REVISED DRAFT TECHNICAL SPECIFICATIONS

This attachment includes revised drafts of the following upgraded Technical Specifications:

3/4.6.5.2 -	Revised to delete charcoal filter test exceptions after painting with low solvent paints, and to define acceptable painting in the BASIS.
3/4.7.1.5 and 3/4.7.1.6 -	Revised to require at least one operable EES Safety Valve per loop, for each boiler feed pump that is operating and supplying the EES Sections.
6.5.1.2 and 6.2.3.3 -	Revised to reflect recent PSC re-organization, as discussed in P-88184.

The single margin marks that were shown in the May 25, 1988 draft have been retained. Double margin marks indicate changes to the May 25, 1988 revised final draft.

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PCRV AND CONFINEMENT SYSTEMS

3/4.6.5 REACTOR BUILDING CONFINEMENT

REACTOR BUILDING EXHAUST SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.2 The reactor building exhaust system shall be OPERABLE with:

a. Reactor building internal pressure subatmospheric, and

b. At least two of the three exhaust trains OPERABLE, with each train consisting of one exhaust fan (C-7301, C-7302, or C-7302S) and an associated filter assembly (F-7301, F-7302, or F-7302S).

APPLICABILITY: POWER, LOW POWER, STARTUP, SHUTDOWN and REFUELING*

ACTION:

a. POWER, LOW POWER, and STARTUP

1. With reactor building internal pressure greater than or equal to atmospheric pressure, restore it to subatmospheric within 6 hours or be in at least SHUTDOWN within the next 24 hours.

2. With only one exhaust train OPERABLE, restore an inoperable train to OPERABLE status within 7 days or be in at least SHUTDOWN within the next 24 hours.

b. SHUTDOWN and REFUELING*

1. With the reactor building internal pressure greater than or equal to atmospheric pressure, immediately suspend all operations involving CORE ALTERATIONS, control rod movements resulting in positive reactivity changes, or movement of IRRADIATED FUEL in the reactor building.

2. With only one exhaust train OPERABLE, restore an inoperable train to OPERABLE status within 7 days, or suspend all operations involving CORE ALTERATIONS, control rod movements resulting in positive reactivity changes, or movement of IRRADIATED FUEL in the reactor building.

* During CORE ALTERATIONS or handling of IRRADIATED FUEL in the reactor building.

4.6.5.2 The reactor building exhaust system shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the reactor building internal pressure is negative relative to atmospheric pressure.

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following significant fire, chemical release, or painting in any ventilation zone communicating with the system by:

1. Verifying that the exhaust system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the flow rate is between 17,100 and 23,000 cfm per train,

2. Verifying within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 10%, and

3. Verifying a flow rate between 17,100 and 23,000 cfm per train during system operation when tested in accordance with ANSI N510-1975.

c. After every 4000 hours of charcoal adsorber operation, by verifying within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 10%.

d. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches water gage while operating at a flow rate between 17,100 and 23,000 cfm for each filter train.

e. After each complete or partial replacement of a HEPA filter bank, by verifying that the HEPA filter bank satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1975 for a DOP test aerosol while operating the system at a flow rate between 17,100 and 23,000 cfm per train.

f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the charcoal adsorber bank satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1975 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate between 17,100 and 23,000 cfm per train.

BASIS FOR SPECIFICATION LCO 3.6.5.2/SR 4.6.5.2

The reactor building exhaust filter system is designed to filter the reactor building atmosphere prior to release to the facility vent stack during both normal and most accident conditions of operation. Additional information is provided in the BASIS for LCO 3.6.5.1/SR 4.6.5.1 and FSAR Section 6.2.4.

The system consists of three trains, two of which are normally in continuous operation (FSAR Section 6.2.3.2), with the third normally on standby. The design flow rate for each train is 19,000 cfm. Allowing 10%, the minimum flow rate is 17,100 cfm. Based on past performance data, a maximum flow rate of 23,000 cfm is also specified. One train is sufficient to maintain the reactor building subatmospheric and thereby minimize unfiltered fission product release from the building. With only one exhaust fan operating, the ventilation system controls will throttle fresh air supply to the air handler in order to reduce the pressure.

