50-237 DRESDEN 2 CEC

Application for Amends to Licenses DPR-19 & DPR-25

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ATTACHMENT 1

DESCRIPTION OF PROPOSED AMENDMENT

GENERAL BACKGROUND

A revision to the Unit 2 and Unit 3 Technical Specifications is being proposed as part of the Dresden Station Improvement Program Technical Specification Action Plan.

A detailed discussion of the proposed changes is included in this attachment. Attachment 2 contains a summary listing each change. Attachment 3 contains the marked-up pages reflecting the proposed changes to the Technical Specifications. Attachment 4 contains the Evaluation of Significant Hazards Consideration. Attachment 5 includes the evaluation performed by the CECo Nuclear Fuel Services Department and Advanced Nuclear Fuels on the proposed change of the MSIV Low Pressure isolation setpoint to 825 psig, as well as copies of a related General Electric SIL and a previous NRC SER approving a similar change for Quad Cities.

The proposed changes include rewriting thirteen instrumentation tables for each unit to incorporate enhancements from the BWR Standard Technical Specifications (STS) which result in consistency of table format and technical content. In addition, several new restrictions from STS are added in various tables, the Rod Block Monitor and APRM Rod Block operability requirements are clarified, the existing containment isolation function of high containment radiation has been reflected in appropriate tables, and excess conservatism is removed from the main steamline low pressure isolation setpoint. These and other noteworthy changes are discussed in further detail in the following sections.

DISCUSSION OF PROPOSED CHANGES

A. NEW TABLES 1.1 and 1.2

The rewrite of the technical specification instrumentation tables described below implements the terminology of the Standard Technical Specifications (STS) of Surveillance Frequency Notations and uses the Dresden specific terminology of Operational Modes. In order to define this terminology in the Dresden Technical Specifications, it is necessary to add new Tables 1.1 and 1.2 to define Surveillance Frequency Notations and Operational Modes, respectively.

Table 1.1 on Surveillance Frequency notations contains the STS time frames for surveillance frequencies and their abbreviated notations with the exception of frequency notations 'R', 'E', and 'S'. Frequency surveillance notation R definition as refueling outage interval has been retained and "E" has been added to identify surveillances required every 18 months or 550 days. This distinction

Tables 1.1 and 1.2 (Cont'd)

is necessary to prevent unwarranted surveillance outages and to ensure surveillances that are not exclusively linked to refueling outage activities are completed in the appropriate time frame. Frequency notation 'S' will correspond to a period of 8 hours. This deviation from the STS is necessary to ensure shiftly surveillances continue to be performed every 8 hours.

Table 1.2 on Operational Modes implements those STS requirements that are applicable to Dresden and also incorporates Dresden specific operating allowances. A slight variation of the STS terminology of "Operational Condition" is used in order to retain the present Dresden terminology of "Operational Mode". The STS uses Power Operation to define Mode 1 but due to Dresden terminology differences, the term RUN will be used for Mode 1. The present temperature allowances used to determine Modes in the Dresden Technical Specifications are incorporated into Table 1.2. The footnotes of Table 1.2 are derived from the footnotes contained in the STS and are needed to allow the reactor mode switch movement to test switch interlocks, to allow the mode switch to remain or be moved to the REFUEL position when non-refueling outages are required. Technical Specification Definition AA for Shutdown will be revised to reflect the addition of Table 1.2. Footnote (b) also provides a definition of refueling. The present definition of Mode can be deleted with the implementation of the Operational Mode definitions in Table 1.2.

B. REWRITE OF TECHNICAL SPECIFICATION TABLES

The present Technical Specification Instrumentation Tables for Dresden Units 2 and 3 are not consistent in table format or technical content. The proposed changes will take advantage of improvements made in these tables as implemented in the Standard Technical Specifications (STS) and other STS BWRs. While implementing these improvements, it should be noted that several new restrictions on plant operation are also added to the new table requirements.

The present technical requirements of the Instrumentation Tables are retained where they are still applicable to plant design or operating philosophy. The Instrumentation Tables will retain the present format (top of page to bottom) instead of implementing the STS format of both top to bottom and turning the table around on the page. In order to improve readability, table columns are presented in a consistent order and the Trip Function or Instrument is numbered in the first column of each table. The Applicable Operational Modes are added to the tables in a manner consistent with the STS and recently licensed plant requirements. The table Actions and Notations are updated with STS and STS BWR requirements while retaining as many of the present requirements as possible. The remaining changes to the Instrumentation Tables are discussed below on a table by table basis.

Table 3.1.1

The present table requirements do not address Modes 3 and 4, HOT SHUTDOWN and COLD SHUTDOWN, respectively, for the reactor protection instrumenta- tion. The addition of these requirements represent restrictions on plant operation not currently in the technical specifications. The trip functions required to be operable in HOT SHUTDOWN and COLD SHUTDOWN are Mode Switch in Shutdown, Manual Scram, IRM High Flux and IRM Inop. The APRM scram function will not be required when in Shutdown however, the APRM scram functions must be operable prior to any startup. Requiring APRM's to be operable in Shutdown is overly restrictive and may delay maintenance activities during refuel outages.

