1901 Chouteau Avenue
Post Office Box 149
St. Louis, Missouri 63166
314 554 2650

UNION ELECTRIC

Donald F. Schnell
Senior Vice President
Nuclear

June 4, 1993

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

ULNRC- 2808

Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT
AXIAL FLUX DIFFERENCE PENALTY FUNCTION OF
OVERTEMPERATURE DELTA-T REACTOR TRIP

References: 1. ULNRC-2546 dated January 14, 1992, Relaxed Axial Offset Control

2. ULNRC-2781 dated March 24, 1993, Revision 3 to the Callaway Cycle 6 COLR

3. ULNRC-2274 dated August 23, 1990, Thimble Plug Removal

4. ULNRC-2450 dated July 30, 1991, Miscellaneous Technical Specification Bases Changes

5. ULNRC-2196 dated April 12, 1990, RTD Bypass Elimination

Union Electric Company herewith transmits an application for amendment to Facility Operating License No. NPF-30 for the Callaway Plant.

This amendment application includes changes to Technical Specification Tables 2.2-1 and 4.3-1 as well as Bases 3/4.2.2 and 3/4.2.3 for the purpose of revising the Axial Flux Difference (AFD) penalty function f_1(Delta-I) defined in Note 1 of Table 2.2-1 for the Overtemperature Delta-T reactor trip function. This change will be accommodated by the use of available DNBR margin, as reflected in changes to the Bases, and by a reduction in the recalibration tolerance for the incore vs. excore AFD comparison surveillance in Note 3 of Table 4.3-1 from 3% to 2%. No changes to the Z, S, or Allowable Value terms in Table 2.2-1 are required.

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STATE OF MISSOURI)
) S S
CITY OF ST. LOUIS)

Alan C. Passwater, of lawful age, being first duly sworn upon oath says that he is Manager, Licensing and Fuels (Nuclear) for Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Alan C Passwater
Alan C. Passwater
Manager, Licensing and Fuels
Nuclear

SUBSCRIBED and sworn to before me this 4th day of June, 1993.

Barbara J. Pfaff
BARBARA J. PFAFF
NOTARY PUBLIC — STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 22, 1997
ST. LOUIS COUNTY

cc: T. A. Baxter, Esq.
Shaw, Pittman, Potts & Trowbridge
2300 N. Street, N.W.
Washington, D.C. 20037

Dr. J. O. Cermak
CFA, Inc.
18225-A Flower Hill Way
Gaithersburg, MD 20879-5334

L. Robert Greger
Chief, Reactor Project Branch 1
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Bruce Bartlett
Callaway Resident Office
U.S. Nuclear Regulatory Commission
RR#1
Steedman, Missouri 65077

L. R. Wharton (2)
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
1 White Flint, North, Mail Stop 13E21
11555 Rockville Pike
Rockville, MD 20852

Manager, Electric Department
Missouri Public Service Commission
P.O. Box 360
Jefferson City, MO 65102

Ron Kucera
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

ATTACHMENT ONE

SAFETY EVALUATION

SAFETY EVALUATION

INTRODUCTION

This amendment application includes changes to Technical Specification Tables 2.2-1 and 4.3-1 as well as Bases 3/4.2.2 and 3/4.2.3 for the purpose of revising the Axial Flux Difference (AFD) penalty function, f_1 (Delta-I), defined in Note 1 of Table 2.2-1 for the Overtemperature Delta-T (OTDT) Reactor Trip Functional Unit. These changes to the penalty function deadband and positive wing power reduction slope will be accommodated by the use of available DNBR margin, as reflected in the changes to Bases 3/4.2.2 and 3/4.2.3, and by a reduction in the recalibration tolerance for the incore vs. excore AFD comparison surveillance in Note 3 of Table 4.3-1 from 3% to 2%.

In addition, inequality signs are added to the time constant definitions in Notes 1 and 3 of Table 2.2-1 for the OTDT and Overpower Delta-T (OPDT) reactor trip functions. These inequality signs indicate the conservative direction for setting these time constants and are the same as previously approved for Vogtle Units 1 and 2.

