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 FACIL: 50-331 Duane Arnold Energy Center, Iowa Electric Light & Pow 05000331
 AUTH. NAME: MCGAUGHY, R.W. AUTHOR AFFILIATION: Iowa Electric Light & Power Co.
 RECIPIENT NAME: DENTON, H. RECIPIENT AFFILIATION: Office of Nuclear Reactor Regulation, Director

SUBJECT: Application for amend to License Dpr-49, consisting of proposed change RTS-182A, revising Tech Specs re APRM, rod block monitor & improvement program.

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M Thadani - 4 eys
 #2 thru #5

Iowa Electric Light and Power Company

March 15, 1985
NG-85-1250

Mr. Harold Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Duane Arnold Energy Center
Docket No: 50-331
Op. License No: DPR-49
Technical Specification Change RTS-182A:
APRM, RMB and Technical Specification
Improvement (ARTS) Program
Reference: Letter, R. McGaughy to H. Denton, "Technical
Specification Change RTS-182: 'APRM, RMB and
Technical Specification Improvement (ARTS)
Program'," NG-85-0101, January 11, 1985

Dear Mr. Denton:

In accordance with the requirements of 10 CFR 50.59 and 50.90, we transmitted on January 11 our proposed technical specification change in support of the ARTS (APRM, RMB and Technical Specification Improvement) program (reference). We hereby amend our previous application. We enclose a number of revised technical specification pages, which supersede only the corresponding pages previously submitted. We also enclose several new pages which are being added to the submittal as well.

This application is required for re-start for Cycle 8. It is based upon our earlier applications regarding single recirculation loop operation (RTS-124C: NG-84-4741, December 7, 1984) and the Lead Test Assemblies (RTS-179: NG-84-5416, December 7, 1984). We request that this application be approved concurrently with (or after) action on those applications, but no later than restart of the DAEC, currently scheduled for May 19, 1985.

This amendment request, RTS-182A, has been reviewed by the DAEC Operations Committee and the Safety Committee. As a check for \$150 was submitted with our original application, no further fees are enclosed. The balance of the application fee will be paid upon billing.

In response to your staff's request, General Electric (GE) has revised their report, NEDC-30813-P, "Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvement (ARTS) program for the Duane Arnold Energy Center," to more closely conform to the regulations regarding

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Page Two
Mr. Harold Denton
March 15, 1985
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information which may be classified as proprietary and withheld from public disclosure. Therefore, we request that the copies of this GE report submitted with our original application (reference), be returned to us and the attached copies (Attachment 3) be submitted in their place. Again, as with the original document, we request that this revised version be treated as proprietary and withheld from public disclosure in accordance with the provisions of 10 CFR 2.790, under the GE affidavit of proprietary information submitted with the original document. Also, you will find attached thirty-five copies of a non-proprietary version of this report (Attachment 4: NEDO-30813, "Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvement (ARTS) program for the Duane Arnold Energy Center"), which supplements the five copies of the revised proprietary version mentioned above.

Pursuant to the requirements of 10 CFR 50.91, a copy of this submittal and analysis of no significant hazards considerations is being forwarded to our appointed state official.

This application, which consists of three signed and 37 copies of their enclosures, is true and accurate to the best of my knowledge and belief.

IOWA ELECTRIC LIGHT AND POWER COMPANY

BY

Richard W. McGaughey
Richard W. McGaughey
Manager, Nuclear Division

Subscribed and sworn to Before Me on
this 14th day of March 1985.

Stephen M. Furman
Notary Public in and for the State of Iowa

RWM/RAB/rh*

- Attachments:
- 1) Proposed Change RTS-182A
 - 2) Evaluation per 10 CFR 50.92
 - 3) "Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvement (ARTS) program for the Duane Arnold Energy Center," NEDC-30813-P, December, 1984
 - 4) "Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvement (ARTS) program for the Duane Arnold Energy Center," NEDC-30813, March, 1985
 - 5) Technical Specification Affected Pages

cc: R. Browning
L. Liu
S. Tuthill
M. Thadani
T. Houvenagle (ICC) (w/o Attachment 3)
NRC Resident Office

REVISION 1 TO PROPOSED CHANGE RTS-182 TO THE
DUANE ARNOLD ENERGY CENTER
TECHNICAL SPECIFICATIONS

The purpose of this change to the original submittal, RTS-182, submitted January 11, 1985 (NG-85-0101), is to update the package to be consistent with other currently docketed amendment requests required for Cycle 8 startup. A List of the Affected Pages is given below.

