

September 18, 1986

*See Correction Letter
of 10/28/86*

Docket No. 50-261

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Mr. E. E. Utley, Senior Executive Vice President
Power Supply and Engineering & Construction
Carolina Power and Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Utley:

The Commission has issued the enclosed Amendment No. 103 to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant Unit No. 2. This amendment consists of changes to the Technical Specifications in response to your request dated November 6, 1985.

The amendment revises the Technical Specifications by eliminating the requirement for shutting down the ventilation system in the fuel handling building on a high radiation signal, reduces the waste gas decay tank radioactivity limit, and corrects the bases for the control of explosive gas mixtures in the waste gas decay tanks. The amendment also involves changes of an editorial nature.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Original Signed by

Glode Requa, Project Manager
PWR Project Directorate #2
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 103 to DPR-23
2. Safety Evaluation

cc: w/enclosures
See next page

*LA:PAD#2
DM:Miller
8/9/86*

*PM:PAD#2
GRequa:mc
8/9/86*

*LR:Rubenstein
8/9/86*

*SEC
8/10/86*

9/12/86

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PDR ADDOCK 05000261
P PDR

Mr. E. E. Utley
Carolina Power & Light Company

H. B. Robinson 2

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

CAROLINA POWER AND LIGHT COMPANY

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.103
License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power and Light Company (the licensee) dated November 6, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-23 is hereby amended to read as follows:

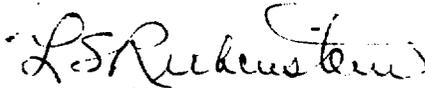
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(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.103, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Lester S. Rubenstein, Director
PWR Project Directorate #2
Division of PWR Licensing-A

Attachment:
Changes to the Technical
Specifications

Date of Issuance: 103

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 103 FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Revise Appendix A as follows:

Remove Pages

3.5-20 through 3.5-30

3.16-5

3.16-8

3.17-3

3.17-4

Insert Pages

3.5-20 through 3.5-30

3.16-5

3.16-8

3.17-3

3.17-4

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|------|--|
| 1. Liquid Radwaste Effluent Discharge Line | | |
| a. Monitor (RMS-18) provides automatic termination of release upon exceeding alarm/trip setpoint | 1 | <p>With the number of channels operable less than the MCO requirements:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that prior to initiating a release:</p> <ol style="list-style-type: none"> 1. Two independent samples are analyzed in accordance with the Surveillance Requirements of Specification 3.9.1.1 and; 2. Two members of the facility staff independently verify the release rate calculations and the discharge line valving. |
| b. Flow rate measurement device | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may be continued, provided that the flow rate is estimated at least once per 4 hours during actual releases. Pump performance curves generated "in situ" and tank volumes may be used to estimate flow.</p> |

*MCO - Minimum Channels Operable

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|-----------|--|
| 2. Steam Generator Blowdown Effluent Line | | |
| a. Monitor (RMS-19) provides automatic termination of blowdown from all three Steam Generators upon exceeding alarm/trip setpoint. | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that grab samples are analyzed for gross radioactivity (beta or gamma) with a lower limit of detection of at least 1.0E-07 μ Ci/ml or are analyzed for principle gamma emitters consistent with Table 4.10-1;</p> <p>1. Once per 24 hours when the specific activity of the secondary coolant is $< 0.01 \mu$ Ci/ml Dose Equivalent I-131, or;</p> <p>2. Once per 12 hours when the specific activity of the secondary coolant is $> 0.01 \mu$ Ci/ml Dose Equivalent I-131.</p> |
| b. Flow rate measurement devices - each Steam Generator has its own blowdown flow rate measuring device. | 1 per S/G | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that the flow rate for the affected blowdown line(s) is estimated at least once per 24 hours.</p> |

*MCO - Minimum Channels Operable

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|---|-------------|--|
| 3. Discharge Canal Flow | Note 1 | With the number of channels operable less than the MCO requirement suspend effluent release via this pathway |
| 4. Tank Level Indicating Devices | | With the number of channels operable less than the MCO requirement: |
| a. Refueling Water Storage Tank | 1 | a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and, |
| b. Monitor Tanks Tank A Tank B | 1 | b. Liquid additions to the affected tank(s) may continue provided that the liquid level for the affected tanks is estimated during all liquid additions to the affected tank(s). |
| c. Waste Condensate Tanks Tank C Tank D Tank E | 1 1 1 | |
| d. Temporary Tanks (Note 2) | 1 per Tank | |