OTDT AXIAL FLUX DIFFERENCE PENALTY FUNCTION

The OTDT AFD penalty function is calculated using the core thermal limits and axial offset limits presented in the Reload Safety Analysis Checklist. The axial offset limits are envelopes of allowable power, based on the DNBR limit, and are calculated based on expected axial power shapes from various ANS Condition I and II events. Axial offset is a measure of the axial core power distribution and is defined as:

$$(q_T - q_B)/(q_T + q_B)$$

where q_T is the percent of rated thermal power generated in the top half of the core and q_B is the percent of rated thermal power generated in the bottom half of the core. The numerator of the axial offset, $(q_T - q_B)$, is the AFD.

The revision to the OTDT AFD penalty function is needed for two reasons. Westinghouse has determined that the slope of the positive wing of this penalty function may not provide a sufficiently large penalty for axial power shapes that have a large positive AFD (i.e. top-skewed power shapes). The calculation of this penalty function currently uses a linear extrapolation of the core thermal limits and axial offset limits above 118% rated thermal power. However, this may be non-conservative because the slopes and deadband (AFD band for which the penalty function is zero) of the axial offset envelopes are not independent of power. Specifically, the slope of the positive wing of the AFD penalty function may not be as high with this approach as it would be if calculations were performed using actual axial offset data at the higher power levels. The power reduction slope of the negative wing of the AFD penalty function is unchanged because of the large negative AFD deadband (shifted slightly to -23%) and since axial power shapes with large negative axial offsets are not limiting for either Cycle 6 or Cycle 7. The current linear extrapolation method of determining the AFD penalty function introduces a maximum DNBR penalty of 5.5%. The change to the slope of the positive wing proposed herein, from 1.89% / % Delta-I to 2.973% / % Delta-I, will eliminate this calculation methodology DNBR penalty.

Secondly, the Beginning of Cycle Life (BOL) axial flux difference under RAOC operation can be as high as +12% (revised to +13% in Reference 2 of the cover letter) at 100% rated thermal power; however, the AFD penalty function of the OTDT reactor trip requires trip setpoint reductions if the AFD exceeds +6%. At the beginning of Cycle 6 this imposed operational limitations and has the potential to do so for Cycle 7. To address this concern, Westinghouse has determined that the OTDT AFD penalty function deadband, for which there is no trip setpoint reduction, can be moved out to +10% AFD if the negative wing of the AFD penalty function is revised to impose a penalty below -23% AFD and 4% of available DNBR margin is used. One of several reload design features anticipated to reduce the axial offset concerns encountered during Cycle 6 is the reinsertion of all thimble plugs which will reduce core bypass flow. As discussed in References 3 and 4 of the cover letter, thimble plug removal required the assignment of a 3.1% DNBR penalty. Their reinsertion eliminates this penalty such that the above AFD deadband shift DNBR penalty results in less than a 1% additional DNBR penalty assessment.

OTDT SETPOINT TERMS

Increasing the slope of the positive wing of the OTDT AFD penalty function has the potential to impact the setpoint studies submitted in Reference 5 of the cover letter. The OTDT setpoint study has Process Measurement Accuracy (PMA) terms that are dependent upon a gain factor determined from the magnitude of this slope. One of these terms is derived from Note 3 of Technical Specification Table 4.3-1. That note deals with a monthly comparison of incore to excore AFD above 15% of rated thermal power. Currently there is a requirement to recalibrate, normally done on a quarterly interval, if the absolute difference in the incore vs. excore AFD is greater than or equal to 3%. It has been confirmed that the Z, S, and Allowable Value terms currently listed in Table 2.2-1 for the OTDT trip function will remain conservative, with no changes needed, by reducing the incore vs. excore AFD recalibration tolerance from 3% to 2% and implementing the new gain factor. There will be little impact on plant operation since this value has historically been less than 2% and is usually less than 1%.

