the primary system that could inhibit natural circulation core cooling. The OPERABILITY of at least one reactor vessel head vent path ensures the capability exists to perform this function.

The valve redundancy of the reactor coolant system vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve power supply or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the reactor coolant system vent systems are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plan Requirements", November, 1980.

The OPS is designed to relieve the RCS pressure for certain unlikely incidents to prevent the peak RCS pressure from exceeding the 10 CFR 50, Appendix G, limits. "Arming" means that the motor operated valve (MOV) is in the open position. This can be accomplished either automatically by the OPS when the RCS temperature is less than or equal to 326°F or manually by the control room operator.

The start of an RCP is allowed when the steam generators' temperature does not exceed the RCS and the OPS is operable (i.e., both PORVs available). During all modes of operation, the steam generator temperature may be measured using the Control Room instrumentation or, as a backup, from a contact reading off the steam generator's shells.

Most start-ups will satisfy these requirements as provided in Specification 3.1.A.1.d.(1)(a). In order to allow start of an RCP when the steam generators are hotter than the RCS, requirements for a pressurizer bubble (gas or steam) are developed. During this Heat Input initiation event the RCS fluid temperature rise is considerably more rapid than the reactor vessel metal temperature rise. Since OPS utilizes a setpoint curve (Fig. 3.1.A-2, curve II) and the temperature measured is the fluid temperature, and not the reactor vessel metal, it is necessary to shift to the right the OPS setpoint curve to ensure the pressure does not exceed the allowable (Appendix G) values for the vessel. For the conditions when the OPS is inoperable, additional requirements are developed for the pressurizer bubble, RCS pressure and temperature.

Due to the rate of energy transferred to the RCS, when the RCP is started, the resultant rate of temperature rise and the pressure increase are strongly dependent on the temperature difference between the RCS and the steam generators. The presence of a pressurizer bubble provides for a more moderate pressure increase. The bubble size is sufficient to prevent the RCS from going water solid for 10 minutes during which time operator action will terminate the pressure transient. Pressurizer level refers to indicated level and includes instrument uncertainty. The preventive measures for a Mass Input initiating event (i.e., SI pump or charging pumps) as well as the Heat Input initiating event are described in References (3), (4) and (5). (Also refer to Specification 3.3.A.8. Safety Injection and Residual Heat Removal Systems). The OPS need not be operable when the RCS temperature is less than 326°F if the RCS is depressurized and vented with an equivalent opening of at least 2.00 square inches. This opening is adequate to relieve the worst case analyzed.

The OPS arming temperature of 326°F permits the performance of an RCS hydrostatic test (see Fig. 4.3-1) without activating the OPS.

Upon OPS inoperability, the RCS may be heated above 370°F. This temperature is that value for which the RCS heatup and cooldown curves (Figures 3.1-1 and 3.1-2) permit pressurization to the setting of the pressurizer safety valves. Accordingly, with an inoperable OPS and an RCS temperature 370°F, the pressurizer safety valves will preclude violation of the 10 CFR 50, Appendix G, curves. In addition, the OPS need not be operable upon satisfying the conditions of Specification 3.1.A.8.b.(3) which requires the presence of a pressurizer bubble to preclude RCS overpressurization during inadvertant mass inputs. Specification 3.1.A.8.b(3) also places restrictions on the number of SI pumps capable of feeding the RCS (see Specification 3.3.A.8). An SI pump can be rendered capable of feeding the RCS if, for example, its switch is in the trip pull-out position, or if at least one valve in the flow path from the SI pump to the RCS is closed and locked (if manual) or de-energized (if motor operated).

This section has also been revised in accordance with the results of tests conducted on the capsule "T" specimens (Reference 6).

References

1) FSAR Section 14.1.6
2) FSAR Section 14.1.8
3) Letter dated 10/25/78 "Summary of Changes to IP-3 Plant Operating Procedures in Order to Preclude RCS Overpressurization"
4) Letter dated 2/28/76 "Conceptual Design of the Reactor Coolant Overpressure Protection System" and response to NRC questions.
5) IP-3 Low Temperature Overpressurization Protection System Analysis, NYPA Report dated 8/24/84.
6) WCAP-9491 "Analysis of Capsule T from IP-3 Reactor Vessel Radiation Surveillance Program", J. A. Davidson, S. L. Anderson, W. T. Kaiser, April 1979.

