

APR 11 1974

Docket No. 50-261

Carolina Power & Light Company
ATTN: Mr. J. A. Jones
Senior Vice President
336 Fayetteville Street
Raleigh, North Carolina 27602

Change No. 29
License No. DPR-23

Gentlemen:

By letter dated March 7, 1974, and supplement dated April 9, 1974, you proposed a change to the Technical Specifications of Facility Operating License No. DPR-23 for the H. B. Robinson Plant Unit No. 2 that would allow an increase in authorized effective full power hours (EFPH) from 7000 EFPH to 7500 EFPH.

Based on our evaluation of the proposed change, we have concluded that it does not involve a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered by operation of the reactor in the manner proposed.

Accordingly, pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specifications of License No. DPR-23 are changed as shown in Attachment A.

Sincerely,

Original Signed by
Donald J. Skovholt

Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

Enclosures:

1. Attachment A - Change No. 29 to the Technical Specifications
2. Safety Evaluation

cc w/enclosures on next page

CP + Lic

APR 11 1974

cc w/enclosures:

G. F. Trowbridge, Esquire
 Shaw, Pittman, Potts, Trowbridge
 and Madden
 910 - 17th Street, N. W.
 Washington, D. C. 20006

Mr. Dave Hopkins
 Environmental Protection Agency
 1421 Peachtree Street, N. E.
 Atlanta, Georgia 30309

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| SURNAME | DElliott:dc | RJSchemel | VStello | DJSkovholt | | |
| DATE | 4/11/74 | 4/11/74 | 4/11/74 | 4/11/74 | | |

ATTACHMENT A

CHANGE NO. 29 TO THE TECHNICAL SPECIFICATIONS

CAROLINA POWER AND LIGHT COMPANY

H. B. ROBINSON PLANT UNIT NO. 2

DOCKET NO. 50-261

Delete pages 2.1-1, 2.1-5, and 3.1-22 and replace with the revised pages.

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| OFFICE ➤ | | | | | | |
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| DATE ➤ | | | | | | |

UNITED STATES ATOMIC ENERGY COMMISSION

SAFETY EVALUATION BY THE DIRECTORATE OF LICENSING

CAROLINA POWER AND LIGHT COMPANY

CHANGE NO. 29 TO THE TECHNICAL SPECIFICATIONS

DOCKET NO. 50-261

By letter dated March 7, 1974, and telecommunication of April 9, 1974, Carolina Power and Light Company proposed a change in the Technical Specifications of Facility Operating License No. DPR-23 to allow an increase in the fuel residency time for Cycle 2 of H. B. Robinson Unit 2 from 7000 EFPH to 7500 EFPH.

Carolina Power and Light Company has proposed a limiting maximum steam generator leakage rate of 0.3 gpm during operation in excess of 7000 EFPH. This limit on allowable steam generator leakage results from consideration of the increased number of collapsed rods that may occur due to the increased fuel cycle period and the percentage of collapsed rods assumed to fail in a postulated steam line break accident or overpower transient.

Carolina Power and Light Company has stated that all other previously analyzed accidents exhibit negligible dependence on cycle length and that the results of such analyses are unchanged by the requested increase in Cycle 2 residency time.

We have reviewed the proposed changes and the submitted analysis and have concluded that it does not involve a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the manner proposed.

15/ Donald Elliott
Operating Reactors Branch #1
Directorate of Licensing

Original Signed by:
Robert J. Schemel

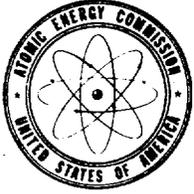
Robert J. Schemel, Chief
Operating Reactors Branch #1
Directorate of Licensing

Date: APR 11 1974

OFFICE >

SURNAME >

DATE >



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

April 11, 1974

Docket No. 50-261

Carolina Power & Light Company
ATTN: Mr. J. A. Jones
Senior Vice President
336 Fayetteville Street
Raleigh, North Carolina 27602

Change No. 29
License No. DPR-23

Gentlemen:

By letter dated March 7, 1974, and supplement dated April 9, 1974, you proposed a change to the Technical Specifications of Facility Operating License No. DPR-23 for the H. B. Robinson Plant Unit No. 2 that would allow an increase in authorized effective full power hours (EFPH) from 7000 EFPH to 7500 EFPH.