The reactor building is maintained in a subatmospheric condition to ensure that all air leakage will be inward and to minimize unfiltered fission product release from the building. The ventilation system was designed to maintain a subatmospheric condition of approximately 1/4 inch water gauge negative (FSAR 6.2.3.2). In actual practice, the reactor building pressure is normally indicated approximately 0.15 to 0.20 inches water gauge negative, depending on building activity and ventilation equipment configuration. There is an alarm at approximately 0.08 inches water gauge negative, and the air supply will fully close if the building pressure increases to atmospheric (FSAR Section 14.7.3).

Bypass leakage and penetration for the charcoal adsorbers and particulate removal efficiency for HEPA filters are determined by halogenated hydrocarbon and dioctyl phthalate (DOP) respectively. The laboratory carbon sample test results indicate a radioactive methyl iodide removal efficiency for expected accident conditions. The filter/adsorber penetration and bypass acceptance limits in the surveillances are applicable based on a HEPA filter efficiency of 95% and charcoal adsorber efficiency of 90% assumed in the AEC staff's Safety Evaluation (Table 4.3, Safety Evaluation, Jan. 20, 1972; and FSAR Section 14.12.3).

The surveillance frequencies specified establish system performance capabilities.

The activated carbon adsorber in the affected unit will be replaced if a representative sample fails to pass the iodine removal efficiency test. Any HEPA filters found defective will be replaced.

If fire, chemical release, or painting, occurs such that the HEPA filter or charcoal adsorber could become significantly contaminated from the fumes, chemicals, or foreign materials, the same tests and sample analysis should be performed, as required, for operational surveillance. Reactor building exhaust train(s) OPERABILITY should be verified per SR 4.6.5.2.b following:

1. Painting with greater than 5 gallons of paint, including water-base or equivalent paint, over the six-month normal surveillance interval,

2. Any spray (aerosol generating) painting (includes water-base or equivalent paint),

3. Fires that exceed 1 hour in duration, or

4. Any uncontrolled release/spillage of 5 gallons or more of any chemical material which could reasonably be expected to interfere with the charcoal to adsorb methyl iodide.

A pressure drop across the combined HEPA filter and charcoal adsorber of less than 6 inches of water gauge at the filter design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter.

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3/4.7.1 TURBINE CYCLE

SAFETY VALVES - OPERATING

LIMITING CONDITION FOR OPERATION

3.7.1.5 a. At least one steam generator economizer-evaporator-superheater (EES) safety valve per loop (V-2214, V-2215, V-2216, V-2245, V-2246, or V-2247) shall be OPERABLE for each boiler feed pump in operation supplying feedwater to the EES sections. OPERABLE valve setpoints shall be in accordance with Table 4.7.1-1.*

b. Both reheater safety valves (V-2225 and V-2262) shall be OPERABLE with setpoints in accordance with Table 4.7.1-1.*

APPLICABILITY: POWER, LOW POWER and STARTUP

ACTION: a. With one of the above required EES safety valves inoperable in either or both loops or with one reheater safety valve inoperable, restore the required valve to OPERABLE status within 72 hours or restrict plant operation as follows:

1. With an EES safety valve inoperable, restrict plant operation so that the number of boiler feed pumps in operation corresponds to the number of OPERABLE safety valves as required above.

2. With a reheater safety valve inoperable, be in at least SHUTDOWN within the next 24 hours.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.5 The superheater and reheater safety valves shall be demonstrated OPERABLE by testing in accordance with the applicable ASME Code requirements to verify setpoints. The test frequency is specified in the ASME Code, and the lift settings are specified in Table 4.7.1-1.

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* Setpoint verification is not required until 7 days after achieving steady state plant operating conditions at a power level above 50% RATED THERMAL POWER.