FIGURE 3.1.A-1

Maximum Permissible T_{cold} for First RCP Start

- OPS Operable
- Hottest SG Temperature > T_{cold}

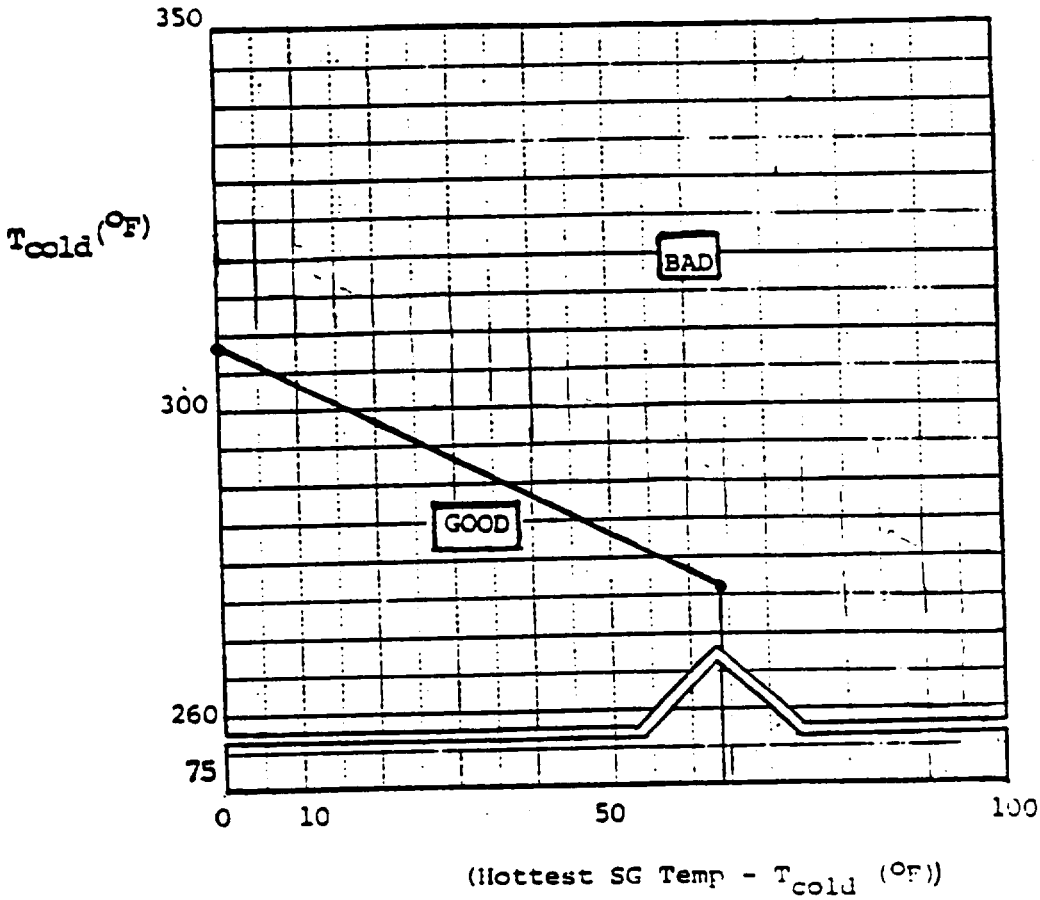


Figure 3.1.A-2 Maximum Permissible RCS Pressure for RCP Start with OPS Inoperable

Notes: No allowance for instrument error beyond 10°F and 30 psi in Appendix - G curve
Figure applicable to 9.26 EFPY