Some current operating modes are deleted by this proposed change. The flow biased APRM High Flux trip function is not required in STARTUP/HOT STANDBY since the High Flux (15% scram) function is operable in STARTUP/HOT STANDBY. STARTUP/HOT STANDBY mode is also deleted from the Turbine Stop Valve Closure and Generator Load Rejection functions since these trip functions are not required to be operable when turbine first stage pressure is less than that which corresponds to 45% of rated steam flow.

New Actions 1 through 9 are proposed to be added to Table 3.1.1. These actions are based on STS requirements and are needed to address the addition of the new modes of operation added to the table as well as to implement requirements found acceptable for use at STS BWRs. The present Action allowance of 8 hours to reach STARTUP is retained in the new requirements in order to allow for an orderly plant shutdown from the full power, 100% rod pattern.

Changes to the Table Notations include the addition of Notes (a), (c), and (i). These new notes follow STS guidelines and address channels out of service for surveillances, IRM bypasses, and exceptions for operability of the Scram Discharge Volume in REFUEL for control rods removed in accordance with Specification 3.10.D or 3.10.E.

As a result of using the Applicable Operational Mode terminology in Table 3.1.1, it is necessary to change Technical Specification 3.1.A.1. The change to 3.1.A.1 will delete reference to the reactor mode switch and use the Applicable Operational Mode terminology.

Proposed Action 5 will replace present Actions A and C for the Mainsteam Line (MSL) Radiation Monitors. Present Actions A and C require a power reduction to the Hot Standby condition within 5 hours or insertion of all operable control rods within 4 hours. These present actions are difficult to meet in an orderly fashion, particularly when operating at 100% power during an initiating event. During a recent event when 3 of 4 MSL Radiation Monitors were

Table 3.1.1 (cont'd)

declared inop, the 5 hour requirement to reach the startup mode was reached with only minutes to spare. The original power level for this event was approximately 87%. If difficulty has been experienced in attempting to reach Startup in 5 hours from a near full power condition, it is reasonable to assume that difficulty will be experienced when trying to reach an 'all rods in condition' from full power without initiating a manual reactor scram. The current actions will therefore not allow an orderly shutdown from operation near full power. Proposed Action 5 will require a power reduction to the startup condition with the MSIVs closed within an 8 hour time frame. This time is consistent with existing Action B for the Primary Containment Isolation function of the MSL Radiation Monitors (Table 3.2.1) and with proposed Action 12. In the event that the MSIVs cannot be closed within 8 hours, the reactor will be shutdown within the subsequent 12 hours.

Table 4.1.1

The changes to Table 4.1.1 will make the title consistent with that of Table 3.1.1; i.e., Reactor Protection System (Scram) Instrumentation Functional Test Requirements. The instrumentation Group column and associated Note 3 are deleted from the table since this information is not of vital importance to the operator or user of the Technical Specifications. Bases 4.1.A is also changed to reflect the deletion of the Group designation in Table 4.1.1. The applicable operational modes are added to Table 4.1.1 to be consistent with the modes in which the instrumentation is required to be operable by Table 3.1.1.

The present functional test frequency is maintained for all trip functions except for the IRMs and APRMs. Weekly testing is added to the IRM High Flux trip function for Modes 2, 3, 4, and 5. For the IRM Inoperative trip function, weekly testing replaces the present testing prior to a startup. This weekly testing meets the intent of present Table Note 6 and thus necessary testing requirements are maintained. For the APRM trip functions of High Flux and Inoperative, additional tests at startup are added and for the High Flux (15% scram), additional tests on a weekly basis are added. These additional tests follow STS guidelines and help to ensure operability of instrumentation when required to perform a trip function.

Changes to Table 4.1.1 Notations include the addition of Notes (g), (h), and (i). Notes (a), (g), and (h) represent requirements implemented in the STS and are used to (1) exclude operability of the High Reactor Pressure trip function with the head removed, and (2) to exclude operability of the Scram Discharge Volume when control rods are removed per Specification 3.10.D or 3.10.E. New Note (i) is required to allow entry into a reactor condition (greater that 45% turbine first stage pressure) in order to perform the testing required by this specification. The 12 hour time frame is sufficient to complete the testing and of short enough duration to ensure that operability is demonstrated in a timely manner.

Table 4.1.2

The title of this table is changed to be consistent with that of Table 3.1.1, i.e. Reactor Protection System (Scram) Instrumentation Calibration Requirements. As in Table 4.1.1, the instrument Group column and associated Note 1 are deleted. The Applicable Operational Modes for the calibrations are added to be consistent with the required operational modes for the instruments in Table 3.1.1. The testing frequency for the IRM High Flux trip function is changed from every shutdown to startup after a refueling outage. Note (d) is rewritten to clarify what plant conditions must exist in order to perform the heat balance.

