

**19.15 CHEMICAL AND VOLUME CONTROL SYSTEM****19.15.1 System Description**

See subsection 9.3.6.2.

**19.15.2 System Operation**

See subsection 9.3.6.4.

**19.15.3 Performance during Accident Conditions**

See subsection 9.3.6.4.5.

**19.15.4 Initiating Event Review**

This section intentionally blank.

**19.15.5 System Logic Models****19.15.5.1 Assumptions and Boundary Conditions**

The following assumptions are used for the chemical and volume control system PRA model:

a. - i. Intentionally blank.

j. Either one of the two makeup pumps is sufficient to deliver borated water to the reactor coolant system. To simplify the PRA model, it is assumed that one makeup pump is always the operating pump and the other makeup pump is always the standby pump.

k. - q. Intentionally blank.

**19.15.5.2 Fault Tree Models**

This section intentionally blank.

**19.15.5.3 Human Interactions**

This section intentionally blank.

**19.15.5.4 Common Cause Failures**

This section intentionally blank.

**19.15.6 References**

19.15-1 Deleted.

TABLES 15-1 THROUGH 15-9 NOT INCLUDED IN THE DCD.  
FIGURES 15-1 AND 15-2 NOT INCLUDED IN THE DCD.

**19.16 Containment Hydrogen Control System**

See subsection 6.2.4.

**19.17 Normal Residual Heat Removal System**

See subsection 5.4.7.

**19.18 Component Cooling Water System**

See subsection 9.2.2.

**19.19 Service Water System**

See subsection 9.2.1.

**19.20 Central Chilled Water System**

See subsection 9.2.7.

**19.21 ac Power System**

See subsection 8.3.1.



**19.22 Class 1E dc & UPS System**

See subsection 8.3.2.1.1.

**19.23 Non-Class 1E dc & UPS System**

See subsection 8.3.2.1.2.

**19.24 Containment Isolation**

See subsection 6.2.3.

**19.25 Compressed and Instrument Air System**

See subsection 9.3.1.

**19.26 Protection and Safety Monitoring System**

See subsection 7.1.2.

**19.27 Diverse Actuation System**

See subsection 7.7.1.11.

**19.28 Plant Control System**

See subsection 7.1.3.

**19.29 Common Cause Analysis**

This section intentionally blank.



**19.30 Human Reliability Analysis**

This section intentionally blank.

**19.31 Other Event Tree Node Probabilities**

This section intentionally blank.

**19.32 Data Analysis and Master Data Bank**

This section intentionally blank.

**19.33 Fault Tree and Core Damage Quantification**

This section intentionally blank.