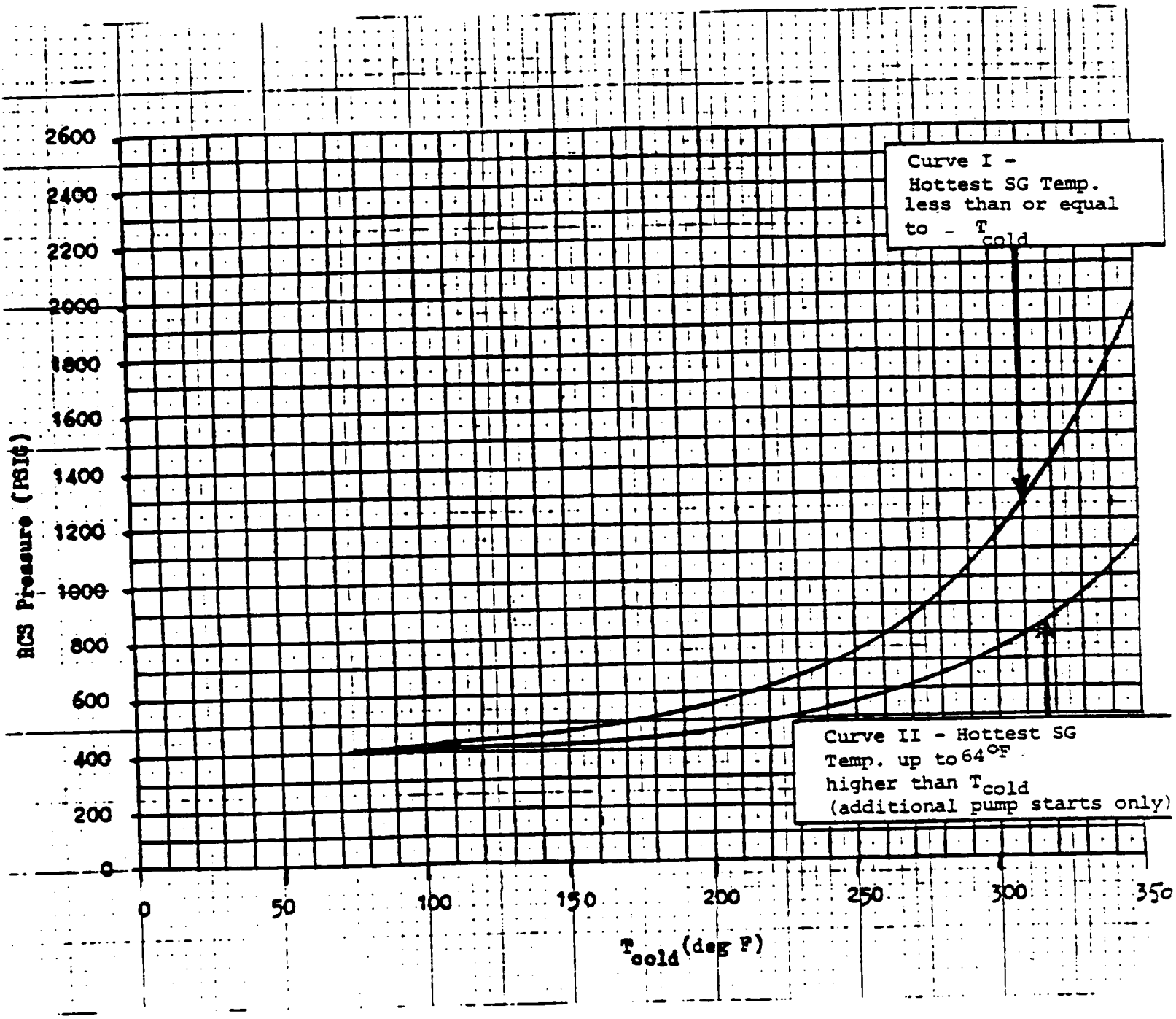


Figure 3.1.A-3 RCS Pressure Limits for Low Temperature Operation

Notes: No allowance for instrument error beyond 10°F and 30 psi in Appendix - G curve
Figure applicable to 9.26 EFPY

