5.0 ADMINISTRATIVE CONTROLS

The information in this section of the reference ABWR DCD, including all subsections, is incorporated by reference with the following departures and site-specific supplements. The site-specific supplements partially address COL License Information Item 16.1.

STD DEP 16.3-100
STD DEP 16.5-1
STD DEP 16.5-2
STD DEP 16.5-3
STD DEP 16.5-4
STD DEP 16.5-5
STD DEP 16.5-6
STD DEP T1 2.14-1
STD DEP T1 3.4-1

5.1 Responsibility

5.1.1 *The* ~~[Plant Superintendent]~~ Plant General Manager *shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.*

The ~~[Plant Superintendent]~~ Plant General Manager*, or his designee, in accordance with approved administrative procedures, shall approve, prior to implementation, each proposed test or experiment and proposed changes and modifications to unit systems or equipment that affect nuclear safety.*

STD DEP 16.5-1

5.1.2 *The* ~~[~~*Shift Supervisor*~~/~~Manager ~~(SS)]~~ *shall be responsible for the control room command function. A management directive to this effect, signed by the* ~~[highest level of corporate or site management]~~ President & Chief Executive Officer*, shall be issued annually to all station personnel. During any absence of the* ~~[SS]~~ Shift Supervisor/Manager *from the control room while the unit is in MODE 1, 2,* or *3*~~, or 4~~*, an individual with an active Senior Reactor Operator (SRO) license shall be designated to assume the control room command function. During any absence of the* ~~[SS]~~ Shift Supervisor/Manager *from the control room while the unit is in MODE* 4 or *5, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function.*

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5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

5.2.1 *Onsite and Offsite Organizations*

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power plant.

a. *Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the ~~[applicant's~~ FSAR~~]~~* or the Quality Assurance Program Description (QAPD)*;*

b. *The ~~[Plant Superintendent]~~* Plant General Manager *shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;*

c. *The ~~[a specified corporate executive position]~~* President & Chief Executive Officer *shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and*

d. *The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.*

STD DEP 16.5-2

5.2.2 *Unit Staff*

The unit staff organization shall include the following:

a. *A ~~auxiliary~~* non-licensed *operator shall be assigned to each reactor containing fuel and an additional ~~auxiliary~~* non-licensed *operator shall be assigned for each control room from which a reactor is operating.*[1]

STD DEP 16.5-1

b. *At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2,* or *3 ~~or 4~~, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.*

c. *A ~~[Health Physics~~* Radiation Protection *Technician~~]~~ shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.*

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1 *Two unit sites with both units shutdown or defueled require a total of three ~~auxiliary~~* non-licensed *operators for the two units*

STD DEP 16.5-5

~~d. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety related functions (e.g., licensed SROs, licensed ROs, health physicist , auxiliary operators, and key maintenance personnel).~~

~~Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work an [8 or 12] hour day, nominal 40 hour week, while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modification, on a temporary basis the following guidelines shall be followed:~~

~~1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;~~

~~2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;]~~

~~3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;~~

~~4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.~~

~~Any deviation from the above guidelines shall be authorized in advance by the [Plant Superintendent] or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.~~

~~*Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the [Plant Superintendent] or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.*~~

~~*OR*~~

~~*The amount of overtime worked by unit staff members performing safety related functions shall be limited and controlled in accordance with the NRC Policy Statement on working hours (Generic Letter 82-12).*~~

d. ~~*e.*~~ *The* ~~*[*~~*Operations* Division *Manager* ~~*or Assistant Operations Manager]*~~ *shall hold an active SRO license.*

e. ~~*f.*~~ *The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor* ~~*(SS)*~~*/*Manager *in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.*

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

~~*[Reviewer's Note: Minimum qualifications for members of the unit staff shall be specified by use of an overall qualification statement referencing an ANSI Standard acceptable to the NRC staff or by specifying individual position qualifications. Generally, the first method is preferable; however, the second method is adaptable to those unit staffs requiring special qualification statements because of unique organizational structures.]*~~

5.3.1 *Each member of the unit staff shall meet or exceed the minimum qualifications of ~~[~~Regulatory Guide 1.8, Revision* 3, 2000, with the following exception: ~~*2, 1987, or more recent revisions, or ANSI Standard acceptable to the NRC staff]. The staff not covered by [Regulatory Guide 1.8] shall meet or exceed the minimum qualifications of [Regulations, Regulatory Guides, or ANSI Standards acceptable to NRC staff]*~~

a. During cold license operator training prior to Commercial Operation, the Regulatory Position C.1.b of Regulatory Guide 1.8, Revision 2, 1987, applies. Cold license operator candidates meet the training elements defined in ANS/ANSI 3.1-1993 but are exempt from the experience requirements defined in ANS/ANSI 3.1-1993.

