

1.0 DEFINITIONS

- K. Operable - A system, subsystem, train, component or device shall be operable or have operability when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).
- L. Operating - Operating means that a system or component is performing its intended functions in its required manner.
- M. Operating Cycle - Interval between the end of one refueling outage and the end of the next subsequent refueling outage.
- N. Primary Containment Integrity - Primary containment integrity means that the drywell and pressure suppression chamber are intact and all of the following conditions are satisfied:
1. All manual containment isolation valves on lines connecting to the reactor coolant system or containment which are not required to be open during ~~accident conditions~~ *plant operation* are closed.
 2. At least one door in each airlock is closed and sealed.
 3. All automatic containment isolation valves are operable or deactivated in the isolated position.
 4. All blind flanges and manways are closed.
- O. Protective Instrumentation Definitions
1. Instrument Channel - An instrument channel means an arrangement of a sensor and auxiliary equipment required to generate and transmit to a trip system a single trip signal related to the plant parameter monitored by that instrument channel.
 2. Trip System - A trip system means an arrangement of instrument channel trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A trip system may require one or more instrument channel trip signals related to one or more plant parameters in order to initiate trip system action. Initiation of protective action may require the tripping of a single trip system or the coincident tripping of two trip systems.
 3. Protective Action - An action initiated by the protection system when a limit is reached. A protective action can be at a channel or system level.
 4. Protective Function - A system protective action which results from the protective action of the channels monitoring a particular plant condition.
- P. Rated Neutron Flux - Rated neutron flux is the neutron flux that corresponds to a steady state power level of 1593 thermal megawatts.
- Q. Rated Thermal Power - Rated thermal power means a steady state power level of 1593 thermal megawatts.

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ATTACHMENT 4

Vermont Yankee Nuclear Power Station Proposed Technical Specification Change No. 209: Intermittent Opening of Primary Containment Isolation Valves

**Retyped Technical Specifications
and Bases Pages**

December 1998

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The succeeding frequently used terms are explicitly defined so that a uniform interpretation of the specifications may be achieved.

- A. Reportable Occurrence - The equivalent of a reportable event which shall be any of the conditions specified in Section 50.73 to 10CFR Part 50.
- B. Alteration of the Reactor Core - The act of moving any component affecting reactivity within the reactor vessel in the region above the core support plate, below the upper grid and within the shroud. Normal movement of control rods or neutron detectors, or the replacement of neutron detectors is not defined as a core alteration.
- C. Hot Standby - Hot standby means operation with the reactor critical and the main steam line isolation valves closed.
- D. Immediate - Immediate means that the required action will be initiated as soon as practicable considering the safe operation of the unit and the importance of the required action.
- E. Instrument Calibration - An instrument calibration means the adjustment of an instrument signal output so that it corresponds, within acceptable range and accuracy, to a known value(s) of the parameter which the instrument monitors. Calibration shall encompass the entire instrument including actuation, alarm, or trip. Response time as specified is not part of the routine instrument calibration but will be checked once per operating cycle.
- F. Instrument Check - An instrument check is qualitative determination of acceptable operability by observation of instrument behavior during operation. This determination shall include, where possible, comparison of the instrument with other independent instruments measuring the same variable.
- G. Instrument Functional Test - An instrument functional test shall be:
 - 1. Analog channels - the injection of a signal into the channel as close to the sensor as practicable to verify operability including alarm and/or trip functions.
 - 2. Bistable channels - the injection of a signal into the sensor to verify the operability including alarm and/or trip functions.
- H. Log System Functional Test - A logic system functional test means a test of all relays and contacts of a logic circuit from sensor to activated device to insure all components are operable per design intent. Where possible, action will go to completion, i.e., pumps will be started and valves opened.
- I. Minimum Critical Power Ratio - The minimum critical power ratio is defined as the ratio of that power in a fuel assembly which is calculated to cause some point in that assembly to experience boiling transition as calculated by application of the appropriate NRC-approved critical power correlation to the actual assembly operating power.
- J. Mode - The reactor mode is that which is established by the mode-selector-switch.