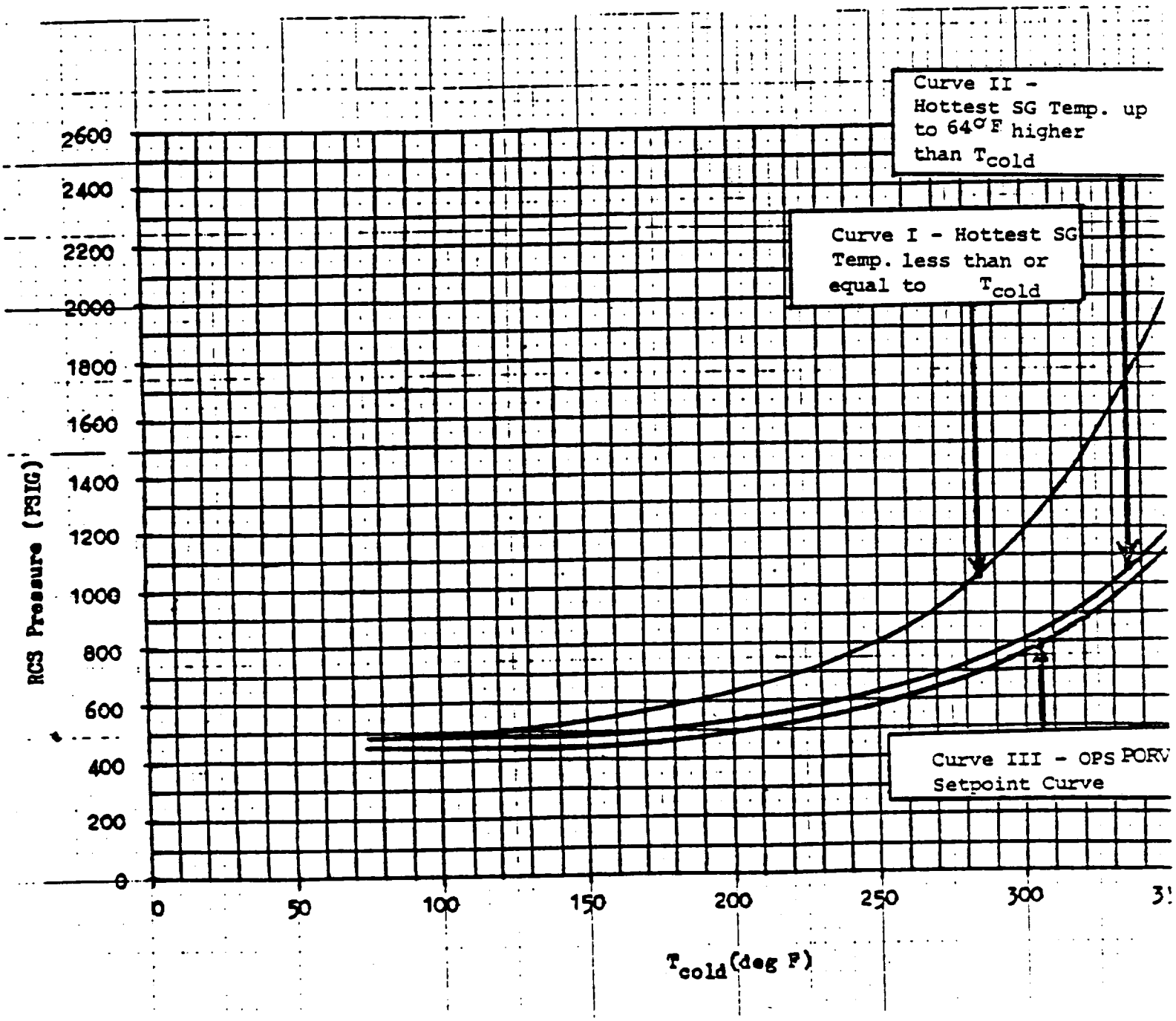


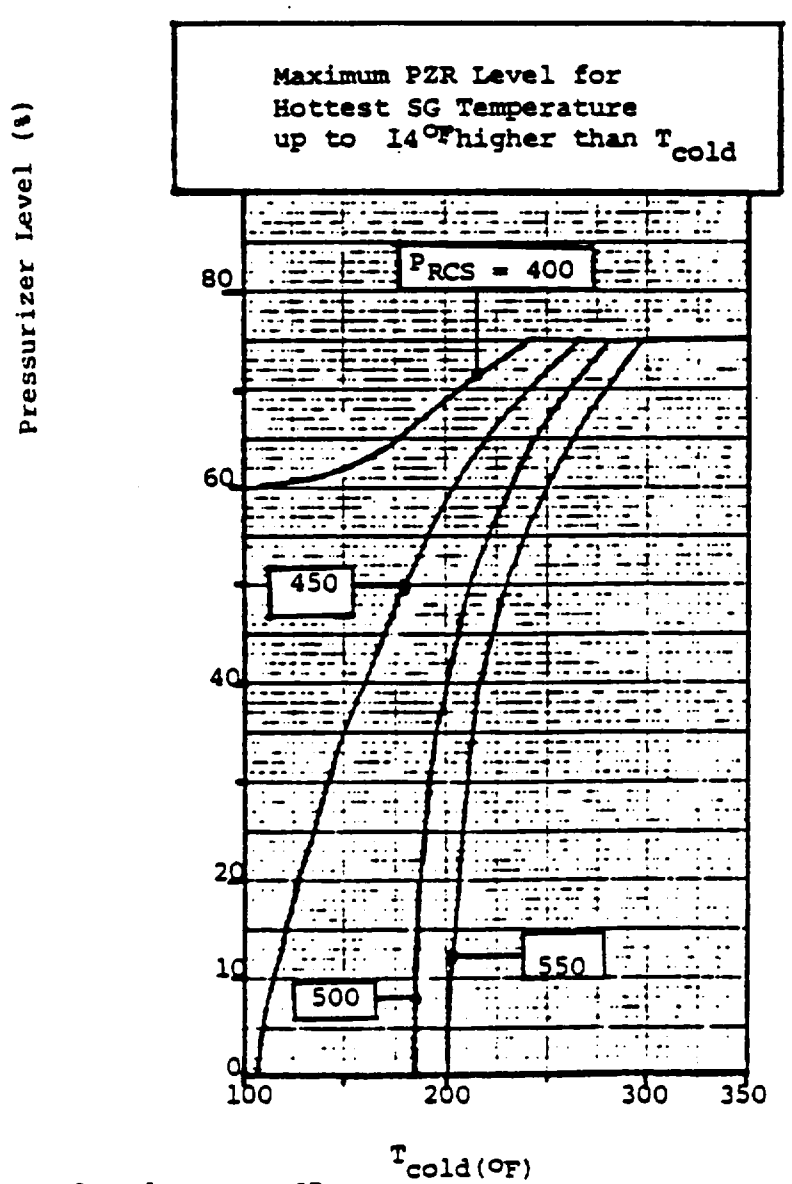
Figure 3.1.A-4

Maximum Pressurizer Level for OPS Inoperable and First RCP Start

(Steam Generator Temperature Greater than T_{cold})

Notes: No allowance for instrument error beyond 10°F and 30 psi in Appendix - G curve, and 5% PRZR LEVEL (Meas. Unc.)