TIME CONSTANT INEQUALITY SIGNS

The inequality signs added to the time constant definitions in Notes 1 and 3 of Table 2.2-1 for the OTDT and OPDT reactor trip functions indicate the conservative direction for setting these time constants. This is helpful to the I&C technicians who check and, as necessary, reset these time constants. Lead-lag compensation cards are used in both the OTDT and OPDT reactor trip functions to compensate for dynamic delays and provide rapid responses by providing an output signal that is always greater than the input signal. For a step input, a lead-lag card provides an output greater than the input based on the ratio between the lead time constant, τ_1 and τ_4 in Table 2.2-1, and the lag time constant, τ_2 and τ_5 in Table 2.2-1. The greater this ratio, the greater the magnitude of the initial output pulse, which decays down to approach the input as time passes. For a smaller value of the lag time constant, the output decays down to the input more quickly. For a ramp input, these cards provide an output greater than the input based on the algebraic difference between the lead and lag time constants. Measured Delta-T is multiplied by a lead-lag compensator in Table 2.2-1 for both the OTDT and OPDT reactor trip functions. If this lead-lag compensator is increased, the measured Delta-T must decrease to satisfy the setpoint equation. Likewise, the difference between measured T-avg and reference T-avg at 100% rated thermal power (588.4°F) is multiplied by a lead-lag compensator in Table 2.2-1 for the OTDT reactor trip function. If this lead-lag compensator is increased, the right hand side of the setpoint equation is reduced thereby reducing the allowed value for measured Delta-T. Therefore, the conservative directions for the inequality signs for the lead-lag cards are greater than or equal to for the τ_1 and τ_4 time constants and less than or equal to for the τ_2 and τ_5 time constants.

The OPDT reactor trip function also uses a rate-lag card for T-avg dynamic compensation. This card provides a rapid response to an input signal exhibiting a rate of change. For a step input, the rate-lag card provides an output initially equal to the input but which decays to zero as time passes. However, for a ramp input, this card provides an output directly proportional to the magnitude of the time constant, τ_7 in Table 2.2-1. Measured T-avg is multiplied by a rate-lag compensator in Table 2.2-1 for the OPDT reactor trip function. If this rate-lag compensator is increased, the right hand side of the setpoint equation is reduced thereby reducing the allowed value for measured Delta-T.

Therefore, the conservative direction for the inequality sign for the rate-lag card is greater than or equal to for the τ_7 time constant.

DETERMINATION OF NO UNREVIEWED SAFETY QUESTION

The proposed changes to the Technical Specifications do not involve an unreviewed safety question because the operation of Callaway Plant in accordance with these proposed changes would not:

(1) Involve an increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. Overall protection system performance will remain within the bounds of the accident analyses documented in FSAR Chapter 15, WCAP-10691-P, and WCAP-11883 since no hardware changes are proposed.

The OTDT reactor trip function is a primary trip credited in the FSAR Chapter 15 and WCAP-10961-P accident analyses. The OPDT reactor trip function provides backup protection against excessive power (fuel rod integrity protection within the fuel temperature design basis). No credit is explicitly taken for OPDT trips in those accident analyses, although the OPDT trip is credited in the analysis of a steamline break coincident with control rod withdrawal.

The specific accident analyses which take credit for a reactor trip on OTDT are listed below:

(a) FSAR Section 15.2.3, Turbine Trip (specifically the case with pressurizer spray and PORVs available, with maximum reactivity feedback, analyzed at full power)

(b) FSAR Section 15.4.2, Uncontrolled Rod Cluster Control Assembly (RCCA) Bank Withdrawal at Power (specifically the cases with slow (1 pcm/sec) reactivity insertion rates, analyzed at 100%, 60%, and 10% of full power)

(c) FSAR Section 15.4.3, RCCA Misoperation (specifically the case for a single RCCA withdrawal at full power)

(d) FSAR Section 15.4.6, CVCS Malfunction that Results in a Decrease in the Boron Concentration of the Reactor Coolant (specifically the case at full power with manual rod control)

(e) FSAR Section 15.6.1, Inadvertent Opening of a Pressurizer Safety or Relief Valve (analyzed at full power)

(f) WCAP-10961-P, Steamline Break Mass/Energy Releases for Equipment Environmental Qualification Outside Containment (specifically Cases 60-62 of Table III.B-4, analyzed at full power).

These events are of interest because the OTDT trip is the primary trip credited in the analyses, with a total analysis response time of 8 seconds (6 seconds of first order lags, i.e. RTD response time and thermal lags, and 2 seconds of pure delays, i.e. electronic delays).