New Table Notes (a), (f), and (g) are added for the following reasons. Note (a) reflects that in-core neutron "detectors" cannot be calibrated per se, i.e. a standard source cannot be used as with radiation detectors used in other plant applications. This does not affect any existing requirements or procedures for calibrating the electronics associated with in-core neutron monitoring. Note (f) excludes operability of the High Reactor Pressure trip function when the reactor head is removed, Note (g) excludes Mode 5 operability from the High Water Level in the Scram Discharge Volume trip function when control rods are removed in accordance with Specification 3.10.D or 3.10.E. These notes are necessary so that required testing flexibility is allowed without placing an undue hardship on plant operations. These notes follow STS guidelines and provisions implemented at STS BWRs. New Note (h) is required to allow entry into a reactor condition (greater than 45% turbine first stage pressure) in order to perform the testing required by this specification. The basis for this note is identical to Note (i) of Table 4.1.1 above for functional testing.

Table 3.2.1

Table 3.2.1 for the Instrumentation that Initiates Primary Containment Isolation Functions is changed by adding two new columns. One of these new columns will correlate Isolation Instrumentation signals with the respective valve groups that are affected as shown on Table 3.7.1. The other new column will add Applicable Operational Modes to the table in order to more clearly define when the isolation instrumentation signals are required to be operable. The Applicable Operational Modes for all of the isolation instrumentation except Low Pressure Main Steam Line are Modes 1, 2, and 3. These Applicable Modes assure operability of the instrumentation when reactor temperature is greater than 212° F. The proposed change to the tolerance of the Reactor Low Low Water Level initiation setpoint to (GT/E) 84 inches will help standardize the setpoint throughout the Technical Specifications and allow greater flexibility in the calibration of the level transmitter. The upper tolerance of +4 inches was implemented to prevent spurious initiation of PCIS and ECCS, and has no other technical basis. Therefore, the removal of the upper tolerance will have no effect on the margin of safety. The

Table 3.2.1 (Cont'd)

Low Pressure Main Steam Line instrumentation is required operable only in Mode 1 since this function is bypassed in all modes except the RUN Mode. By implementing the Applicable Operational Mode terminology in Table 3.2.1, the terminology of "When primary containment integrity is required" can be deleted from Technical Specification 3.2.A. This change will provide consistent use of terminology between Technical Specification 3.2.A and Table 3.2.1 concerning when primary containment isolation instrumentation is required to be operable.

The Actions for Table 3.2.1 are proposed to be changed by rewriting the present Actions using STS guidelines. Proposed Action 11 is similar to present Action A except that an additional 12 hours is allowed to reach HOT SHUTDOWN before going to COLD SHUTDOWN in the Next 24 hours. Proposed Action 12 is a rewrite of present Action B and will allow 8 hours to reach STARTUP with the associated isolation valves closed or allow 12 hours to reach HOT SHUTDOWN and COLD SHUTDOWN in the next 24 hours. The 8 hour time to reach STARTUP is justified based on time required to perform an orderly shutdown from 100% power with all rods out. Proposed Actions 13 and 14 are similar to present Actions C and D with an additional requirement invoked to require the affected isolation valves to be closed within one hour.

New Table Notations (h) and (i) are added to Table 3.2.1 for Dresden Unit 2 (Notes (g) and (h) for Unit 3) to allow a channel to be inoperable for up to 2 hours to allow required surveillances without declaring the channel inoperable and to Table 3.7.1 to determine which valves are in each valve group. Note (a) is a rewrite of present Note (1) and references the Applicable Operational Modes in the table to determine when the instrumentation is required to be operable.

An addition to Table 3.2.1 is proposed as HPCI Steam Supply Line - Low Pressure with a trip level setting of greater than or equal to 80 psig. This Trip Function is already listed in the Notes for Table 3.7.1 as being a condition that will close the valves in Primary Containment Isolation Group 4. The addition of this signal to Table 3.2.1 will add an LCO for this instrument since it is required to be calibrated in accordance with Table 4.2.1.

The drywell isolation function on high radiation is added to Table 3.2.1 consistent with NUREG-0737 Topic II.E.4.2.7. Functional testing, surveillance testing and calibration will be consistent with methods used to test existing radiation monitors. In the event that less than the minimum number of operable channels are operable then the affected isolation valves must be closed within 24 hours or the reactor must in cold shutdown in 24 hours.

Table 3.2.2

The changes proposed to Table 3.2.2 for Instrumentation that Initiates or Controls the Core and Containment Cooling Systems include deletion of the present Remarks column. The information in the Remarks column is not required or needed in the Technical Specifications.

Added to the table are two columns, one for Applicable Operational Modes and the other for Actions. The Applicable Operational Modes are listed as 1, 2, and 3 for those systems that are used with the reactor at pressure. For those low pressure systems that may be needed in COLD SHUTDOWN or REFUEL, Modes 4 and 5 are listed as Applicable Operational Modes. The present Actions for Trip Functions on Table 3.2.2 are very restrictive and do not allow for continued plant operation in accordance with the affected systems Technical Specification requirements. The new actions are based on STS requirements and reflect that affected systems should be declared inoperable when initiating instrumentation is inoperable. Present Note (1) is rewritten and the present Action provisions contained therein are deleted.