Figure applicable to 9.26 EFPY
P_{RCS} = RCS Pressure (psig)



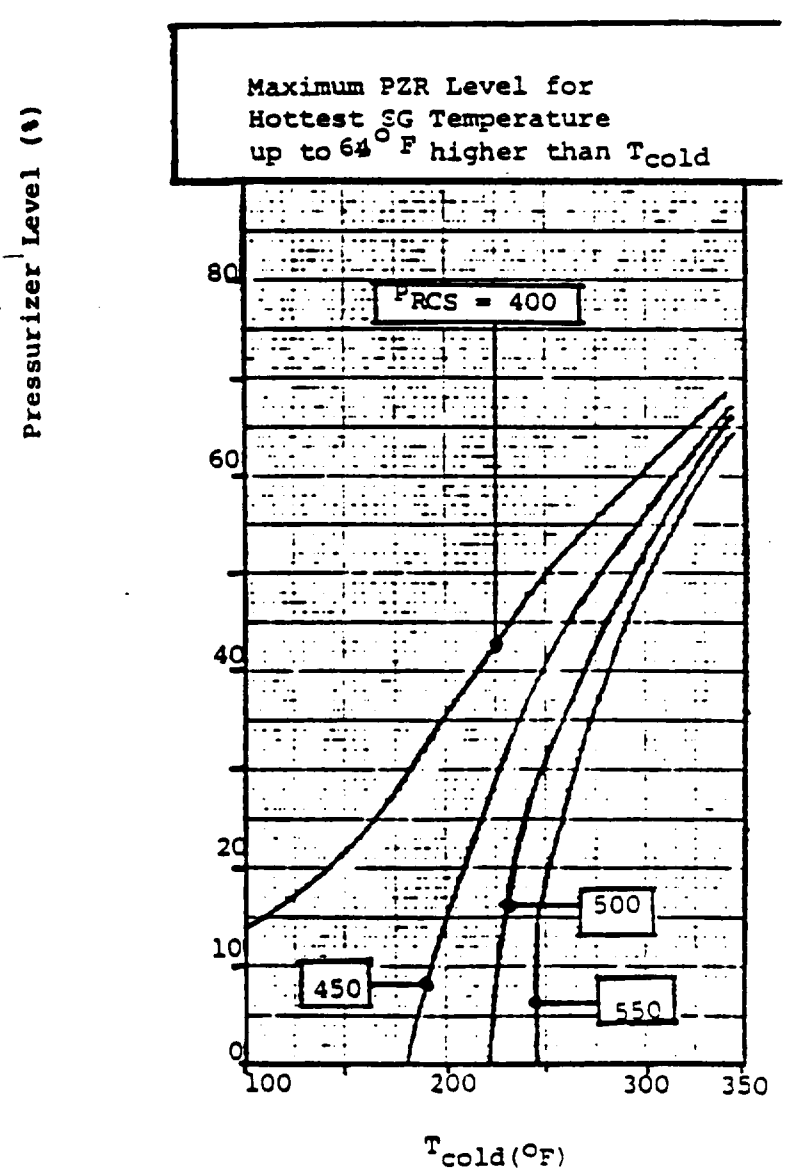


Figure 3.1.A-5 MAXIMUM PRESSURIZER LEVEL FOR PORVs INOPERABLE AND ONE (1) CHARGING PUMP ENERGIZED

NOTES: No allowance for instrument error, other than 10 °F and 30 psi in Appendix-G curve, and 5% PRZR% LEVEL (Meas. Unc.)