RTS-182 requested changes to the Technical Specifications to support the ARTS (Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvement) program scheduled to be implemented during the present refueling outage. However, other amendment requests needed to support Cycle 8 startup conjoin with RTS-182 to the extent that certain pages in RTS-182 must be revised in order to be compatible with these other amendments. Specifically, clarifying words and figures need to be added to the Technical Specifications in order to make the administration of core thermal limits under ARTS, the Lead Test Assemblies (LTA) [RTS-179: NG-84-5416, 12/7/84], and Single Loop Operation (SLO) [RTS-124C: NG-84-4741, 12/7/84] easier to understand. These clarifications do not alter the Limiting Conditions for Operation (LCO) and Surveillance Requirements previously submitted under the individual submittals.

In addition, the SLO MAPLHGR multiplier for the BP/P8X8R and ELTA bundles is being revised from 0.70 to 0.87. This change in limit eliminates the restrictive condition imposed as part of an earlier, temporary SLO amendment, which was granted prior to completion of the review and approval of the GE analysis (NEDO-24272) submitted with our permanent SLO amendment, which supports the 0.87 value. This review has now been completed and the conclusion has been reached that this restriction is not required.

An administrative change is also being included which will improve consistency within the Technical Specifications. Presently, several different terms are used in the Technical Specifications to describe power operation with only one recirculation loop in service. The requested change will identify this condition as Single Loop Operation, or SLO, in the definition section in the Technical Specifications and apply that term uniformly throughout the text. Also, several other administrative changes are included to improve consistency and clarity.

The changes being made are as follows:

- 1) Add Figure 3.12-12 to Section 3.12 and revise the text in 3.12.A to indicate that the central LTA bundle (LTA-311) has an additional flow-dependent MAPLHGR restriction from the other fuel types.
- 2) Add Figure 3.12-13 to Section 3.12 and revise the text in 3.12.A to indicate that when operating in single loop, both the ARTS and SLO flow-dependent MAPLHGR limits must be observed and the more limiting one applied. The SLO multiplier for the BP/P8X8R and ELTA bundles, as shown in Fig. 3.12-13, is being revised from 0.70 to 0.87 to eliminate the restrictive condition previously imposed. The text and figure also reflect the fact that the LTA-311 bundle has a different SLO flow-dependent MAPLHGR limit than the other fuel types.

- 3) Subdivide Sections 3.12.A, B and C in order to improve delineation between the ARTS, LTA and SLO requirements, as well as between the surveillance requirements and LCOs.
- 4) Clarify the text of 3.12.A.5 and 3.12.C.5 to indicate that surveillance and corresponding actions should continue until the required "action" is met rather than the required "limit" is met.
- 5) Revise the description of the fuel types in Section 3.12.B.1 from "P8X8R, BP8X8R" to "BP/P8X8R" to be consistent with other figures and text.
- 6) Revise the text of 3.12.C.1(b) to refer to Figure 3.12-3 for the rated-power MCPR limit for the LTA-311 bundle.
Note: This figure is not being revised or added, as with items 1) and 2) above.
- 7) Clarify the text of 3.12.C to indicate that the SLO adjustment to the Operating Limit MCPR is to be performed after the ARTS adjustments.
- 8) Add Figures 3.12-12 and 3.12-13 to the List of Figures on Page viii.
- 9) Add the definition for Single Loop Operation to Section 1.0 and apply it throughout the text.

LIST OF AFFECTED PAGES

viii	3.3-7a	3.12-3
1.0-2	3.6-7	3.12-3a*
1.1-1	3.6-7a	3.12-5
1.1-5	3.6-7b	3.12-8
1.1-10	3.6-31	3.12-23*
3.1-3	3.6-34	3.12-24*
3.2-16	3.12-1	
3.2-42	3.12-2	

*new page

EVALUATION OF CHANGE
WITH RESPECT TO
10 CFR 50.92

Summary

RTS-182 requested changes to the Technical Specifications to support the ARTS (Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvement) program scheduled to be implemented during the present refueling outage. However, other amendment requests needed to support Cycle 8 startup conjoin with RTS-182 to the extent that certain pages in RTS-182 must be revised in order to be compatible with these other amendments. Specifically, clarifying words and figures need to be added to the Technical Specifications in order to make the administration of core thermal limits under ARTS, the Lead Test Assemblies (LTA) [RTS-179: NG-84-5416, 12/7/84], and Single Loop Operation (SLO) [RTS-124C: NG-84-4741, 12/7/84] easier to understand. These clarifications do not alter the Limiting Conditions for Operation (LCO) and Surveillance Requirements previously submitted under the individual submittals.