Table notes (f), (g), and (h) are added based on STS guidelines. The new notes allow a channel to be inoperable for up to 2 hours for required surveillances without placing the trip system in which the instrument is included in the tripped condition and requires the instrumentation to be operable in Modes 4 or 5 only when the associated system is required to be operable.

Table 3.2.3

The changes to Table 3.2.3 for Instrumentation that initiates the Control Rod Block function includes the addition of two new columns. A column for the Applicable Operational Modes and a column for Actions are added and are similar to STS guidelines. The minimum number of operable channels per trip system column is changed to the minimum number of operable channels per trip function. Technical Specification Bases 3.2 describes the logic for the control rod block function as 1 out of n, where any one trip will cause a control rod block to occur. The change from the two trip system to trip function (one trip system) terminology reflects the one trip system design of the control rod block system at Dresden. The number of channels required operable have increased to reflect the decrease from two to one trip system. The Applicable Operational Modes are chosen based on when the instrumentation is required to perform a rod block function. The new Actions 30, 31 and 32 are based on STS guidelines for rod block instrumentation and ensure operability of instrumentation when needed or requires inoperable instrumentation to be placed in the safe or tripped condition when necessary to protect the rod block function.

Table 3.2.3 (Cont'd)

Table notation changes include the addition of Notes (f), (g), and (h). These notes (1) clarify that the RBM is required operable in the RUN mode only when operating greater than or equal to 30 percent power, (2) state when the RBM channels may be bypassed, and (3) state when the Scram Discharge Volume trip function is required operable in the REFUEL mode. New note (g) is taken from and replaces the requirements of Technical Specifications 3.2.C.2.

Dresden also proposes to remove wording in this table which could be interpreted to impose a Technical Specification requirement to have the APRM Rod Block function operable in the Refuel mode. Such a requirement would be overly restrictive and redundant to the SRM and IRM rod block functions. The design basis of the APRM Rod Block function is to initiate a rod block trip signal, which will prevent core average power increases to excessive levels with reduced recirculation flow. During the Refuel mode or during refueling, rod motion is restricted to one rod. Another design basis of the APRM is to provide a continuous indication and record of the bulk thermal power of the reactor in the power range. It is extremely unlikely that reactor can reach the power range with the reactor in the refueling mode, since rod movement is restricted to one rod with all other rods fully inserted. With the SRM and IRM operable and able to provide adequate and redundant rod blocks, it is unnecessary to force the APRMs to be operable during operational conditions when the flux levels existing are well below the power range. The APRM rod block is not needed in the refuel mode to mitigate the consequences of any accident. Since accident considerations will not be affected and the APRM rod block function is redundant to the IRM and SRM rod blocks in the refuel mode, the removal of the APRM refuel mode rod block will only remove unnecessary conservatism and will not effect the plant margin of safety.

Present Note (7) which allowed exceptions for operability during low power physics tests is deleted. Note (7) is not needed since all the Trip Functions that referenced the note are required operable only in Mode 1.

Table 3.2.4

The changes to Table 3.2.4 for Radioactive Liquid Effluent Monitoring Instrumentation include the renumbering of present Actions A, B and C to Actions 40, 41, and 42. The present Action provisions are retained. The "*" footnote is deleted from the table. This footnote requires flowrates to be determined by appropriate pump curves. This method has been replaced with flow measuring devices. The method of determining pump flowrates does not need to be specified in the Technical Specifications.

Table 3.2.5

The changes to Table 3.2.5 for the Radioactive Gaseous Effluent Monitoring Instrumentation include the renumbering of present Actions B through E to Actions 51 through 55. Proposed Action 50 will replace present Action A. Action 50 together with proposed new Action 56 will allow releases to continue with the Mid and High Range SPING inoperable without taking grab samples as long as the SPING Low Range monitors are operable. The Mid and High range monitors must be returned to service within 21 days or the NRC shall be notified. A new table column for Applicable Operational Conditions is added which implements the provisions of present Note (1). Present Note (1) is thus deleted and new footnotes "*" and "**" are added which specify operability of the instrumentation "at all times" and "during SJAE operation", respectively.

The Mobile Volume Reduction System (MVRS) requirements are deleted from the table since this system is not in use at Dresden and there are no plans for its use in the future. The present requirements were placed in the Technical Specifications in anticipation of the use of this system for radioactive waste disposal.

Table 3.2.6

The changes to Table 3.2.6 for Post Accident Monitoring Instrumentation include deletion of the table columns for Instrument Readout Location and Instrument Range. These columns provide information in excess of that necessary to establish post accident monitoring requirements. For example, inclusion of this information in the Technical Specifications restricts change out of instrumentation if the replacement instrumentation does not meet the exact stated range even though its range may be more than sufficient to meet the design requirements.

New table columns for Applicable Operational Modes and Actions are added to the table. The Applicable Operational Modes of 1 and 2 were chosen to ensure that the instrumentation is operable at reactor operation above HOT SHUTDOWN and thus will be ready to perform its function in these modes as well as in lower modes of operation if an accident occurs that requires use of this instrumentation.