Figure applicable to 9.26 EFPY

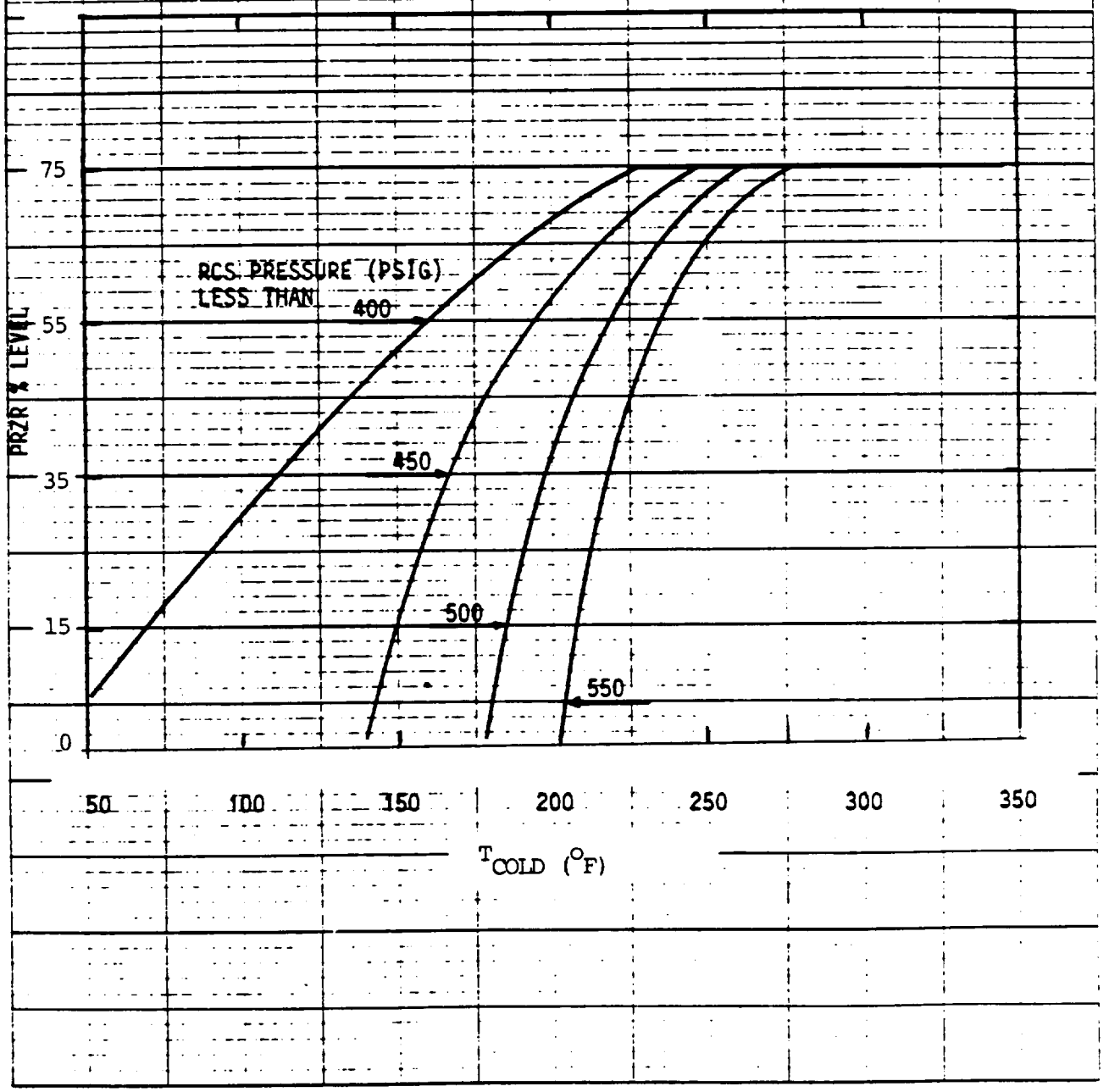
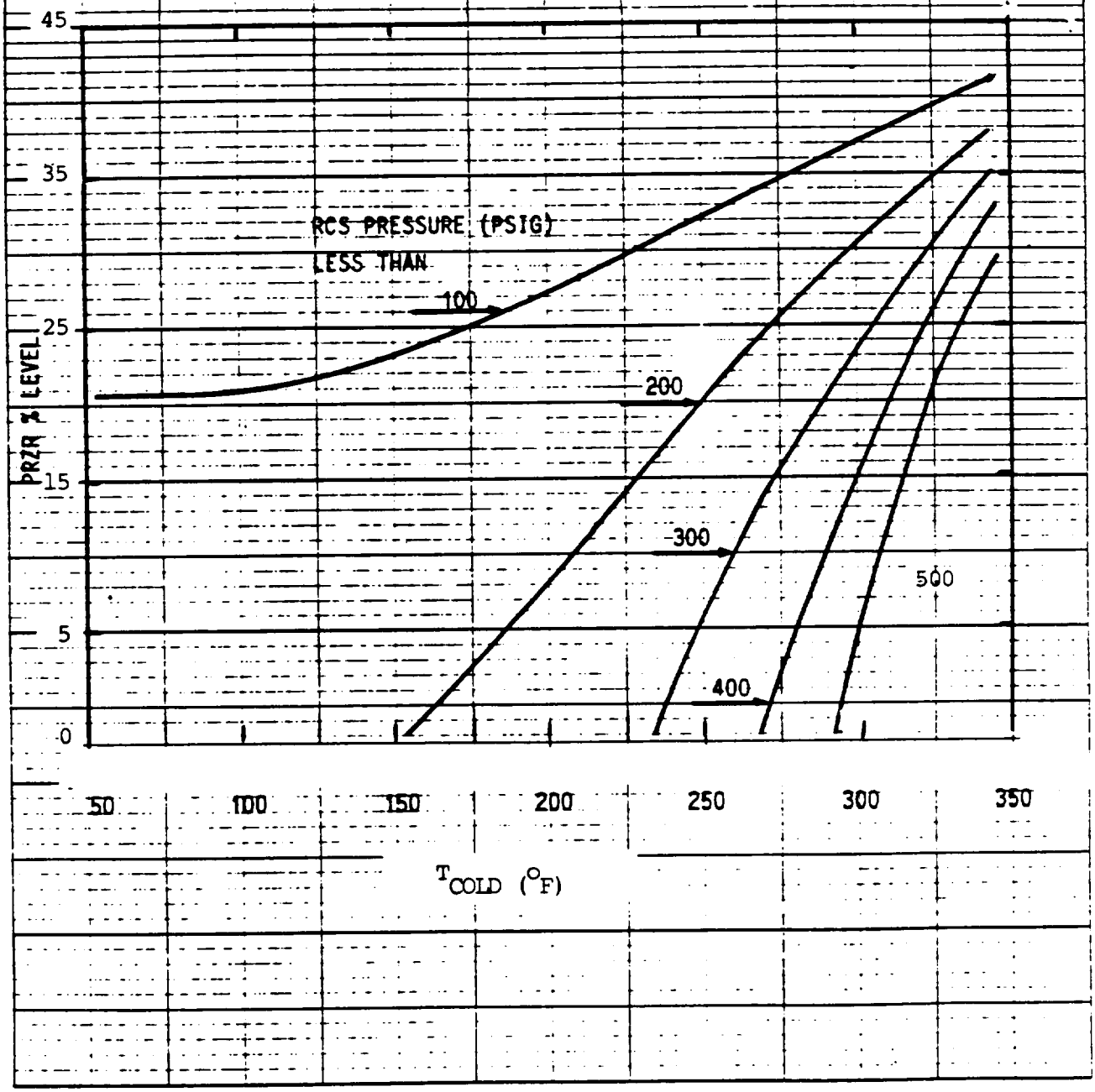