The OTDT setpoint is designed to ensure plant operation within the DNB design basis and hot leg boiling limit. The OTDT AFD penalty function, f_1 (Delta-I), is designed to ensure DNB protection from adverse axial power shapes. Changing the penalty function deadband, such that no penalty is incurred for axial flux differences between -23% and +10% Delta-I, as well as increasing the power reduction slope of the positive wing will have no effect on the above listed accident analyses since those analyses do not model the f_1 (Delta-I) term in the OTDT setpoint equation. This penalty function accounts for axial power shape effects on the DNB criteria and independently lowers the OTDT setpoint to ensure a conservative reactor trip when faced with severe power shapes. Changing the slope of the positive wing will eliminate a DNBR penalty assessed due to the non-conservative nature in which Westinghouse previously calculated the AFD penalty function. Changing the deadband will require the use of available DNBR margin as reflected in the revisions to the Bases.

The OTDT and OPDT (for Callaway, OPDT is a backup trip with no AFD penalty function) trips will continue to function in a manner consistent with the above analysis assumptions and the plant design basis. As such, there will be no degradation in the performance of or an increase in the number of challenges to equipment assumed to function during an accident situation.

The reactor trip system response time, beginning at the time the measured Delta-T exceeds the trip setpoint at the RTDs as defined in the Technical Specifications, will be unaffected. With the addition of the time constant inequality signs, the time between the beginning of a transient until the RTDs sense a Delta-T higher than the reactor trip setpoint will be reduced since the effect of the signal conditioning will be to lower the trip setpoint if the time constants are set in accordance with the conservative direction of the inequality signs.

These Technical Specification revisions do not involve any hardware changes nor do they affect the probability of any event initiators. There will be no change to normal plant operating parameters, ESF actuation setpoints, accident mitigation capabilities, accident analysis assumptions or inputs. The accident analyses do not model the OTDT AFD penalty function, therefore changes to that penalty function do not impact the conclusions of the accident analyses. The addition of the OTDT and OPDT time constant inequality signs has the effect of lowering the respective reactor trip setpoints. Therefore, these changes will not increase the probability or consequences of an accident or malfunction.

(2) Create the possibility for an accident or malfunction of a different type than any previously evaluated in the FSAR. As discussed above, there are no hardware changes associated with these Technical Specification revisions nor are there any changes in the method by which any safety-related plant system performs its safety function. Revisions to the OTDT AFD penalty function deadband and positive wing slope will require setpoint and scaling changes for the function generator (NCH) cards in the 7300 Process Protection System. The nature of these setpoint and scaling changes is straightforward and similar to those perfomed to implement RAOC (see Reference 1 of the cover letter). The new requirement to recalibrate if the incore vs. excore AFD mismatch is greater than or equal to 2% does not affect the manner of plant operation. At most this would result in monthly recalibrations vs. the current quarterly recalibrations. This should not come into play since this mismatch has historically been less than 2% and is usually less than 1%.

No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of these changes. There will be no adverse effect or challenges imposed on any safety-related system as a result of these changes. Therefore, the possibility of a new or different kind of accident is not created.

There are no changes which would cause the malfunction of safety-related equipment, assumed to be operable in the accident analyses, as a result of the proposed Technical Specification changes. No new mode of failure has been created and no new equipment performance burdens are imposed. Therefore, the possibility of a new or different malfunction of safety-related equipment is not created.

(3) Involve a reduction in the margin of safety as defined in the basis for any Technical Specification. There will be no change to the DNBR Correlation limit, the design DNBR limits, or the safety analysis DNBR limits discussed in BASES Section 2.1.1. Available DNBR margin will be used to widen the OTDT AFD penalty function deadband, as indicated in the revisions to BASES 3/4.2.2 and 3/4.2.3.

As discussed earlier, the response time of the OTDT and OPDT reactor trip functions will remain within the assumptions used in the accident analyses. The analyses of the events which credit the OTDT reactor trip will remain as presented in FSAR Chapter 15 and WCAP-10961-P.

The OTDT setpoint calculation includes PMA terms that are dependent upon a gain factor determined by the slope of the positive wing of the AFD penalty function. One of these terms is derived from Note 3 of Technical Specification Table 4.3-1. That note deals with a monthly comparison of incore to excore AFD above 15% of rated thermal power. Currently there is a requirement to recalibrate, normally done on a quarterly interval, if the absolute difference in the incore vs. excore AFD is greater than or equal to 3%. It has been confirmed that the Z, S, and Allowable Value terms currently listed in Table 2.2-1 for the OTDT trip function will remain conservative, and no changes are required, by reducing the incore vs. excore AFD recalibration tolerance from 3% to 2% and implementing the new gain factor.