Present Table Notes (1) through (5) are actually written in the form of Action requirements and thus the proposed change will convert them into Actions 60 through 64, respectively. The present requirements of Notes (1) through (5) are therefore retained.

Table 4.2.1

The changes to Table 4.2.1 for Core and Containment Cooling Systems Instrumentation, Rod Blocks, and Isolations surveillance requirements include the addition of a new column for Applicable Operational Modes. Where available, these modes are identical to the instrumentation operability requirements in Tables 3.2.1, 3.2.2, and 3.2.3. For the refueling floor radiation monitors the applicable operational modes are identical to those for the monitors in Technical Specification 3.2.D.

Table 4.2.1 (Cont'd)

The surveillance requirements (SRs) for the Safety and Relief Valve monitoring are being relocated to Section 3/4.6.E and SRs for the Containment Monitoring are being deleted based on the following justification. The installation of Tables 3.2.6/4.2.4 for Post Accident Monitoring Instrumentation required the removal of present sections C and D of Table 4.2.1 to prevent the existence of redundant surveillance requirements. There is no LCO Table entry nor is there a specific LCO in section 3.2 for this instrumentation. The LCOs and SRs for the Containment Monitoring instrumentation are located in Tables 3.2.6 and 4.2.4. The LCOs and SRs for Safety and Relief Valve operability are located in section 3/4.6.E. Therefore, the Containment Monitoring section C of Table 4.2.1 is being deleted to eliminate SRs redundant to those of Table 4.2.4. Relocation of the Safety and Relief Valve Monitoring SRs of present Table 4.2.1 section D to section 3/4.6.E is necessary to assure all LCOs and SRs that effect Safety and Relief operability are located in the appropriate TS section. Section D of Table 4.2.1 is not being deleted because a commitment was made to the NRC after TMI to install LCOs for Safety and Relief Valve operability based on valve position monitoring instrumentation operability.

Testing requirements added to the table include the functional test frequency of STARTUP to the Rod Blocks for APRM Downscale, APRM Flow Variable, RBM Upscale, and RBM Downscale. This additional testing will ensure operability of the affected instrumentation prior to plant startup and follows the guidelines suggested in the STS.

Present Table Note (1) is deleted by these proposed changes to the Technical Specifications. The monthly testing frequency suggested in Note (1) is incorporated into the table for the instrumentation that presently reference Note (1). New requirements are proposed to be added to the table in the form of Table Notes (i), (j), (k), (m), (n), (p), (q), and (r). These notes will require applicable functional testing within 24 hours prior to startup if not performed within the previous 7 days, will not require Scram Discharge Volume level switch testing in Mode 5 with control rods removed in accordance with 3.10.D or 3.10.E, will require RBM operability only at greater than or equal to 30% rated thermal power, and require Undervoltage and Degraded Voltage on the emergency buses to be operable in Modes 4 and 5 only when the associated ECCS equipment is required to be operable. The new notes will also require ECCS functions of Reactor Low-Low Water Level and Reactor Low Pressure to be operable in Modes 4 and 5 only when associated ECCS or containment cooling systems are required to be operable. New Note (p) adds the operability requirements for the Refueling Floor Radiation Monitors. Note (q) excludes channel calibration for the neutron detectors. The requirements for Notes (i), (j), (k), (m), (n), and (q) are taken from STS guidelines. The requirements for Note (p) clarify operational conditions for the affected instrumentation. New Note (r) is included to prevent the

Table 4.2.1 (Cont'd)

violation of Technical Specifications during a controlled shutdown. The Calibration of the APRM Rod Block function may take 8 hours to perform. This surveillance will lengthen the time required to reach a shutdown condition. The APRM Rod Block functional test is performed during controlled shutdowns. The functional test verifies the proper setpoint of this function, therefore, calibration of this function is not required during shutdowns. Note (c) has been reworded to clarify that MSL radiation monitors are calibrated using sources. The term "sensors" used in present Note 4 is not well defined.

Table 4.2.2

The changes to Table 4.2.2 for Radioactive Liquid Effluent Monitoring Instrumentation include deleting present Note (1). The testing frequencies specified in Note (1) are incorporated into the revised table. The present Source Checks for the Liquid Radwaste Effluent Gross and Activity Monitor instrumentation do not contain a testing frequency. A surveillance frequency of 18 months is added for these source checks which is consistent with the testing frequency for the service water instrumentation in this table.

Table 4.2.3

The proposed change to Table 4.2.3 for Radioactive Gaseous Effluent Monitoring Instrumentation is to add a table column for Application Operational Modes. These modes for the surveillance requirements are identical to those for operability of the instrumentation in Table 3.2.5. Also, as described in the changes for Table 3.2.5, the specifications regarding the MVRS are deleted. Present Note (1) is deleted and its surveillance frequency notations are incorporated into the table. The present Note 6 (proposed Note (e)) requirement for daily Instrument Checks is deleted and incorporated into the table. Note 7 is also deleted. It was associated with MVRS.