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TABLE 4.7.1-1

STEAM GENERATOR SAFETY VALVES

VALVE NUMBER	LIFT SETTINGS
LOOP I	
V-2214	Less than or equal to 2917 psig
V-2215	Less than or equal to 2846 psig
V-2216	Less than or equal to 2774 psig
V-2225	Less than or equal to 1133 psig
LOOP II	
V-2245	Less than or equal to 2917 psig
V-2246	Less than or equal to 2846 psig
V-2247	Less than or equal to 2774 psig
V-2262	Less than or equal to 1133 psig

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PLANT AND SAFE SHUTDOWN COOLING SUPPORT SYSTEMS

3/4.7.1 TURBINE CYCLE

SAFETY VALVES - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.7.1.6 a. At least one safety valve for each operating section of the steam generator shall be OPERABLE with its setpoint in accordance with Table 4.7.1-1.*

b. The provisions of Specification 3.0.4 are not applicable.

APPLICABILITY: SHUTDOWN and REFUELING

ACTION: With less than the above required safety valves OPERABLE, restore the inoperable valve to OPERABLE status prior to reaching a CALCULATED BULK CORE TEMPERATURE of 760 degrees F or suspend all operations involving CORE ALTERATIONS or control rod movements resulting in positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.7.1.6 No additional surveillances required beyond those identified per Specification 4.7.1.5.

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* Setpoint verification requires power levels not included in the Applicability of this Specification. Where the test interval has been exceeded or the setting has been affected by valve maintenance, valve settings shall be estimated and verified per Specification 3.7.1.5.

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BASIS FOR SPECIFICATIONS LCO 3.7.1.5/SR 4.7.1.5 AND LCO 3.7.1.6/SR 4.7.1.6

The economizer-evaporator-superheater (EES) section of each steam generator loop is protected by three spring-loaded safety valves, each with one-third nominal relieving capacity of each loop. The reheater section of each steam generator loop is protected from overpressure transients by a single safety valve. These steam generator safety valves are described in the FSAR, Section 10.2.5.3.

These steam generator safety valves are designed to relieve steam and can be damaged by rapid cyclic actuations that occur when they relieve water. T protect these valves, only one EES safety valve and the reheater safety valve are maintained in service in each loop, through startup evolutions with only one boiler feedwater pump supplying feedwater to the EES sections. As additional boiler feedwater pumps are placed in service, additional safety valves are also placed in service. The use of one safety valve per steam generator section during SHUTDOWN and REFUELING is acceptable, as it is capable of relieving the available flow. Also, other power actuated valves that are capable of relieving pressure from the main steam and reheat piping are included in the FSV design.

The above valves are required to be tested in accordance with ASME Section XI, IGV requirements every 5 years (or less, depending on failures) or after maintenance. To satisfy the testing criteria, the valves must be tested with steam. Since these valves are permanently installed in steam piping, the appropriate means for testing requires the plant to be operating at steady state conditions, and close to the steam conditions expected at the setpoint. Power levels above 50% RATED THERMAL POWER are sufficient to achieve this. Also, 7 days ensures setpoint verification within a reasonable time, noting that the test schedules are such that all valves are not tested at the same time and thus, some valves will normally be OPERABLE.

During all MODES, with one EES safety valve inoperable, plant operation is restricted to a condition for which the remaining safety valves have sufficient relieving capability to prevent overpressurization of any steam generator section. Conversely, with any reheater safety valve inoperable, plant operation is restricted to a more restrictive MODE.

A 72-hour action time for repair or SHUTDOWN due to inoperable safety valves ensures that these valves are returned to service in a relatively short period of time, during which an overpressure transient is unlikely. Operation at power for 72 hours does not result in a significant loss of safety function for any extended period.

The setpoints for the safety valves identified in Table 4.7.1-1 are those values identified in the FSAR with tolerances applied such that the Technical Specifications incorporate an upper bound setpoint. This is consistent with not incorporating normal operating limits in these Specifications.