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5.0 ADMINISTRATIVE CONTROLS

5.4 Technical Specifications (TS) Bases Control

STD DEP 16.5-3

5.4.2 Licensees may make changes to Bases without prior NRC approval provided the changes do not involve either of the following:

a. *A change in the plant-specific TS, or plant-specific DCD Tier 1 or Tier 2* information; or*

b. *A change to the site-specific portion of the FSAR* or Bases *that* requires NRC approval pursuant to ~~*involves an unreviewed safety question as defined in*~~ *10 CFR 50.59, or a change to Tier 2 of the* ~~*plant-specific*~~ ABWR *DCD that* ~~*involves an unreviewed safety question as defined in*~~ requires NRC approval pursuant to *the design certification rule for the ABWR (Appendix A to 10 CFR 52).*

Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71.

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5.0 ADMINISTRATIVE CONTROLS

5.5 Procedures, Programs, and Manuals

5.5.1 *<u>Procedures</u>*

5.5.1.1 *Scope*

b. The emergency operating procedures required to implement the requirements of NUREG-0737 and NUREG-0737, Supplement 1, as stated in ~~[~~Generic Letter 82-33~~]~~;

5.5.2 *<u>Programs and Manuals</u>*

The following programs shall be established, implemented, and maintained:

5.5.2.1 *Offsite Dose Calculation Manual (ODCM)*

Licensee initiated changes to the ODCM:

b. Shall become effective after review and acceptance by plant reviews and the approval of the ~~[Plant Superintendent]~~<u>Plant General Manager</u>*; and*

STD DEP T1 2.14-1

5.5.2.2 *Primary Coolant Sources Outside Containment*

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Low Pressure Core Flooder, High Pressure Core Flooder, Residual Heat Removal, Reactor Core Isolation Cooling, ~~Hydrogen Recombiner,~~ Post Accident Sampling, Standby Gas Treatment, Suppression Pool Cleanup, Reactor Water Cleanup, Fuel Pool Cooling and Cleanup, Process Sampling, Containment Atmospheric Monitoring, and Fission Product Monitor. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at refueling cycle intervals or less.

STD DEP 16.5-6

5.5.2.6 *Inservice Testing Program*

<u>This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components.</u> *This program shall include the following:*

a. *Testing frequencies specified in ~~Section XI of~~ the* applicable edition and addenda of the *ASME ~~Boiler and Pressure Vessel Code and applicable Addenda as follows~~* Code for Operations and Maintenance of Nuclear Power Plants (ASME OM Code)*:*

ASME ~~Boiler and Pressure Vessel~~ OM *Code and applicable Addenda terminology for inservice testing activities*	*Required Frequencies for performing inservice testing activities*
Weekly	*At least once per 7 days*
Monthly	*At least once per 31 days*
Quarterly or every 3 months	*At least once per 92 days*
Semiannually or every 6 months	*At least once per 184 days*
Every 9 months	*At least once per 276 days*
Yearly or annually	*At least once per 366 days*
Biennially or every 2 years	*At least once per 731 days*

b. *The provisions of SR 3.0.2 are applicable to the above required Frequencies* and to other normal and accelerated Frequencies specified as 2 years or less in the Inservice Testing Program *for performing inservice testing activities;*

c. *The provisions of SR 3.0.3 are applicable to inservice testing activities; and*

d. *Nothing in the ASME ~~Boiler and Pressure Vessel~~* OM *Code shall be construed to supersede the requirements of any TS.*