Table 4.2.4

The changes to Table 4.2.4 for Post Accident Monitoring Instrumentation include the deletion of table columns for Instrument Readout Location and Minimum Number of Operable Channels. The Instrument Readout Location provides information that is not needed in the Technical Specifications. The Minimum Number of Operable Channels column is being deleted since it is already included in Table 3.2.4 and does not need to be in both tables. The proposed change to Note (1) will delete the monthly calibration requirements for the acoustic monitors and place this requirement in the Calibration column of the table.

Table 4.2.4 (Cont'd)

References to the Mobile Volume Reduction System in Table 4.8.1 are removed since this system will not be used at Dresden. Its original inclusion to the Technical Specifications was in anticipation of its use. The minimum analysis frequencies for H3 (tritium), Gross Alpha, Sr-90, Sr-89, and Fe-55 in Table 4.8.3 are changed to the frequency for which they are actually able to be performed. These analyses are contracted and cannot be obtained at intervals less than monthly on a routine basis.

C. MAIN STEAMLINE PRESSURE CHANGE TO 825 PSIG

Present Specification 2.1.G contains a setpoint of 850 psig for the low pressure initiation of main steamline isolation valve closure. The present setpoint is set too conservatively. Some of this excess conservatism can be removed without significantly reducing the margin of safety as originally suggested by General Electric in SIL #130. The proposed change to the Dresden Technical Specifications will reduce the setpoint of 850 psig to 825 psig. A similar change has previously been NRC approved for Quad Cities Units 1 and 2 as part of Amendments 66 and 60, respectively, in an SER dated April 16, 1981.

The low pressure isolation at 850 psig is provided to (1) protect against fast reactor depressurization and resulting rapid cool-down of the vessel and (2) to prevent high power operation at low pressure. Neither of these functions will be significantly affected by the proposed change. A trip of this low pressure instrumentation results in closure of Group 1 isolation valves in the RUN mode. In the REFUEL and STARTUP/HOT STANDBY modes, this trip function is not needed and is bypassed. The trip function on low pressure is provided to ensure protection against a pressure regulator malfunction which could cause the control and/or bypass valves to open. The reduction of 25 psig in the MSIV isolation trip will lower the saturation temperature by only 3° F upon initiation so that the total change in saturation temperature during a pressure regulator failure transient is about 17° F. As evaluated by Advanced Nuclear Fuels (ANF) and CECo Nuclear Fuel Services (NFS) Department, this change will have a negligible effect on fuel duty, vessel cool-down, and on the consequences of a turbine pressure regulator failure, which is the only transient or accident where this setpoint is considered. Attachment 5 discusses this evaluation further.

The reduction of the trip level setting by 25 psi to 825 psig (840 psia) will still provide a 40 psi safety margin for high power operation at low pressure as determined in Technical Specification 1.1.B. As stated in the Technical Specification Bases, the core thermal power limit for reactor pressures below 800 psia is 25% and this limit is conservative. For reactor pressures above 800 psia, there is no core thermal power limit except for 100% - as long as the

C. MAIN STEAMLINE PRESSURE CHANGE TO 825 PSIG (Cont'd)

margin to boiling transition is not exceeded, that is, the minimum critical power ration (MCPR) limits are not exceeded. The proposed change to 825 psig will help to enhance plant reliability and safety by reducing the probability of an inadvertent reactor isolation and subsequent removal of the primary heat sink.

D. TURBINE CONTROL VALVE FAST CLOSURE SCRAM TERMINOLOGY CHANGE

Specification 2.1.I contains the Limiting Safety System Settings for the Turbine Control Valve Fast Closure Scram on loss of control oil pressure. As explained in Bases 2.1.I, the actual scram signal is from loss of Electro-Hydraulic Control (EHC) Oil pressure and not from Control Valve Fast Closure per se. That is, the loss of oil pressure scram is anticipatory for the resultant control valve closure in order to provide similar margins as for the generator load rejection where the scram is based directly on the fast closure solenoid valves. This terminology change will clarify the scram signal origination point by changing the name of the trip to "Loss of EHC Oil Pressure Scram" in Specification 2.1.I and in Bases 2.1.I. This clarification is also necessary in Tables 3.1.1, 4.1.1 and 4.1.2. Also, as a clarification to Bases 2.1.I, the scram setpoint of 900 psig is stated to be in the EHC Oil system.

ATTACHMENT 2

SUMMARY OF PROPOSED CHANGES

The following changes are proposed for Dresden Units 2 and 3 (DPR-19 and 25):

(1) Pages 1.0-2

Delete the definition for Mode. Add new Tables 1.1 and 1.2 on Surveillance Frequency Notation and Operational Modes, respectively.

(2) Page 1.0-5

Reword definition AA for 'shutdown' to include the refuel mode switch position and explanation that the shutdown margin must be met when shutdown with the mode switch in refuel.

(3) Page 1/2.1-4

Change the tolerance on the Reactor Low Low Water Level initiation setpoint from 84 (+4 -0) inches to (GT/E) 84 inches.

(4) Pages 1/2.1-5, B1/2.1-15, B1/2.1-16, Table 3.2.1, B3/4.2-30, and B3/4.2-31.