There will be no effect on the manner in which safety limits or limiting safety system settings are determined nor will there be any effect on those plant systems necessary to assure the accomplishment of protection functions. There will be no impact on DNBR limits, F_Q, F-delta-H, LOCA PCT, peak local power density, or any other margin of safety.

Based on the information presented above, the proposed amendment does not involve an unreviewed safety question and will not adversely affect or endanger the health or safety of the general public.

ATTACHMENT TWO

SIGNIFICANT HAZARDS EVALUATION

SIGNIFICANT HAZARDS EVALUATION

This amendment application includes changes to Technical Specification Tables 2.2-1 and 4.3-1 as well as Bases 3/4.2.2 and 3/4.2.3 for the purpose of revising the Axial Flux Difference (AFD) penalty function, f_1 (Delta-I), defined in Note 1 of Table 2.2-1 for the Overtemperature Delta-T (OTDT) Reactor Trip Functional Unit. These changes to the penalty function deadband and positive wing power reduction slope will be accommodated by the use of available DNBR margin, as reflected in the changes to Bases 3/4.2.2 and 3/4.2.3, and by a reduction in the recalibration tolerance for the incore vs. excore AFD comparison surveillance in Note 3 of Table 4.3-1 from 3% to 2%.

In addition, inequality signs are added to the time constant definitions in Notes 1 and 3 of Table 2.2-1 for the OTDT and Overpower Delta-T (OPDT) reactor trip functions. These inequality signs indicate the conservative direction for setting these time constants and are the same as previously approved for Vogtle Units 1 and 2.

The proposed changes to the Technical Specifications do not involve a significant hazards consideration because operation of Callaway Plant in accordance with these changes would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

Overall protection system performance will remain within the bounds of the accident analyses documented in FSAR Chapter 15, WCAP-10691-P, and WCAP-11883 since no hardware changes are proposed.

The OTDT reactor trip function is a primary trip credited in the FSAR Chapter 15 and WCAP-10961-P accident analyses. The OPDT reactor trip function provides backup protection against excessive power (fuel rod integrity protection within the fuel temperature design basis). No credit is explicitly taken for OPDT trips in those accident analyses, although the OPDT trip is credited in the analysis of a steamline break coincident with control rod withdrawal.

The OTDT setpoint is designed to ensure plant operation within the DNB design basis and hot leg boiling limit. The OTDT AFD penalty function, f_1 (Delta-I), is designed to ensure DNB protection from adverse axial power shapes. This AFD penalty function is generated based on expected axial power shapes from various ANS Condition I and II events. Changing the penalty function deadband, such that no penalty is incurred for axial flux differences between -23% and +10% Delta-I, as well as increasing the power reduction slope of the positive wing will have no effect on the accident analyses since those analyses do not model the f_1 (Delta-I) term in the OTDT setpcint equation. This penalty function accounts for axial power shape effects on the DNB criteria and independently lowers the OTDT setpoint to ensure a conservative reactor trip when faced with severe power shapes. Changing the slope of the positive wing will eliminate a DNBR penalty assessed due to the non-conservative nature in which Westinghouse previously calculated the AFD penalty function. Changing the deadband will require the use of available DNBR margin as reflected in the revisions to the Bases.

The OTDT and OPDT (which for Callaway is a backup trip with no AFD penalty function) trips will continue to function in a manner consistent with the above analysis assumptions and the plant design basis. As such, there will be no degradation in the performance of or an increase in the number of challenges to equipment assumed to function during an accident situation.

The reactor trip system response time, beginning at the time the measured Delta-T exceeds the trip setpoint at the RTDs as defined in the Technical Specifications, will be unaffected. With the addition of the time constant inequality signs, the time between the beginning of a transient until the RTDs sense a Delta-T higher than the reactor trip setpoint will be reduced since the effect of the signal conditioning will be to lower the trip setpoint if the time constants are set in accordance with the conservative direction of the inequality signs.

These Technical Specification revisions do not involve any hardware changes nor do they affect the probability of any event initiators. There will be no change to normal plant operating parameters, ESF actuation setpoints, accident mitigation capabilities, accident analysis assumptions or inputs. The accident analyses do not model the OTDT AFD penalty function, therefore changes to that penalty function do not impact the conclusions of the accident analyses. The addition of the OTDT and OPDT time constant inequality signs has the effect of lowering the respective reactor trip setpoints. Therefore, these changes will not increase the probability or consequences of an accident previously evaluated.