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Technical Advisors

6.2.3 The function, responsibilities and authority of the Technical Advisors shall be as follows:

Function

6.2.3.1 The Technical Advisors shall function to make objective evaluations of plant conditions and to advise or assist plant management in correcting conditions that may compromise safety of operations.

Responsibilities

6.2.3.2 The Technical Advisors are responsible for:

a. Maximizing plant safety during and after accidents, transients, and emergencies by independently assessing plant conditions and by providing technical assistance to mitigate and minimize the effects of such incidents and make recommendations to the Superintendent of Operations,

b. Reviewing abnormal and emergency procedures,

c. Assisting the operations staff in applying the requirements of the Technical Specifications,

d. Providing evaluation of Licensee Event Reports from other plants as assigned, and

e. The Technical Advisor shall be in the control room within one hour after an emergency call. The Technical Advisors shall work on a normal day work schedule, but will be placed "on call" after normal working hours.

Authority

6.2.3.3 The Technical Advisors shall report to, and be directly responsible to, the Systems Engineering Manager. The Technical Advisors shall maintain independence from normal plant operations to be objective in their evaluations.

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6.5 REVIEW AND AUDIT

6.5.1 Plant Operations Review Committee (PORC).

Function

6.5.1.1 The PORC shall function to advise the Manager of Nuclear Production on all matters related to nuclear safety.

Composition

6.5.1.2 The PORC shall be composed of the following:

Chairman: Station Manager
Nuclear Support Manager
Superintendent of Chemistry and Radiation Protection (Radiation Protection Manager)
Operations Manager
Maintenance Department Manager
Systems Engineering Manager
Nuclear Training Manager
Health Physics Supervisor
Superintendent of I & C Maintenance
Superintendent of Operations

Alternates

6.5.1.3 An alternate chairman and alternate members, if required, shall be appointed in writing by the PORC Chairman to serve in the absence of a chairman or a member; however, no more than two alternate members shall participate as voting members in PORC activities at any one time.

Meeting Frequency

6.5.1.4 The PORC shall meet at least once per calendar month and as convened by the Chairman or his designated alternate.

Quorum

6.5.1.5 A quorum shall consist of the Chairman or alternate Chairman, and four members including alternates.

INCORPORATION OF RECENT TECHNICAL SPECIFICATION AMENDMENTS INTO TSUP

This Attachment is a re-submittal of several discussions provided previously in Attachment 2 to P-88082. The impact of Amendment 51 on the Upgraded FSV Technical Specifications has been re-evaluated in several areas, as shown herein.

Amendment No: 51

Current Technical Specification: SR 5.2 21

Description: Testing of valves and transfer switches that must be manually positioned for actuation of the ACM mode of operation.

TSUP Impact: None. Consistent with the philosophy and levels of detail provided in TSUP, these valves and instruments are not explicitly addressed in the Specifications, but they are covered. The operability of the ACM transfer switches is demonstrated during ACM load testing per TSUP SR 4.8.4.e.2. Also, the operability of the valves is assured by other TSUP surveillances for their associated systems.

Amendment No: 51

Current Technical Specification: SR 5.2.24.g

Description: Functionally test each purification cooling water pump and controls, monthly. Annually verify performance and calibrate instrumentation.

TSUP Impact: The surveillance of these pumps was added to the revised final draft of SR 4.7.5.b and c. These pumps supply cooling water to the helium purification coolers, which are included in the depressurization flow path (addressed in TSUP Specification 3/4.7.5). There are other means of supplying these coolers, such as the PCRV liner cooling system or nitrogen recondensing chilled water. These pumps are used in the event of a leak in a helium purification cooler, to provide cooling without spreading activity to other systems. Instrumentation and controls are addressed via PSC's administrative controls.

Amendment No: 51

Current Technical Specification: SR 5.2.24.h

Description: Test valves used for automatic isolation of purification cooling water system and reactor plant cooling water system.

TSUP Impact: Requirements for these valves have been added to the revised final draft of Specification 3/4.6.4.3.