PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS BROWNS FERRY NUCLEAR PLANT UNITS 1 AND 2

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1.0 DEFINITIONS (Cont'd)

 <u>Run Mode</u> - In this mode the reactor system pressure is at or above 825 psig and the reactor protection system is energized with APRM protection (excluding the 15% high flux trip) and the RBM interlocks in service.

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- 3. <u>Shutdown Mode</u> Placing the mode switch to the shutdown position initiates a reactor scram and power to the control rod drives is removed. After a short time period (about 10, sec), the scram signal is removed allowing a scram reset and restoring the normal valve lineup in the control rod drive hydraulic system; also, the main steam line isolation scram and main condenser low vacuum scram are bypassed if reactor vessel pressure is below 1055 psig.
- 4. <u>Refuel Node</u> With the mode switch in the refuel position interlocks are established so that one control rod only may be withdrawn when the Source Range Monitor indicate at least 3 cps and the refueling crane is not over the reactor; also the main steam line isolation scram and main condenser low vacuum scram are bypassed if the reactor vessel pressure is below 1055 psig. If the refueling crane is over the reactor, all rods must be fully inserted and none can be withdrawn.
- N. <u>Rated Power</u> Rated power refers to operation at a reactor power of 3,293 MWt; this is also termed 100 percent power and is the maximum power level authorized by the operating license. Rated steam flow, rated coolant flow, rated neutron flux, and rated nuclear system pressure refer to the values of these parameters when the reactor is at rated power. Design power, the power to which the safety analysis applies, corresponds to 3,440 MWt.
- O. <u>Primary Containment Integrity</u> Primary containment integrity means that the drywell and pressure suppression chamber are intact and all of the following conditions are satisfied:
 - 1. All non-automatic containment isolation valves on lines connected to the reactor coolant systems or containment which are not required to be open during accident conditions are closed. These valves may be opened to perform necessary operational activities.
 - 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.

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- P. Secondary Containment Integrity
 - Secondary containment integrity means that the reactor building is intact and the following conditions are met:
 - a) At least one door in each access opening to the turbine building, control bay and out-of-doors is closed.
 - b) The standby gas treatment system is operable, and can maintain 0.25 inches of vater negative pressure in those areas where secondary containment integrity

c) All reactor building ventilation system automatic isolation valves are operable or deactivated in the isolated position.

- 2. Reactor zone secondary containment integrity means the unit reactor building is intact and the following conditions are met:
 - a) At least one door between any opening to the turbine building, control bay and out-of-doors is closed.
 - b) The standby gas teatment system is operable and can maintain 0.25 inches.water negative pressure on the unit zone.
 - c) All the unit reactor building ventilation system automatic isolation valves are operable or deactivated in the isolated position. If it is desirable for operational considerations, a reactor zone may be isolated from the other reactor zones and the refuel zone by maintaining at least one closed door in each common passageway between zones. Reactor zone safety related features are not compromised by openings between adjacent units or refuel zone, unless it is desired to isolate a given zone.
 - 3. Refuel zone secondary containment integrity means the refuel zone is intact and the following conditions are met:
 - a) At least one door in each access opening to the out-of-doors is closed.
 - b) The standby gas treatment system is operable and can maintain .25 inches water negative pressure on the refuel zone.
 - c) All the refuel zone ventilation system automatic isolation values are operable or deactivated in the isolated position. If it is desirable for operational considerations, the refuel zone may be isolated from the reactor zones by maintaining at least one closed door in each access between the refuel zone and the reactor building.

Refuel zone safety related features are not compromised by openings between the reactor building unless it is desired to isolate a given zone.

- Q. <u>Operating Cycle</u> Interval between the end of one refueling outage for a particular unit and the end of the next subsequent refueling outage for the same unit.
- Refueling Outage Refueling outage is the period of time between the shutdown of the unit prior to a refueling and the startup of the unit after that refueling. For the purpose of designating frequency of testing and surveillance, a refueling outage shall mean a regularly scheduled 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.
- S. <u>Alteration of the Reactor Core</u> The act of moving any component in the region above the core support plate, below the upper grid and within the shroud. Normal control rod movement with the control rod drive hydraulic system is not defined as a core alteration. Normal movement of in-core instrumentation and the traversing in-core probe is not defined as a core alteration.
- T. <u>Reactor Vessel Pressure</u> Unless otherwise indicated, reactor vessel pressures listed in the Technical Specifications are those measured by the reactor vessel steam space detectors.

U. Thermal Parameters

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- Minimum Critical Power Ratio (MCPR) Minimum Critical Power Ratio (MCPR) is the value of the critical power ratio associated with the most limiting assembly in the reactor core. Critical Power Ratio (CPR) is the ratio of that power in a fuel assembly, which is calculated to cause some point in the assembly to experience boiling transition, to the actual assembly operating power.
- 2. <u>Transition Boiling</u> 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.
- 3. Core Maximum Fraction of Limiting Power Density (CMFLFD) The highest ratio, for all fuel types in the core, of the maximum fuel rod power density (kW/ft) for a given fuel type to the limiting fuel rod power density (kW/ft) for that fuel type.
- 4. Average Planar Linear Heat Generation Rate (APLHGR) The Average Planar Heat Generation Rate is applicable to a specific planar height and is equal to the sum of the linear heat generation rates for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

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BROWNS FERRY NUCLEAR PLANT UNIT 3

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- 4. <u>Refuel Mode</u> With the mode switch in the refuel position interlocks are established so that one control rod only may be withdrawn when the Source Range Monitor indicate at least 3 cps and the refueling crane is not over the reactor; also, the main steam line isolation scram and main condenser low vacuum scram are bypassed if reactor vessel pressure is below 1055 psig. If the refueling crane is over the reactor, all rods must be fully inserted and none can be withdrawn.
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