

**V. C. Summer Nuclear Station, Units 2 and 3
COL Application
Part 2, FSAR**

**CHAPTER 7
INSTRUMENTATION AND CONTROLS**

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**CHAPTER 7
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7.1 INTRODUCTION

This **section** of the referenced DCD is incorporated by reference with the following departures and/or supplements.

7.1.6.1 Setpoint Calculations for Protective Functions

STD COL 7.1-1 The Setpoint Program described in Technical Specifications Section 5.5 provides the appropriate controls for update of the instrumentation setpoints following completion of the calculation of setpoints for protective functions and the reconciliation of the setpoints against the final design.

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7.2 REACTOR TRIP

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.

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7.3 ENGINEERED SAFETY FEATURES

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.

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7.4 SYSTEMS REQUIRED FOR SAFE SHUTDOWN

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.

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7.5 SAFETY-RELATED DISPLAY INFORMATION

This **section** of the referenced DCD is incorporated by reference with the following departures and/or supplements.

7.5.2 VARIABLE CLASSIFICATIONS AND REQUIREMENTS

Add the following paragraph at the end of **DCD Subsection 7.5.2**.

STD COL 7.5-1 FSAR **Table 7.5-201** supplements **DCD Table 7.5-1** and provides variable data shown in the DCD Table as “site specific.”

7.5.3.5 Type E Variables

Add the following paragraph at the end of **DCD Subsection 7.5.3.5**.

STD COL 7.5-1 FSAR **Table 7.5-202** supplements **DCD Table 7.5-8** and provides variable data shown in the DCD Table as “site specific.”

7.5.5 COMBINED LICENSE INFORMATION

STD COL 7.5-1 This COL item is addressed in **Subsection 7.5.2** and **Table 7.5-201**, and in
VCS COL 7.5-1 **Subsection 7.5.3.5** and **Table 7.5-202**.

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**Table 7.5-201
Post-Accident Monitoring System^(a)**

VCS COL 7.5-1

Variable	Range/Status ^(b)	Type/ Category	Qualification		Number of Instruments Required	Power Supply	QDPS Indication	Remarks
			Environmental	Seismic				
Boundary environs Radiation • Airborne Radiohalogens and Particulates (portable sampling with onsite analysis capability) • Radiation (portable instrumentation) • Radioactivity (portable instrumentation)	10 ⁻⁹ to 10 ⁻³ μCi/cc 10 ⁻³ to 10 ⁴ R/hr. photons 10 ⁻³ to 10 ⁴ rads/hr. beta and low-energy photons Multichannel gamma ray spectrometer	C3, E3	None	None	No minimum number of instruments is specified. A sufficient number are provided to outfit the Emergency Planning Field Teams.	Non-1E	No	
Meteorological parameters • Wind speed • Wind direction • Differential temperature	0–144 mph ^(c) 0 degrees–360 degrees ^(d) –40°F to 140°F ^(e)	E3	None	None	2 (1 at 10 m and 1 at 60 m) 2 (1 at 10 m and 1 at 60 m) 2 (1 at 10 m and 1 at 60 m)	Non-1E	No	Differential temperature calculated from temperature measurements at 10 and 60 meters.

a) This table supplements **DCD Table 7.5-1** and provides the site specific information to address the note in the “Remarks” column of **DCD Table 7.5-1**.

b) These instruments conform to Regulatory Guide 1.97, Revision 3.

c) System accuracy ±0.011 mph @ 0–5 mph, ±0.11 percent @ 50 mph and ±0.11 percent @ 100 mph.

d) System accuracy ±0.22 degrees.

e) System accuracy 0.17°F (for –0.6°F to 107.7°F). Range specified is for individual temperature instruments.

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Table 7.5-202
Summary of Type E Variables^(a)

VCS COL 7.5-1

Function Monitored	Variable	Type/Category
Enviorns Radiation and Radioactivity	Plant Enviorns radiation levels and airborne radioactivity	E3
Meteorology	Wind speed, wind direction, and estimation of atmospheric stability (based on vertical temperature difference)	E3

a) This table supplements [DCD Table 7.5-8](#) and provides the site specific information noted in the "Variable" column of [DCD Table 7.5-8](#).

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7.6 INTERLOCK SYSTEMS IMPORTANT TO SAFETY

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.

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7.7 CONTROL AND INSTRUMENTATION SYSTEMS

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.