# CHAPTER 7 INSTRUMENTATION AND CONTROLS

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#### **CHAPTER 7**

#### **INSTRUMENTATION AND CONTROLS**

#### 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.

## 7.2 REACTOR TRIP

## 7.3 ENGINEERED SAFETY FEATURES

## 7.4 SYSTEMS REQUIRED FOR SAFE SHUTDOWN

#### 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 paragraphs 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 LNP COL 7.5-1

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

#### LNP COL 7.5-1

## Table 7.5-201 Post-Accident Monitoring System<sup>(a)</sup>

			Qualification		Number of			
Variable	Range/Status	Type/ Category	Environmental	Seismic	Instruments Required	Power Supply	QDPS Indication	Remarks
Boundary environs radiation								
Airborne Radiohalogens and Particulates (portable sampling with onsite analysis capability)	10 <sup>-9</sup> to 10 <sup>-3</sup> μCi/cc							
Radiation (portable instrumentation)	10 <sup>-3</sup> to 10 <sup>4</sup> R/hr, photons; 10 <sup>-3</sup> to 10 <sup>4</sup> rads/hr, beta and low-energy photons	C3, E3	None	None	N/A	Non-1E	No	taken from RG 1.97 Revision 3
Radioactivity (portable instrumentation)	Multichannel gamma ray spectrometer							
Meteorological parameters	See Remarks							
Wind speed					2 (1 @ 10 m and 1 @ 60 m)			See FSAR Subsection 2.3.3 and
Wind Direction		E3	None	None	2 (1 @ 10 m and 1 @ 60 m)	Non-1E	No	Tables 2.3.3-201, 2.3.3-202
Differential Temperature					2 (10 – 60 m)			

a) This Table supplements DCD Table 7.5-1 and provides the site specific information in the remarks column of DCD Table 7.5-1.

## Table 7.5-202 Summary of Type E Variables<sup>(a)</sup>

#### LNP COL 7.5-1

Function Monitored	Variable	Type/ Category
Environs Radiation and	Plant Environs radiation levels and	E3
Radioactivity	airborne radioactivity	
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.

## 7.6 INTERLOCK SYSTEMS IMPORTANT TO SAFETY

#### 7.7 CONTROL AND INSTRUMENTATION SYSTEMS