Based on our evaluation of the proposed change, we have concluded that it does not involve a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered by operation of the reactor in the manner proposed.

Accordingly, pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specifications of License No. DPR-23 are changed as shown in Attachment A.

Sincerely,


Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

Enclosures:

1. Attachment A - Change No. 29 to the Technical Specifications
2. Safety Evaluation

cc w/enclosures on next page

cc w/enclosures:

G. F. Trowbridge, Esquire
Shaw, Pittman, Potts, Trowbridge
and Madden
910 - 17th Street, N. W.
Washington, D. C. 20006

Mr. Dave Hopkins
Environmental Protection Agency
1421 Peachtree Street, N. E.
Atlanta, Georgia 30309

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ATTACHMENT A

CHANGE NO. 29 TO THE TECHNICAL SPECIFICATIONS

CAROLINA POWER AND LIGHT COMPANY

H. B. ROBINSON PLANT UNIT NO. 2

DOCKET NO. 50-261

Delete pages 2.1-1, 2.1-5, and 3.1-22 and replace with the revised pages.

2.0 SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS

2.1 SAFETY LIMIT, REACTOR CORE

Applicability:

Applies to the limiting combinations of thermal power, Reactor Coolant System pressure, coolant temperature, and flow when the reactor is critical.

Objective:

To maintain the integrity of the fuel cladding.

Specification:

- a. The combination of thermal power level, coolant pressure, and coolant temperature shall not exceed the limits shown in Figure 2.1-1 when full flow from three reactor coolant pumps exists and shall not exceed the limits shown in Figure 2.1-2 when the full flow from two reactor coolant pumps exists.
- b. When full flow from one reactor coolant pump exists, the thermal power level shall not exceed 20%, the coolant pressure shall remain between 1820 psig and 2400 psig, and the Reactor Coolant System average temperature shall not exceed 590°F.
- c. When natural circulation exists, the thermal power level shall not exceed 12%, the coolant pressure shall remain between 2135 psig and 2400 psig, and the Reactor Coolant System average temperature shall not exceed 620°F.
- d. The safety limit is exceeded if the combination of Reactor Coolant System average temperature and thermal power level is at any time above the appropriate pressure line in Figures 2.1-1 or 2.1-2 or if the thermal power level, coolant pressure, or Reactor Coolant System average temperature violates the limits specified above.
- e. The fuel residence time for Cycle 2 shall be presently limited to 7,500 effective full power hours (EFPH) under design operating conditions. The Licensee may propose to operate the core in excess of 7,500 EFPH by providing an analysis which includes the effect of further clad flattening or a change in operating conditions. Any such analysis, if proposed, shall be approved by the Regulatory staff prior to operation in excess of 7,500 EFPH.

Basis:

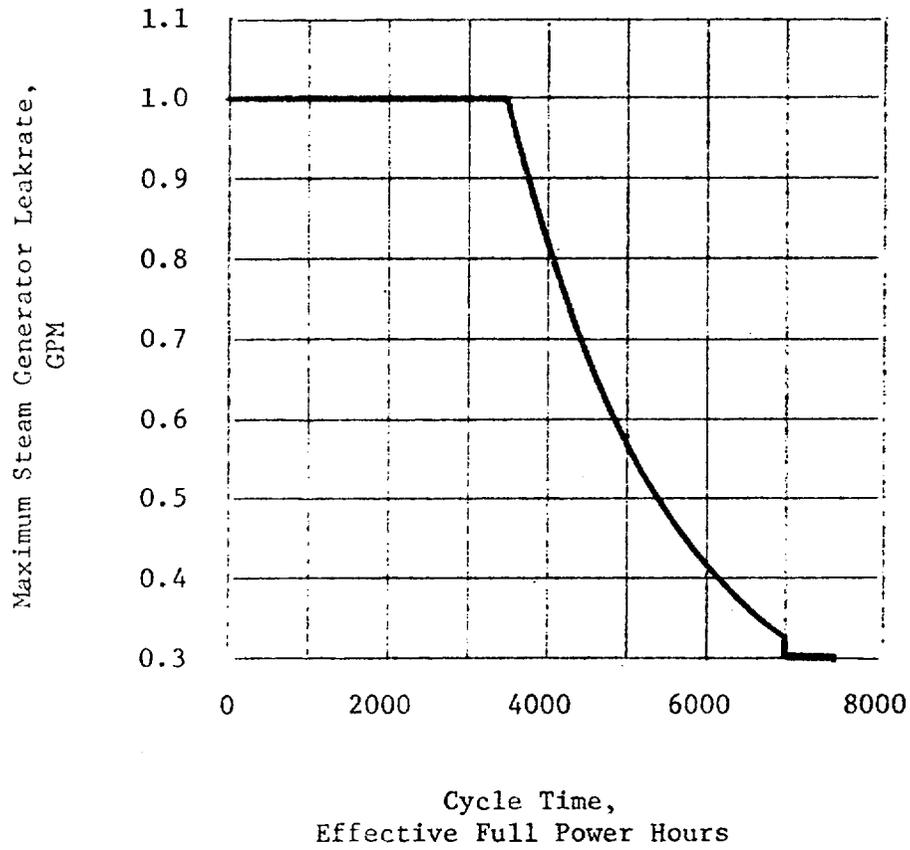
To maintain the integrity of the fuel cladding and prevent fission product release, it is necessary to prevent overheating of the cladding under all operating conditions. This is accomplished by maintaining the