5.5.2.7 *Ventilation Filter Testing Program (VFTP)*

*A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in ~~[~~Regulatory Guide 1.*52, Revision 2*~~]~~, and in accordance with Regulatory Guide 1.52, Revision 2;~~ and~~ ASME N510-1989; and AG-1-1991* as specified below:

a. *Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass < ~~[~~0.05~~]~~% when tested in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989 at the system flowrate specified below ~~[~~± 10~~]~~%:*

ESF Ventilation System	*Flowrate*
Control Room Habitability System	5,100 m^3/h
Standby Gas Treatment System	6,800 m^3/h

b. *Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass < [0.05]% when tested in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989 at the system flowrate specified below [± 10]%:*

ESF Ventilation System	*Flowrate*
Control Room Habitability System	[5,100 m^3/h]
Standby Gas Treatment System	[6,800 m^3/h]

c. *Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with [ASTM D3803-1989] at a temperature of ≤ [30]°C and greater than or equal to the relative humidity specified below:*

ESF Ventilation System	*Penetration*	*RH*
Control Room Habitability System	[*0.175%*]	[*70%*]
Standby Gas Treatment System	[*0.175%*]	[*70%*]

d. *Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989 at the system flowrate specified below [± 10]%:*

ESF Ventilation System	Delta P	Flowrate
Control Room Habitability System	[1745.8 Pa]	[5,100 m^3/h]
Standby Gas Treatment System	[2147.9 Pa]	[6,800 m^3/h]

e. *Demonstrate that the heaters for each of the ESF systems dissipate the value specified below [± 10]% when tested in accordance with ASME N510-1989:*

ESF Ventilation System	*Wattage*
Control Room Habitability System	[65.6 kW]
Standby Gas Treatment System	[26.2 kW]

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

STD DEP 16.3-100

5.5.2.11 Setpoint Control Program (SCP)

a. The Setpoint Control Program (SCP) implements the regulatory requirement of 10 CFR 50.36(c)(1)(ii)(A) that technical specifications will include items in the category of limiting safety system settings (LSSS), which are settings for automatic protective devices related to those variables having significant safety functions.

b. The Nominal Trip Setpoint (NTS), Allowable Value (AV), As-Found Tolerance (AFT), and As-Left Tolerance (ALT) for each Technical Specification required automatic protection instrumentation function shall be calculated in conformance with the NRC approved WCAP-17119-P "Methodology for South Texas Project Units 3 & 4 ABWR Technical Specification Setpoints, Revision 2." Additionally, the NRC approved methodology shall define acceptable margin as margin greater than or equal to the ALT.

c. For each Technical Specification required automatic protection instrumentation function, performance of a SENSOR CHANNEL CALIBRATION, CHANNEL CALIBRATION, or CHANNEL FUNCTIONAL TEST (CFT) surveillance "in accordance with the Setpoint Control Program" shall include the following:

1. The as-found value of the instrument channel trip setting shall be compared with the specified NTS.

   i. If the as-found value of the instrument channel trip setting differs from the specified NTS by more than the pre-defined test acceptance criteria band (i.e., the specified AFT), then the instrument channel shall be evaluated to verify that it is functioning in accordance with its design basis before declaring the surveillance requirement met and returning the instrument channel to service. An Instrument Channel is determined to be functioning in accordance with its design basis if it can be recalibrated to within the ALT. This as-found condition shall be entered into the plant's corrective action program.

ii. If the as-found value of the instrument channel trip setting is less conservative than the specified AV, the surveillance requirement is not met and the instrument channel shall be immediately declared inoperable.

2. The instrument channel trip setting shall be set to a value within the specified ALT around the specified NTS at the completion of the surveillance; otherwise, the surveillance requirement is not met and the instrument channel shall be immediately declared inoperable.

d. The difference between the instrument channel trip setting as-found value and the previous as-left value for each Technical Specification required automatic protection instrumentation function shall be trended and evaluated to verify that the instrument channel is functioning in accordance with its design basis.

e. The SCP shall establish a document containing the current value of the specified NTS, AV, AFT, and ALT for each Technical Specification required automatic protection instrumentation function and references to the calculation documentation. Changes to this document shall be governed by the regulatory requirement of 10 CFR 50.59. In addition, changes to the specified NTS, AV, AFT, and ALT values shall be governed by the NRC approved setpoint methodology. This document, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.0 ADMINISTRATIVE CONTROLS

5.7 Reporting Requirements

STD DEP 16.5-4

5.7.1 *Routine Reports*

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.7.1.1 *Annual Reports*

--NOTE----------------------------------
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station units at the station.

