

Pressurizer Pressure Control

Chapter 6.1



Objectives

1. State the purposes of the pressurizer pressure control system (PPCS).
2. List the sequence of actions performed by the PPCS for an increasing or decreasing pressure control signal.

Purpose

1. Maintain RCS pressure at 2250 psia
2. Minimize pressure excursions during transient operations
3. Provide pressure signals for indication, alarms and control

Figure 6.1-1 Pressurizer Pressure Control System

HI - 2350 PSIA
LO - 2100 PSIA
(1C06-E29)

B/S
ON - 2200 PSIA
OFF - 2225 PSIA

HI PZR LEVEL
DEVIATION

PZR LEVEL
>LOW LEVEL
SETPOINT

BACKUP HEATERS
(4 BANKS - 300 KW/BANK)

PIC
M/A
PIC-100X

PZR LEVEL
>LOW LEVEL
SETPOINT

PROPORTIONAL HEATERS
(2 BANKS - 150KW/BANK)
Maximum power at 2225 psia
Minimum power at 2275 psia

CHANNEL
SELECTOR
SWITCH
HS-100

HIC-100

PZR
SPRAY
VALVES
CV-100E CV-100F
Start to open at 2300 psia
Fully open at 2350 psia

PIC
M/A
PIC-100Y

Figure 6.1-2 Pressurizer Pressure Control Output vs. Pressure Deviation

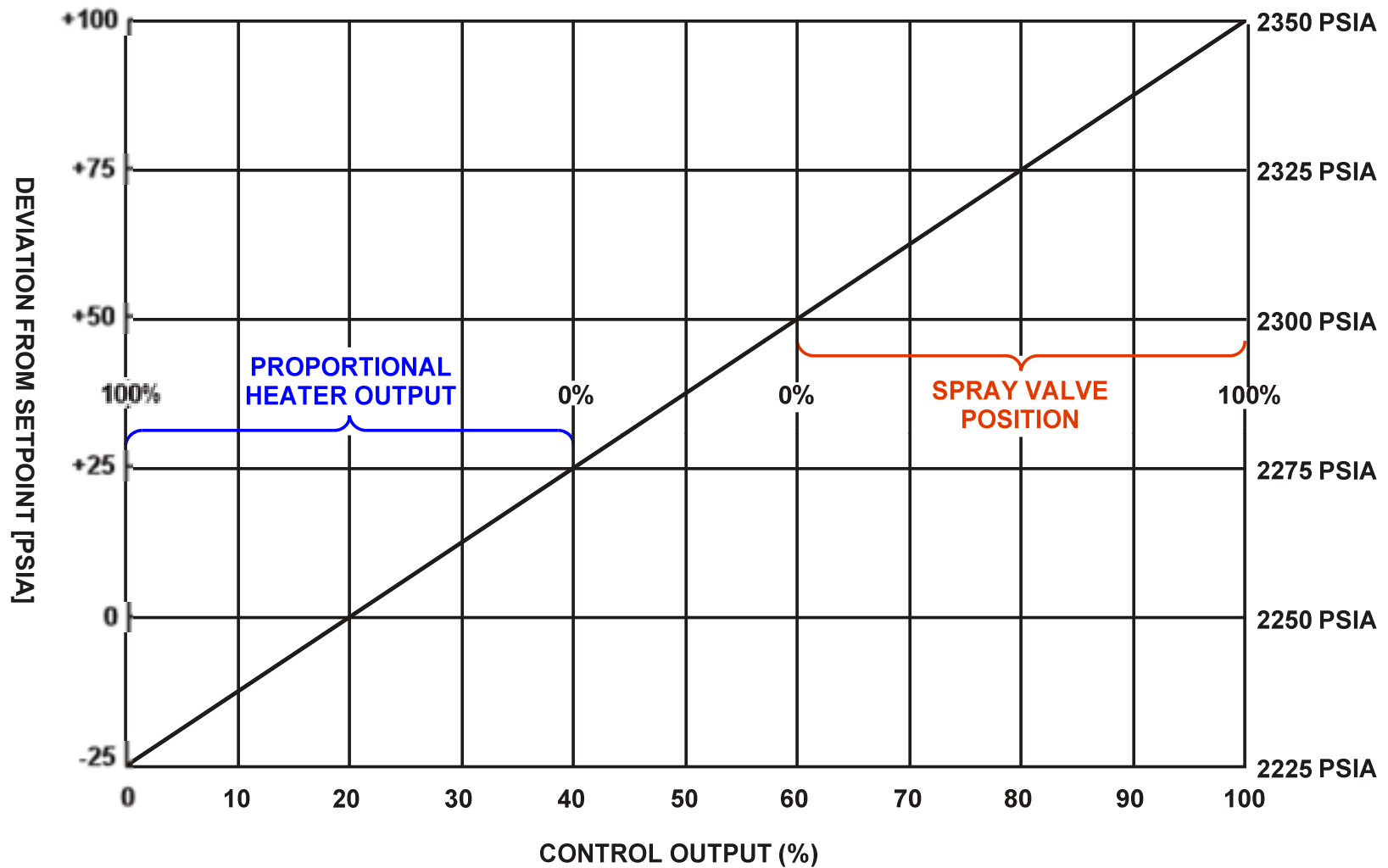
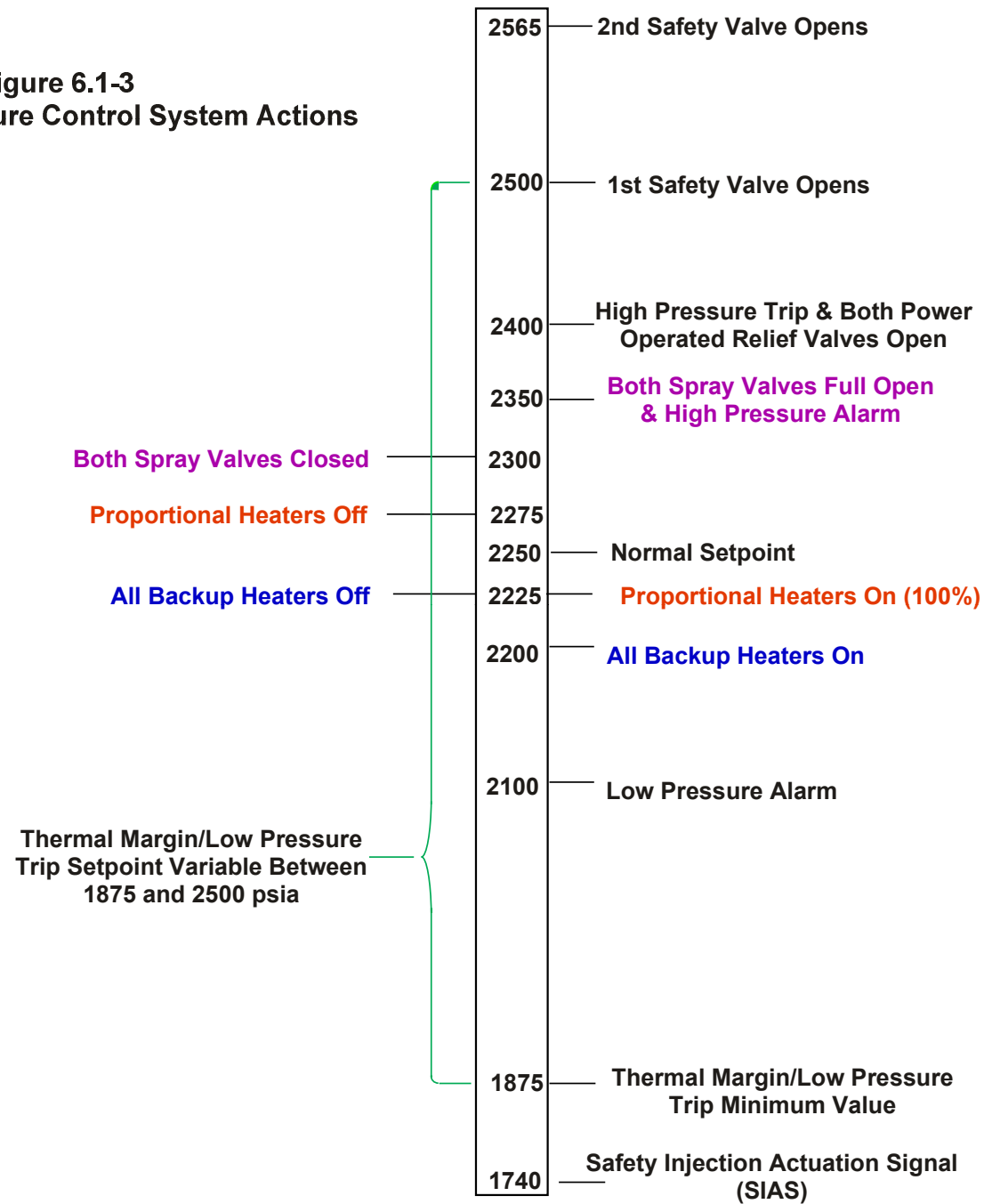


Figure 6.1-3
Pressurizer Pressure Control System Actions



The End