Change the main steamline isolation valve closure on low main steamline pressure from 850 to 825 psig.

(5) Pages 1/2.1-5, B1/2.1-16, Table 3.1.1, Table 4.1.1, and Table 4.1.2.

Change the terminology of Turbine Control Valve Fast Closure Scram to Loss of EHC Oil Pressure Scram. In Bases 2.1.I clarify that the scram setpoint of 900 psig is associated with the EHC oil system.

(6) Pages B1/2.1-12

Removed 'Refuel' from the APRM Flux Scram Trip Setting bases discussion title.

(7) Page 3/4.1-1

For the Reactor Protection System in 3.1.A.1, change the terminology of "position of the reactor mode switch" to "applicable operational mode".

(8) Pages 3/4.1-5 through 3/4.1-7

The changes to Table 3.1.1 for Reactor Protection System (Scram) Instrumentation Requirements are as follows:

a. The present columns are reordered such that the Trip Function is the first column and the Minimum Operable Channels per Trip System column is the second column.

b. The applicable operational modes are given as Modes 1, 2, 3, 4, or 5.

c. New Actions based on the Standard Technical Specifications are added. An exception the STS action requirements will allow the plant 8 hours to reach startup instead of the standard 6 hours.

d. Add new table notations (a), (c), and (i).

(9) Pages 3/4.1-8 and 3/4.1-9

The changes to Table 4.1.1 for Scram Instrumentation Functional Tests are as follows:

a. Change the title to Reactor Protection System (Scram) Instrumentation Functional Test Requirements.

b. Delete the Instrumentation Group column and associated Note (3).

c. Add applicable operational modes column.

d. Add new Notes (a), (g), and (i).

e. Add Weekly testing frequency to IRM High Flux in Mode 2 and APRM High Flux (15% scram) Modes 2, and 3.

f. For IRM High FLux, change frequency of testing from Startup to Weekly for Modes 3, 4, and 5.

g. For IRM Inoperative, change frequency of testing from Startup to Weekly.

(10) Page 3/4.1-10.

The changes to Table 4.1.2 for Scram Instrumentation Calibrations are as follows:

a. Change the title to Reactor Protection System (Scram) Instrumentation Calibration Requirements.

b. Delete the Instrumentation Group column and associated Note (1).

c. Add the Applicable Operational Modes column.

d. Change the testing frequency for High Flux IRM from Every Shutdown to Startup and Weekly in Modes 2, 3, 4, and 5.

e. Add Table Notes (a), (f), (g) and (h).

(11) Page 3/4.2-1

For Primary Containment Isolation Functions in 3.2.A, delete the terminology "When primary containment integrity is required."

(12) Page 3/4.2-2

Move the Control Rod Block Actuation requirements from Technical Specification 3.2.C.2 to Table 3.2.3 Action 30.

(13) Pages 3/4.2-8 and 3/4.2-9

The changes to Table 3.2.1 for Instrumentation That Initiates Primary Containment Isolation Functions are as follows:

a. Change the order of the columns such that the Trip Function is listed first, a new column listing valve groups is second, and the Minimum Operable Channels per Trip System is in column three. A new column showing the Applicable Operational Modes is the fifth column.

b. Add STS wording for Actions 11 and 12 except that 8 hours is allowed to reach startup instead of 6.

c. Add new Table Notes (h) and (i) for DPR-19 and Notes (g) and (h) for DPR-25.

d. Add the isolation trip function for HPCI Steam Supply Line - Low Pressure.

e. Change the Reactor Low Low Water level setpoint tolerance to (GT/E) 84 inches above TAF.

f. Add the Drywell High Radiation primary containment isolation function.

(14) Pages 3/4.2-10 and 3/4.2-11

The changes to Table 3.2.2 for Instrumentation That Initiates or Controls the Core and Containment Cooling Systems are as follows:

a. Reorder the columns in the table by placing the Trip Function in the first column and the Minimum Operable Channels per Trip System in the second column.

b. Delete the Remarks column.

c. Add the Applicable Operational Modes column and the Action column.

d. Change the Reactor Low Low Water level setpoint tolerance to (GT/E) 84 inches above TAF.

e. Add Actions 20, 21, 22, 23, and 24 based on the STS guidelines.

f. Rewrite Note (1) and delete Action provisions contained in this note.

g. Add new Table Notes (f), (g), and (h).

(15) Pages 3/4.2-12 and 3/4.2-13

The changes to Table 3.2.3 for Instrumentation That Initiates Rod Block are as follows:

a. Change the order of the table columns such that the Trip Function is in the first column and the Minimum Operable Channels per Trip Function are in the second column.

b. Add new columns for Applicable Operational Modes and Actions.

c. Replace present Actions in Note (1) with new Actions 30, 31, and 32.

d. Add new Table notes (f), (g), (h), and (r).

e. Delete present Note 7.