Annual Reports covering the activities of the unit as described below for the previous calendar year shall be submitted by ~~March 31~~ April 30 of each year. ~~[~~The initial report shall be submitted by ~~March 31~~ April 30 of the year following initial criticality.~~]~~

Reports required on an annual basis include:

a. Occupational Radiation Exposure Report

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) for whom monitoring was required, receiving an annual deep dose equivalent > 1 mSv and the associated collective deep dose equivalent (reported in person-rem) according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total deep dose equivalent received from external sources should be assigned to specific major work functions.

5.7.1.2 Annual Radiological Environmental Operating Report

--------------------NOTE--------------------
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements ~~[~~in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979~~]~~. ~~[The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program and the exposure period associated with each result.]~~ In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.7.1.3 Radioactive Effluent Release Report

--------------------NOTE--------------------
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

The Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.7.1.4 Monthly Operating Reports

Routine reports of operating statistics and shutdown experience~~[~~, including documentation of all challenges to the safety/relief valves~~]~~ shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

5.7.1.5 CORE OPERATING LIMITS REPORT (COLR)

a. *Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:*

[~~*The individual specifications that address core operating limits must be referenced here.*~~]

LCO 3.2.1, "Average Planar Linear Heat Generation Rate (APLHGR);"
LCO 3.2.2, "Minimum Critical Power Ratio (MCPR);"
LCO 3.3.1.1, "SSLC Sensor Instrumentation;" and
LCO 3.3.4.1, "ATWS and EOC-RPT Instrumentation."

b. *The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:*

[~~*Identify the Topical Report(s) by number, title, date, and NRC staff approval document, or identify the staff Safety Evaluation Report for a plant specific methodology by NRC letter and date.*~~NEDE-24011-P-A, General Electric Standard Application on Fuel, September 1988]

c. *The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.*

d. *The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.*

5.7.1.6 Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

The RCS pressure and temperature limits, including heatup and cooldown rates, criticality, and hydrostatic and leak test limits, shall be established and documented in the PTLR. ~~*[The individual Specifications that*~~ LCO 3.4.9, RCS Pressure and Temperature (P/T) Limits *address*es *the reactor vessel pressure and temperature limits and the heatup and cooldown rates* ~~*may be referenced.]*~~*. The analytical methods used to determine the pressure and temperature limits including the heatup and cooldown rates shall be those previously reviewed and approved by the NRC in* ~~*[Topical Report(s), number, title, date, and NRC staff approval document, or staff safety evaluation report for a plant specific methodology by NRC letter and date*~~SIR-05-044-A, "Pressure-Temperature Limits Report Methodology for Boiling Water Reactors," dated April 2007, and approved for referencing in license applications by the NRC in letter dated February 6, 2007 from Ho K Nieh Deputy Director, Division of Policy and Rulemaking, Office of Nuclear Reactor Regulation to Mr. Randy C. Bunt, Chair, BWR Owner's Group.~~*]*~~ *The reactor vessel pressure and temperature limits, including those for heatup and cooldown rates, shall be determined so that all applicable limits (e.g., heatup limits, cooldown limits, and inservice leak and hydrostatic testing limits) of the analysis are met. The PTLR, including revisions or supplements thereto, shall be provided upon issuance for each reactor vessel fluency period.*

STD DEP T1 3.4-1

5.7.2 Special Reports

Special Reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report.

The following Special Reports shall be submitted:

a. *When a Special Report is required by Condition C of LCO 3.3.3.1, "Essential* ~~*Multiplexer System*~~ Communication Function*," a report shall be submitted within the following 14 days. The report shall outline the cause of the inoperability, consideration of common mode failures, and the plans and schedule for restoring the* ~~*EMS*~~ data communication *transmission segments to OPERABLE status.*

b. *When a Special Report is required by Specification 5.5.2.10, "Software Error Evaluation Program," a report shall be submitted within the following 7 days. The report shall outline the cause of the inoperability, the affected components, and the plans and schedule for completing proposed remedial actions.*