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- R. Reactor Power Operation - Reactor power operation is any operation with the mode switch in the "Startup/Hot Standby" or "Run" position with the reactor critical and above 1% rated thermal power.
1. Startup/Hot Standby Mode - In this mode the low turbine condenser volume trip is bypassed when condenser vacuum is less than 12 inches Hg and both turbine stop valves and bypass valves are closed; the low pressure and the 10 percent closure main steamline isolation valve closure trips are bypassed; the reactor protection system is energized with IRM neutron monitoring system trips and control rod withdrawal interlocks in service and APRM neutron monitoring system operable.
 2. Run Mode - In this mode the reactor system pressure is equal to or greater than 800 psig and the reactor protection system is energized with APRM protection and RBM interlocks in service.
- S. Reactor Vessel Pressure - Unless otherwise indicated, reactor vessel pressures listed in the Technical Specifications are those measured by the reactor vessel steam space detector.
- T. Refueling Outage - Refueling outage is the period of time between the shutdown of the unit prior to a refueling and the startup of the plant subsequent to that refueling. For the purpose of designating frequency of testing and surveillance, a refueling outage shall mean a regularly scheduled refueling outage; however, where such outages occur within 8 months of the completion of the previous refueling outage, the required surveillance testing need not be performed until the next regularly scheduled outage.
- U. Secondary Containment Integrity - Secondary containment integrity means that the reactor building is intact and the following conditions are met:
1. At least one door in each access opening is closed.
 2. The standby gas treatment system is operable.
 3. All reactor building automatic ventilation system isolation valves are operable or are secured in the isolated position.
- V. Shutdown - The reactor is in a shutdown condition when the reactor mode switch is in the shutdown mode position and no core alterations are being performed. When the mode switch is placed in the shutdown position a reactor scram is initiated, power to the control rod drives is removed, and the reactor protection system trip systems are de-energized.
1. Hot Shutdown means conditions as above with reactor coolant temperature greater than 212°F.
 2. Cold Shutdown means conditions as above with reactor coolant temperature equal to or less than 212°F.
 3. Shutdown means conditions as above such that the effective multiplication factor (K_{eff}) of the core shall be less than 0.99.

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- W. Simulated Automatic Actuation - Simulated automatic actuation means applying a simulated signal to the sensor to actuate circuit in question.
- X. Transition Boiling - Transition boiling means the boiling regime between nucleate and film boiling. Transition boiling is the regime in which both nucleate and film boiling occur intermittently with neither type being completely stable.
- Y. Surveillance Frequency - Unless otherwise stated in these specifications, periodic surveillance tests, checks, calibrations, and examinations shall be performed within the specified surveillance intervals. These intervals may be adjusted plus 25%. The operating cycle interval is considered to be 18 months and the tolerance stated above is applicable.
- Z. Surveillance Interval - The surveillance interval is the calendar time between surveillance tests, checks, calibrations, and examinations to be performed upon an instrument or component when it is required to be operable. These tests unless otherwise stated in these specifications may be waived when the instrument, component, or system is not required to be operable, but these tests shall be performed on the instrument, component, or system prior to being required to be operable.
- AA. Vital Fire Suppression Water System - The vital fire suppression water system is that part of the fire suppression system which protects those instruments, components, and systems required to perform a safe shutdown of the reactor. The vital fire suppression system includes the water supply, pumps, and distribution piping with associated sectionalizing valves, which provide immediate coverage of the Reactor Building, Control Room Building, and Diesel Generator Rooms.
- BB. Source Check - The qualitative assessment of channel response when the channel sensor is exposed to a radioactive source.
- CC. Dose Equivalent I-131 - The dose equivalent I-131 shall be that concentration of I-131 (microcurie/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134 and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in NRC Regulatory Guide 1.109, Revision 1, October 1977.
- DD. Solidification - Solidification shall be the conversion of wet wastes into a form that meets shipping and burial ground requirements. Suitable forms include dewatered resins and filter sludges.
- EE. Deleted
- FF. Site Boundary - The site boundary is shown in Figure 2.2-5 in the FSAR.
- GG. Deleted
- HH. Deleted

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- II. Off-Site Dose Calculation Manual (ODCM) - A manual containing the current methodology and parameters used in the calculation of off-site doses due to radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduction of the environmental radiological monitoring program.
- JJ. Process Control Program (PCP) - A process control program shall contain the sampling, analysis, tests, and determinations by which wet radioactive waste from liquid systems is assured to be converted to a form suitable for off-site disposal.
- KK. Gaseous Radwaste Treatment System - The Augmented Off-Gas System (AOG) is the gaseous radwaste treatment system which has been designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system off-gases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.
- LL. Ventilation Exhaust Treatment System - The Radwaste Building and AOG Building ventilation HEPA filters are ventilation exhaust treatment systems which have been designed and installed to reduce radioactive material in particulate form in gaseous effluents by passing ventilation air through HEPA filters for the purpose of removing radioactive particulates from the gaseous exhaust stream prior to release to the environment. Engineered safety feature atmospheric cleanup systems, such as the Standby Gas Treatment (SBGT) System, are not considered to be ventilation exhaust treatment system components.
- MM. Vent/Purging - Vent/Purging is the controlled process of discharging air or gas from the primary containment to control temperature, pressure, humidity, concentration or other operating conditions.
- NN. Core Operating Limits Report - The Core Operating Limits Report is the unit-specific document that provides core operating limits for the current operating reload cycle. These cycle-specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.7.A.4. Plant operation within these operating limits is addressed in individual specifications.