The fuel residence time for Cycle 2 is limited to 7,500 EFPH to assure no further fuel clad flattening without prior review by the Regulatory staff. Prior to 7,500 EFPH, the Licensee may provide the additional analyses required for operation beyond 7,500 EFPH.

References:

- (1) FSAR, Section 3.2.2
- (2) FSAR, Section 14.1.3
- (3) FSAR, Section 7.2.1

STEAM GENERATOR LEAKRATE LIMIT



UNITED STATES ATOMIC ENERGY COMMISSION

SAFETY EVALUATION BY THE DIRECTORATE OF LICENSING

CAROLINA POWER AND LIGHT COMPANY

CHANGE NO. 29 TO THE TECHNICAL SPECIFICATIONS

DOCKET NO. 50-261

By letter dated March 7, 1974, and telecommunication of April 9, 1974, Carolina Power and Light Company proposed a change in the Technical Specifications of Facility Operating License No. DPR-23 to allow an increase in the fuel residency time for Cycle 2 of H. B. Robinson Unit 2 from 7000 EFPH to 7500 EFPH.

Carolina Power and Light Company has proposed a limiting maximum steam generator leakage rate of 0.3 gpm during operation in excess of 7000 EFPH. This limit on allowable steam generator leakage results from consideration of the increased number of collapsed rods that may occur due to the increased fuel cycle period and the percentage of collapsed rods assumed to fail in a postulated steam line break accident or overpower transient.

Carolina Power and Light Company has stated that all other previously analyzed accidents exhibit negligible dependence on cycle length and that the results of such analyses are unchanged by the requested increase in Cycle 2 residency time.

We have reviewed the proposed changes and the submitted analysis and have concluded that it does not involve a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the manner proposed.



Donald Elliott
Operating Reactors Branch #1
Directorate of Licensing



Robert J. Schemel, Chief
Operating Reactors Branch #1
Directorate of Licensing

Date: April 11, 1974

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ACRS (16)

RO (3)

Attorney, OBC

RVollmer Change No. 28

RJSchemel License No. DPR-23

TJCarter

Docket No. 50-261

Carolina Power & Light Company
ATTN: Mr. E. E. Utley, Vice President
Bulk Power Supply Department
336 Fayetteville Street
Raleigh, North Carolina 27602

Gentlemen:

By letter dated December 6, 1973, you submitted an application for a change to the Technical Specifications appended to license No. DPR-23, as amended, for Unit No. 2 at the H. B. Robinson Steam Electric Plant. The proposed change would clarify requirements in Technical Specification 4.11.1 for periodically mapping the power distribution in the core when the reactor is operated above 75% of rated power. The technical specification would be clarified by indicating that only actual operating time would be used in determining the maximum time between maps.

We have reviewed your application for the proposed change and we agree that the intent of the Technical Specification is more accurately stated in the revised wording. We have designated our action as Change No. 28. We conclude that Change No. 28 does not present a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered.

Pursuant to 10 CFR Part 50, Section 50.59, the Technical Specifications appended to License No. DPR-23 are changed as shown in Attachment A.