Figure 3.1.A-6 - MAXIMUM PRESSURIZER LEVEL FOR PORVs INOPERABLE AND ONE (1) SI AND/OR THREE (3) CHARGING PUMPS ENERGIZED

NOTES: No allowance for instrument error, other than 10 °F and 30 psi in Appendix-G curve, and 5% of PRZR% LEVEL (Meas. Unc.)

Figure applicable to 9.26 EFPY



3.3 ENGINEERED SAFETY FEATURES

Applicability

Applies to the operating status of the Engineered Safety Features.

Objective

To define those limiting conditions for operating that are necessary: 1) to remove decay heat from the core in emergency or normal shutdown situations; 2) to remove heat from containment in normal operating and emergency situations; 3) to remove airborne iodine from the containment atmosphere following a Design Basis Accident; 4) to minimize containment leakage to the environment subsequent to a Design Basis Accident; 5) to minimize the potential for and consequences of Reactor Coolant System pressure transients.

Specification

The following specifications apply except during low temperature physics tests.

A. Safety Injection and Residual Heat Removal Systems

1. The reactor coolant system T_{avg} shall not exceed 200°F unless the following requirements are met:

   a. The refueling water storage tank contains a minimum of 346,870 gallons of water at a boron concentration of at least 2000 ppm.

   b. One refueling water storage tank low level alarm operable and set to alarm between 98,100 gallons and 100,850 gallons of water in the tank.

2) RCS temperature and the source range detectors are monitored hourly; and

3) no operations are permitted which would reduce the boron concentration of the reactor coolant system.

8. When the RCS cold leg temperature (T_{COLD}) is at or below 326°F, no more than one safety injection pump shall be energized and aligned to feed the RCS.

B. Containment Cooling and Iodine Removal Systems

1. The reactor shall not be brought above the cold shutdown condition unless the following requirements are met:

a. The spray additive tank contains a minimum of 4000 gallons of solution with a sodium hydroxide concentration of not less than 30% by weight.

b. The five fan cooler-charcoal filter units and the two spray pumps, with their associated valves and piping, are operable.

2. The requirements of 3.3.B.1 may be modified to allow any one of the following components to be inoperable at one time:

sampling system consists of a sample line which originates in each of the containment fan cooler units. The fan and sampling pump head together are sufficient to pump containment air in a loop from the fan cooler through a containment penetration to a sample vessel outside the containment. The design hydrogen concentration for operating the recombiner is established at 2% by volume. Conservative calculations indicate that the hydrogen content within the containment will not reach 2% by volume until 12 days after a loss-of-coolant accident.(10) There is, therefore, no need for immediate operation of the recombiner following an accident, and the quantity of hydrogen fuel stored at the site will be only for periodic testing of the recombiners.

Auxiliary Component Cooling Pumps are provided to deliver cooling water for the two Recirculation Pumps located inside the containment. Each recirculation pump is fed by two Auxiliary Component Cooling Pumps. A single Auxiliary Component Cooling Pump is capable of supplying the necessary cooling water required for a recirculation pump during the recirculation phase following a loss-of-coolant accident.

The control room ventilation is designed to filter the control room atmosphere for intake air and/or for recirculation during control room isolation conditions. The control room system is designed to automatically start upon control room isolation and to maintain the control room pressure to the design positive pressure so that all leakage should be out leakage.

The OPS has been designed to withstand the effects of the postulated worst case Mass Input (i.e, single safety injection pump) without exceeding the 10 CFR 50, Appendix G curve. Curve III on Figure 3.1.A-3 provides the setpoint curve of the OPS PORVs which is sufficiently below the Appendix G curve such that PORVs overshoots would not exceed the allowable Appendix G pressures. Therefore, only one safety injection pump can be available to feed water into the RCS when the OPS is operable. The other pumps must be prevented from injecting water into the RCS. This may be accomplished, for example, by placing the SI pump

switches in the trip pull-out position, or by closing and locking (if manual) or de-energizing (if motor operated) at least one valve in the flow path from these pumps to the RCS. For conditions when the OPS is inoperable, additional restrictions are imposed on the RCS temperature, and pressurizer pressure and level. See Specification 3.1.A.6.b.(3).

