

**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 no departures or supplements.

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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

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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.

VCS SUP 7.5-1 FSAR Table 7.5-201 supplements DCD Table 7.5-1 and provides variable data shown in DCD Table 7.5-1 as “site specific.”

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

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

VCS SUP 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 SUP 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

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7.7 CONTROL AND INSTRUMENTATION SYSTEMS

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