(16) Page 3/4.2-14

The changes to Table 3.2.4 for Radioactive Liquid Effluent Monitoring Instrumentation are as follows:

a. Change the order of the table columns such that the Instruments are in the first column.

b. Renumber Actions from present A, B, and C to 40, 41, and 42.

c. Delete the "*" footnote which requires flowrates to be determined by appropriate pump curves.

(17) Pages 3/4.2-15 and 3/4.2-16

Changes to Table 3.2.5 for Radioactive Gaseous Effluent Monitoring Instrumentation are as follows:

a. Change the order of the columns such that the Instruments are listed in the first column.

b. Add a new column for Applicable Operational Modes.

c. Renumber the Actions from A, B, C, D, E, and F to 50, 51, 52, 53, 54, and 55, respectively.

d. Add Action 56.

e. Delete the Mobile Volume Reduction System Instrumentation.

f. Change "Off Gas Radiation Activity Monitor" to SJAE Off Gas Activity Monitor.

(18) Pages 3/4.2-17 and 3/4.2-18.

Changes to Table 3.2.6 for Post Accident Monitoring Instrumentation are as follows:

a. Change the order of the table columns such the the Instrument column is first followed by the Minimum Channels Operable and the Number of Channels Provided.

b. Add new columns for Applicable Operational Modes and Actions.

c. Delete present table columns for Instrument Readout Location and Instrument Range.

d. Change present Table Notes 1, 2, 3, 4, and 5 into Actions 60, 61, 62, 63, and 64, respectively.

(19) Pages 3/4.2-19 through 3/4.2-21

Changes to Table 4.2.1 for Minimum Test and Calibration Frequency for Core and Containment Cooling Systems Instrumentation, Rod Blocks, and Isolations are as follows:

a. Add a new column for Applicable Operational Modes.

b. Delete Section C. Move Section D and associated notes to Section 3/4.6.E.

c. Add new Table Notes (i), (j), (k), (m), (n), (p), (q), and (r).

d. Delete present Table Note (1).

e. Add functional test frequency of Startup to the Rod Blocks for APRM Downscale, APRM Flow Variable, RBM Upscale and RBM Downscale.

f. Add functional test, calibration, and instrument check frequencies for Drywell High Radiation isolation function.

(20) Pages 3/4.2-22 and 3/4.2-23

Changes to Table 4.2.2 for Radioactive Liquid Effluent Monitoring Instrumentation Surveillance Requirements are as follows:

a. Change the order of the table columns such that the second column is Functional Tests, the third column is Calibration, the fourth column is Instrument Check, and the fifth column is Source Check.

b. Delete present Table Note (1).

c. Add Refueling frequency for Source Checks on the Liquid Radwaste Effluent Gross and Activity Monitor instruments.

(21) Pages 3/4.2-24 and 3/4.2-25

Changes to Table 4.2.3 for Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements are as follows:

a. Change the order of the table columns such that the second column is Functional Tests, the third column is Calibration, the fourth column is Instrument Check, and the fifth column is Source Check.

b. Delete the Mobile Volume Reduction Instrumentation.

c. Delete present Table Notes (1) and (7).

d. The requirement in present Note 6 that Instrument Checks be performed at least once per day is moved to the table for the affected instruments.

e. Add table column for Applicable Operational Modes to include all modes and only during Steam Jet Air Ejector operation.

(22) Pages 3/4.2-26 and 3/4.2-27

Changes to Table 4.2.4 for Post Accident Monitoring Instrumentation Surveillance Requirements are as follows:

a. Change the order of the table columns such that the first column is the Instrument, the second column is Calibration, the third column is Instrument Check, and the fourth column is Applicable Operational Modes.

b. Delete present table columns of Minimum Number of Operable Channels and Instrument Readout Location.

c. Incorporate the Note (1) requirement for monthly calibration of the acoustic monitors into the table.

(23) Pages B 3/4.2-31 and B 3/4.2-32

a. Page B 3/4.2-31
A paragraph is added to explain the RBM operability requirements during a limiting control rod pattern.

b. Page B 3/4.2-32
Sentences are added to clarify why the RBM is not required operable when edge control rods are selected.

(24) Page 3/4.3-9

a. Change "operating" to "operation" and add "except as specified in Table 3.2.3 Note (g)" in paragraph 3.3.B.5.

b. Change "been" to "an" in paragraph 4.3.B.4.

(25) Pages B 3/4.3-18 and B 3/4.3-19

Add a paragraph which provides an updated description of Rod Block monitor requirements during limiting control rod pattern operation.

(26) Pages 3/4-6.6 and 3/4-6-7.

a. Insert 'relief' after 'pressure' in the last sentence present section 3.6.E.1.

b. Renumber Section 4.6.E as 4.6.E.1.

c. Insert LCO and SR for safety and relief valve monitoring in sections 3.6.E.3 and 4.6.E.2.

(27) Table 4.8.1

Remove items E and F which refer to the MVRS.

(28) Table 4.8.1 Notations

Remove notes (6) and (7). Surveillance frequencies are noted on Table 1.2

(29) Table 4.8.3

Change H3, Gross Alpha, and Sr-90, Sr-89, and Fe-55 Minimum Analysis Frequency to monthly.