In addition, the SLO MAPLHGR multiplier for the BP/P8X8R and ELTA bundles is being revised from 0.70 to 0.87. This change in limit eliminates the restrictive condition imposed as part of an earlier, temporary SLO amendment, which was granted prior to completion of the review and approval of the GE analysis (NEDO-24272) submitted with our permanent SLO amendment, which supports the 0.87 value. This review has now been completed and the conclusion has been reached that this restriction is not required.

An administrative change is also being included which will improve consistency within the Technical Specifications. Presently, several different terms are used in the Technical Specifications to describe power operation with only one recirculation loop in service. The requested change will identify this condition as Single Loop Operation, or SLO, in the definition section in the Technical Specifications and apply that term uniformly throughout the text. Also, several other administrative changes are included to improve consistency and clarity.

In accordance with the requirements of 10 CFR 50.92, the enclosed application is judged to involve no significant hazards based upon the following information:

- (1) Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

The changes being made in the Technical Specifications are to provide clarification and additional guidance with regard to the conjunction between the changes being made for ARTS, the LTAs and SLO. As the conjunction does not require changes to the Limiting Conditions for Operation (LCO) and Surveillance Requirements previously submitted under the individual submittals, the probability of occurrence or the magnitude of the consequences of any accident previously analyzed is not increased by the addition of the clarifying language.

Revising the SLO MAPLHGR multiplier for the BP/P8X8R and ELTA bundles from 0.70 to 0.87 eliminates the restriction imposed as part of an earlier, temporary SLO amendment, which was granted prior to the review and approval of the analysis supporting a permanent SLO amendment. This review has now been completed and the conclusion has been reached that this restriction is not required. Therefore, revising the multiplier will not increase the probability of occurrence or the magnitude of the consequences of any previously analyzed accident.

These administrative changes do not increase the probability of occurrence or the magnitude of the consequences of any previously analyzed accident.

- (2) Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The conjunction between the submittals does not require changes in the LCOs and Surveillance Requirements of the individual submittals. The changes are of a clarifying nature and the possibility of a new or different kind of accident or malfunction is not created.

The SLO MAPLHGR multiplier is required to account for differences in the Loss-of-Coolant Accident (LOCA) response because only one recirculation loop is in operation and, thus, has previously been analyzed. Therefore, revising the value of this multiplier will not introduce a new or different accident than any previously analyzed.

These administrative changes do not introduce the possibility of a new or different accident than previously analyzed.

- (3) Does the proposed amendment involve a significant reduction in a margin of safety?

The conjunction between the submittals does not require changes in the LCOs and Surveillance Requirements of the individual submittals. The changes are of a clarifying nature and the margin of safety is not reduced.

Revising the SLO MAPLHGR multiplier for the BP/P8X8R and ELTA bundles from 0.70 to 0.87 eliminates the restrictive condition imposed as part of an earlier, temporary SLO amendment, which was granted prior to the review and approval of the analysis supporting a permanent SLO amendment. This review has now been completed and the conclusion has been reached that this restriction is not required. Therefore, revising the multiplier will not reduce the margin of safety.

These administrative changes do not reduce the margin of safety.

In the April 6, 1983 Federal Register, the NRC published a list of examples of amendments that are not likely to involve a significant hazards concern. Example number (vi) of that list states:

"A change which either may result in some increase to the probability or consequences of a previously-analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan: for example, a change resulting from the application of a small refinement of a previously used calculational model or design method."

The addition of the clarifying language for the conjunction between the individual submittals for ARTS, LTAs and SLO is judged to fall within the above category, as the LCOs and Surveillance Requirements of the individual changes fell within this category and they are not being altered.

Example number (iv) of that lists states:

"A relief granted upon demonstration of acceptable operation from an operating restriction that was imposed because acceptable operation was not yet demonstrated. This assumes that the operating restriction and the criteria to be applied to a request for relief have been established in a prior review and that it is justified in a satisfactory way that the criteria have been met."

Revising the SLO MAPLHGR multiplier to remove the restriction imposed while the review of the permanent SLO application was being conducted is judged to fall within the scope of this example.

Example number (i) of that list states:

"A purely administrative change to technical specifications: for example, a change to achieve consistency throughout the technical specifications, correction of an error, or a change in nomenclature."

The addition of the definition for SLO and its application to achieve consistency within the Technical Specifications, along with the other administrative changes clearly fall within the scope of this example.

In conclusion, the enclosed application is judged to involve a no significant hazards consideration, based upon the above information.