*MCO - Minimum Channels Operable

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|------|--|
| 5. Containment Fan Cooling Water Monitor (Service Water Effluent Line) | | |
| a. Monitor (RMS-16) does not provide automatic termination of release upon exceeding alarm setpoint. | 1 | With the number of channels operable less than the MCO requirement: a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and, b. Effluent releases via this pathway may continue provided that, once per 24 hours, grab samples are collected and analyzed for gross radioactivity (beta or gamma) with a lower limit of detection of at least $1.0E-07$ μ Ci/ml or are analyzed for principal gamma emitters consistent with Table 4.10-1. |
| 6. Composite Sampler for Settling Ponds | 1 | With the number of channels operable less than the MCO requirement: a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and, b. Effluent releases via this pathway may continue provided that, once per 24 hours, grab samples are collected and analyzed for gross radioactivity (beta or gamma) with lower limit of detection of at least $1.0E-07$ μ Ci/ml or are analyzed for principal gamma emitters consistent with Table 4.10-1. |

*MCO - Minimum Channels Operable

NOTE TO TABLE 3.5-6

Note 1 - Pump curves for Unit 2 operating circulating water pumps may be used to satisfy this MCO. If no Unit 2 circulating water pumps are operating the pump curves for circulating water pumps operating in Unit 1 may be used to satisfy this MCO.

Note 2 - A temporary tank is defined as any tank having a capacity of \geq 100 gallons used for the receipt or transfer of radioactive liquids.

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|-----------------------|--|
| 1. Plant Vent | | |
| <p>a. Radionoble gas monitor (RMS-14) provides automatic termination of Waste Gas Decay Tank releases upon exceeding alarm/trip setpoint.</p> | 1 | <p>With the number of channels operable less than the MCO requirements:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that prior to initiating a release:</p> <ol style="list-style-type: none"> 1. Two independent samples are analyzed in accordance with the Surveillance Requirements of Specification 3.9.3.1 and; 2. Two members of the facility staff independently verify the release rate calculations and the discharge line valving. |
| <p>b. Radionoble gas monitors RMS-14 and RMS-34 monitor all effluents from Auxiliary Building Ventilation System without providing automatic termination of release upon exceeding their respective alarm setpoints.</p> | 1 of the two monitors | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that grab samples are collected once per 12 hours and are analyzed for radionoble gases within 24 hours.</p> |

*MCO - Minimum Channels Operable

3.5-24

Amendment No. 85, 103

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|---|-------------------------------------|---|
| 1. Plant Vent (Continued) | | |
| c. Radiiodine Sampler (RMS-34) | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent release via this pathway may continue provided that a continuous sample is collected utilizing auxiliary sampling equipment as required by Table 4.10-2.</p> |
| d. Particulate Sampler (RMS-34) | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that a continuous sample is collected utilizing auxiliary sampling equipment as required by Table 4.10-2.</p> |
| e. Sampler flow rate monitor (RMS-34) and Vacuum gauge (RMS-34) | 1 of the two moni- tors | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided the flow rate is estimated once per 4 hours.</p> |

*MCO - Minimum Channels Operable

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|------|--|
| 1. Plant Vent (Continued) | | |
| f. Plant Vent flow rate monitor | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that flow rate is estimated once per 4 hours.</p> |
| 3.5-26 2. Waste Gas Holdup System Explosive Gas Monitoring System | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 14 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. When continuous monitoring is out of service daily grab samples will be taken and analyzed during normal operations and once per 4 hours during degassing operations.</p> |
| 3. Containment Vessel via Plant Vent | | |
| a. Radionoble gas monitor (RMS-12) provides automatic termination of Containment Vessel releases upon exceeding alarm/trip Setpoint. | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> |

*MCO - Minimum Channels Operable

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|------|---|
| 3. Containment Vessel Via Plant Vent (Continued) | | b. Effluent releases via this pathway may continue provided that either of the Plant Vent Radionoble Gas Monitors (RMS-14 or RMS-34) is operable; otherwise, suspend all releases via this pathway. |
| b. Radioparticulate Monitor (RMS-11) provides automatic termination of containment vessel releases exceeding alarm/trip setpoints | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that either of the Plant Vent Radionoble Gas Monitors (RMS-14 or RMS-34) is operable; otherwise, suspend all releases via this pathway.</p> |
| c. Sampler flow rate monitor (RMS-11) | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that the flow rate is estimated once per 4 hours.</p> |
| 4. Condenser Vacuum Pump Vent | | |
| a. Radionoble gas monitor (RMS-15) diverts effluents from Condenser Vacuum Pump Vent to the Plant Vent upon exceeding alarm/trip setpoint. | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> |