References

1) FSAR Section 9
2) FSAR Section 6.2
3) FSAR Section 6.2
4) FSAR Section 6.3
5) FSAR Section 14.3.5
6) FSAR Section 1.2
7) FSAR Section 8.2
8) FSAR Section 9.6.1
9) FSAR Section 14.3
10) FSAR Section 6.8
11) FSAR Section 6.5
12) Response to Question 14.6, FSAR Volume 7
13) FSAR Appendix 14C
14) Response to Question 9.35, FSAR Volume 7

FUNCTIONAL UNIT	1	2	3	4	5
3. AUXILIARY FEEDWATER					
a. Stm Gen. Water Level-Low-Low					
i. Start Motor Driven Pumps	3/stm. gen	2 in any stm gen.	2 chan. in each stm gen	1	Reduce system temperature such that $T \leq 350^{o}F$
ii. Start Turbine-Driven Pump	3/stm. gen	2/3 in each of two stm. gen.	2 chan. in each stm. gen.	1	$T \leq 350^{o}F$
b. S. I. Start Motor-Driven Pumps	(All safety injection initiating functions and requirements)				
c. Station Blackout Start Turbine-Driven Pump	2	1	1	0	$T \leq 350^{o}F$
d. Trip of Main Feedwater Pumps start Motor-Driven Pumps	2	1	1	0	Hot Shutdown
4. LOSS OF POWER					
a. 480v Bus Undervoltage Relay	2/bus	1/bus	1/bus	0	See Note 1
b. 480v Bus Degraded Voltage Relay	2/bus	2/bus	2/bus (See Note 2)	0	See Note 1
5. Overpressure Protection System (OPS)	3	2	2	1	******

Note 1. If the 138KV and 13.8KV sources of offsite power are available and the conditions of column 3 or 4 cannot be met within 72 hours, then the requirements of 3.7.C.1 or 2 shall be met.

Note 2. If one channel becomes inoperable, it is placed in the trip position and the number of minimum operable channels is reduced by one.

******Refer to Specification 3.1.A.6.

Table 4.1 (Sheet 5 of 5)

	Channel Description	Check	Calibrate	Test	Remarks
39.	High-Range Containment Radiation Monitoring (R25, R26)	D	R	Q	
40.	Core Exit Thermocouples	D	N.A.	N.A.	
41.	Overpressure Protection System (OPS)	D	R	R	

* To be effective after completion of all required modictations.

S - Each Shift
P - Prior to each startup if not done previous week
Q - Quarterly
NA - Not Applicable
D - Daily
W - Weekly
M - Monthly
R - Each Refueling Outage

SPECIAL REPORTS (Cont'd)

i ~~j~~. Radioactive environmental sampling results in excess of reporting levels (Appendix B Specifications 2.7, 2.8, 2.9)

j. ~~k~~. Operation of Overpressure Protection System (Specification 3.1.A.8.c.)

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of facility operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspec- tions, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to Operating Procedures.

f. Records of radioactive shipments.

g. Records of sealed source and fission detector leak tests and results.

h. Records of annual physical inventory of all source material of record.

i. Records of reactor tests and experiments.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records of any drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of facility radiation and contamination surveys.

d. Records of radiation exposure for all individuals entering radiation control areas.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 67 TO FACILITY OPERATING LICENSE NO. DPR-64

POWER AUTHORITY OF THE STATE OF NEW YORK

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

DOCKET NO. 50-286

INTRODUCTION

By letter dated July 1, 1985, as supplemented March 10, 1986, the Power Authority of the State of New York (the licensee) requested an amendment to Facility Operating License No. DPR-64 which would revise the Indian Point Unit No. 3 Technical Specifications related to the Low Temperature Overpressure Protection System (LTOPS).

DISCUSSION AND EVALUATION

The NRC reviewed the LTOPS for Indian Point Unit 3 and approved it by letter dated June 28, 1984 which forwarded our Safety Evaluation of the LTOPS. In response to the NRC letter, the licensee submitted Technical Specifications which implement the provisions of the June 28, 1984 Safety Evaluation. The proposed Technical Specifications add requirements to Section 3.1 to allow start of a reactor coolant pump (RCP) in the LTOPS range of operation (i.e., reactor coolant system temperature is at or below 326°F). The curves associated with Section 3.1 incorporate measures to account for total instrument errors. Section 3.3 has been expanded to address overpressure protection system considerations related to safety injection pumps.

We have reviewed the proposed Technical Specifications and find that they conform to the Criteria of the Standard Review Plan 5.2.2 and Branch Technical Position RSB 5-2 and fulfill the requirements of the June 28, 1984 Safety Evaluation. On this basis, we concluded that the proposed Technical Specifications are acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in

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individual or cumulative occupations radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 18, 1986

PRINCIPAL CONTRIBUTORS:

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