(2) Create the possibility of a new or different kind of accident from any previously evaluated.

As discussed above, there are no hardware changes associated with these Technical Specification revisions nor are there any changes in the method by which any safety-related plant system performs its safety function. Revisions to the OTDT AFD penalty function deadband and positive wing slope will require setpoint and scaling changes for the function generator (NCH) cards in the 7300 Process Protection System. The nature of these setpoint and scaling changes is straightforward and similar to those perfomed to implement Relaxed Axial Offset Control. The new requirement to recalibrate if the incore vs. excore AFD mismatch is greater than or equal to 2% does not affect the manner of plant operation. At most this would result in monthly recalibrations vs. the current quarterly recalibrations. This mismatch has historically been less than 2% and is usually less than 1%.

No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of these changes. There will be no adverse effect or challenges imposed on any safety-related system as a result of these changes. Therefore, the possibility of a new or different kind of accident is not created.

(3) Involve a significant reduction in a margin of safety.

There will be no change to the DNBR Correlation limit, the design DNBR limits, or the safety analysis DNBR limits discussed in BASES Section 2.1.1. Available DNBR margin will be used to widen the OTDT AFD penalty function deadband, as indicated in the revisions to BASES 3/4.2.2 and 3/4.2.3.

As discussed earlier, the response time of the OTDT and OPDT reactor trip functions will remain within the assumptions used in the accident analyses. The analyses of the events which credit the OTDT reactor trip will remain as presented in FSAR Chapter 15 and WCAP-10961-P.

The OTDT setpoint calculation includes terms that are dependent upon a gain factor determined by the slope of the positive wing of the AFD penalty function. One of these terms is derived from Note 3 of Technical Specification Table 4.3-1. That note deals with a monthly comparison of incore to excore AFD above 15% of rated thermal power. Currently there is a requirement to recalibrate, normally done on a quarterly interval, if the absolute difference in the incore vs. excore AFD is greater than or equal to 3%. It has been confirmed that the Z, S, and Allowable Value terms currently listed in Table 2.2-1 for the OTDT trip function will remain conservative, and no changes are required, by reducing the incore vs. excore AFD recalibration tolerance from 3% to 2% and implementing the new gain factor. There will be no effect on the manner in which safety limits or limiting safety system settings are determined nor will there be any effect on those plant systems necessary to assure the accomplishment of protection functions. There will be no impact on DNBR limits, F_Q, F-delta-H, LOCA PCT, peak local power density, or any other margin of safety.

Based upon the preceding information, it has been determined that the proposed changes to the Technical Specifications do not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed changes meet the requirements of 10CFR50.92(c) and do not involve a significant hazards consideration.

ULNRC-2808

ATTACHMENT THREE

ENVIRONMENTAL CONSIDERATION

ENVIRONMENTAL CONSIDERATION

This amendment application includes changes to Technical Specification Tables 2.2-1 and 4.3-1 as well as Bases 3/4.2.2 and 3/4.2.3 for the purpose of revising the Axial Flux Difference (AFD) penalty function, f_1 (Delta-I), defined in Note 1 of Table 2.2-1 for the Overtemperature Delta-T (OTDT) Reactor Trip Functional Unit. These changes to the penalty function deadband and positive wing power reduction slope will be accommodated by the use of available DNBR margin, as reflected in the changes to Bases 3/4.2.2 and 3/4.2.3, and by a reduction in the recalibration tolerance for the incore vs. excore AFD comparison surveillance in Note 3 of Table 4.3-1 from 3% to 2%.

In addition, inequality signs are added to the time constant definitions in Notes 1 and 3 of Table 2.2-1 for the OTDT and Overpower Delta-T (OPDT) reactor trip functions. These inequality signs indicate the conservative direction for these time constants and are the same as previously approved for Vogtle Units 1 and 2.

The proposed amendment involves changes with respect to the use of facility components located within the restricted area, as defined in 10CFR20, and changes surveillance requirements. Union Electric has determined that the proposed amendment does not involve:

(1) A significant hazards consideration, as discussed in Attachment 2 of this amendment application;

(2) A significant change in the types or significant increase in the amounts of any effluents that may be released offsite;

(3) A significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). Pursuant to 10CFR51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.