Sincerely,

Original signed by,
Donald J. Skovholt

Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

B. Schauf (15)
NDube

MJinks (4)

SATeets

RWoodruff

Hartville Memorial Library

Home & Fifth Avenues

Hartville, South Carolina 29550

Enclosure:

Attachment A - Change No. 28 to the
Technical Specifications

cc: G. F. Trowbridge, Esquire
Shaw, Pittman, Potts, Trowbridge
& Madden

910 17th Street, N. W.

Washington, D. C. 20006

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|----------|-------------------------|--------------|----------|-----------|------------|
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| SURNAME➤ | | RWoodruff:lh | SATeets | RJSchemel | DJSkovholt |
| DATE➤ | | 12/11/73 | 12/12/73 | 12/13/73 | 12/13/73 |

ATTACHMENT A

CHANGE NO. 28 TO THE TECHNICAL SPECIFICATIONS

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

Change Technical Specification 4.11.1 to read as follows:

"4.11.1 The power distribution shall be mapped at least once every month of power operation whenever the reactor is operated between 75% and 94.8% rated power. Before operating above 94.8% rated power, maps will be taken with the control rods in the D Bank at the preselected position, plus or minus five steps, that they will occupy when the reactor is operated power levels greater than 94.8% rated power. The last six maps with this configuration will be used to determine the values of \bar{R} and σ . The power distribution shall be mapped at least once every two weeks of power operation whenever the reactor will be operated above 94.8% rated power.

For a new preselected position of the control rods in the D Bank, maps taken within plus or minus five steps of the new preselected position must be used to determine new values of \bar{R} and σ . The new preselected position must be within 10 steps of the previous preselected position. The maximum power level attained during the mapping interval will determine the minimum mapping frequency. Each map will be based on flux traverses obtained from 36 or more of the 46 monitoring channels."

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NOV 13 1973

Docket No. 50-261

Carolina Power & Light Company
ATTN: Mr. E. E. Utley, Vice President
Bulk Power Supply Department
336 Fayetteville Street
Raleigh, North Carolina 27602

Change No. 27
License No. DPR-23

Gentlemen:

By letter dated October 10, 1973, you submitted an application for a change to the Technical Specifications appended to License No. DPR-23, as amended, for Unit No. 2 at the H. B. Robinson Steam Electric Plant. The proposed change would permit the Company Nuclear Safety Committee to review plant modifications after completion and would limit their reviews to certain kinds of plant modifications.

We have discussed the proposed change with members of your staff. In order to meet the requirements of 10 CFR Part 50 and the intent of ANSI 18.7-1972, it is necessary for the Company Nuclear Safety Committee to review proposed changes to the plant which may involve an unreviewed safety question prior to implementation of the proposed changes and to review all plant modifications. Therefore, pursuant to 10 CFR Part 50, Section 50.59, Technical Specification 6.1.4.2.e.3 is revised to read as follows:

"Review evaluations of changes to procedures, equipment, or systems completed under the provisions of Section 50.59(b) of 10 CFR Part 50 to verify that such changes do not constitute unreviewed safety questions. Review proposed changes to procedures, equipment, or systems which may involve an unreviewed safety question as defined in Section 50.59(c) of 10 CFR Part 50, or changes which are referred to it by the Plant Safety Committee and/or the Plant Manager. Make recommendations concerning these matters."

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We conclude that Change No. 27 does not present a significant safety consideration and that there is reasonable assurance that the health and safety of the public will not be endangered.

Sincerely,

Original signed by
Donald J. Skovholt

Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

cc: G. F. Trowbridge, Esquire
Shaw, Pittman, Potts, Trowbridge
and Madden
910 - 17th Street, N. W.
Washington, D. C. 20006

Mr. Hans L. Hamester (2 copies)
ATTN: Joan Sause
Office of Radiation Programs
Environmental Protection Agency
Room 647A East Tower
Waterside Mall
401 M Street, S. W.
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Mr. Shepard N. Moore
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- R. Woodruff, L:ORB#1 (2)
- S. Teets, L:ORB#1
- N. Dube, L:OPS
- M. Jinks, DRA (4)
- B. Scharf, DRA (15)
- S. Kari, L:RP P. Collins

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| SURNAME ▶ | RWoodruff:dc | SAteets | RJSchemel | DJSkovholt | | |
| DATE ▶ | 11/18/73 | 11/17/73 | 11/12/73 | 11/13/73 | | |