*MCO - Minimum Channels Operable

TABLE 3.5-7 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|----------------------------|--|
| 4. Condenser Vacuum Pump Vent (Continued) | | |
| | | b. Effluent releases via this pathway may continue provided that; |
| | | 1. Grab samples are collected once per 12 hours and are analyzed within 24 hours for radionoble gases, or; |
| | | 2. The effluent is diverted to the Plant Vent and RMS-14 is operable. |
| b. Flow rate measuring devices (one for each Vacuum Pump). | 1 for each pump in service | With the number of channels operable less than the MCO requirement: |
| | | a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and, |
| | | b. Effluent releases via this pathway may continue provided the flow rate is estimated once per 4 hours. |
| 5. Fuel Handling Building Lower Level Exhaust Vent | | |
| a. Radionoble gas monitor (RMS-20) | 1 | With the number of channels operable less than the MCO requirement: |
| | | a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and, |
| | | b. Effluent releases via this pathway may continue provided that grab samples are taken once per 12 hours and analyzed for radionoble gases within 24 hours. |

*MCO - Minimum Channels Operable

RADIONOBLE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|------|--|
| 5. Fuel Handling Building Lower Level Exhaust Vent (Continued) | | |
| b. Sampler flow rate monitor (RMS-20) | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided the flow rate is estimated once per 4 hours.</p> |
| 6. Fuel Handling Building Upper Level Exhaust Vent | | |
| a. Radionoble gas monitor (RMS-21) trips the exhaust and supply fans for the upper level of the Fuel Handling Building upon exceeding alarm/trip setpoint. | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <p>a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and,</p> <p>b. Effluent releases via this pathway may continue provided that:</p> <ol style="list-style-type: none"> 1. The Plant Vent Radionoble Gas Monitor (RMS-14) is operable, 2. Grab samples are collected once per 12 hours and are analyzed within 24 hours for radionoble gases. |

*MCO - Minimum Channels Operable

TABLE 3.5-7 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

| Release Pathway/Instrumentation | MCO* | Required Action |
|--|------|---|
| 6. Fuel Handling Building Upper Level Exhaust Vent (Continued) | | |
| b. Sampler flow rate monitor (RMS-21) | 1 | <p>With the number of channels operable less than the MCO requirement:</p> <ul style="list-style-type: none"> a. Exert best efforts to return the instruments to operable status within 30 days and, if unsuccessful, explain in the next Semi-annual Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner in accordance with Specification 6.9.1.d and, b. Effluent releases via this pathway may continue provided the flow rate is estimated once per 4 hours. |

*MCO - Minimum Channels Operable

3.16.4.3 If the actions taken to comply with paragraph 3.16.4.1.b do not reduce the concentration of hydrogen and/or oxygen in the affected tank to $\leq 6\%$ by volume within 24 hours, a notification must be made to the Commission in accordance with Specification 6.6. Once the concentration of hydrogen and/or oxygen in the affected tank is $\leq 6\%$ by volume, paragraphs 3.16.4.1.a and 3.16.4.2 apply.

3.16.5 Waste Gas Decay Tanks (Radioactive Materials)

Applicability

Applies to the four Waste Gas Decay Tanks.

Objective

To define the operating requirements for the Waste Gas Decay Tanks.

Specification

3.16.5.1 The quantity of radioactivity contained in each Waste Gas Decay Tank shall at all times be limited to $\leq 1.9E4$ curies noble gases (considered as Xe-133).

3.16.5.2 With the quantity of radioactive materials in any Waste Gas Decay Tank exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.

3.16.5.3 If Specification 3.16.5.2 is not completed within 48 hours, a prompt notification must be made to the Commission in accordance with Specification 6.6.

Waste Gas Decay Tanks (Hydrogen and Oxygen)

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas holdup system is maintained below the flammability limits of hydrogen and oxygen. (Control features are included in the system to prevent the hydrogen and oxygen concentrations from reaching these flammability limits. These control features include isolation of the source of hydrogen and/or oxygen, or injection of dilutants to reduce the concentration below the flammability limits). Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

Waste Gas Decay Tanks (Radioactive Materials)

The tanks included in this specification are those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another Technical Specification to a quantity that is less than the quantity that provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the nearest site boundary will not exceed 0.5 rem in an event of 2 hours duration.

Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting total body exposure to a member of the public at the nearest site boundary will not exceed 0.5 rem. This is consistent with Branch Technical Position ETSB 11-5 in NUREG-0800, July 1981.

Solidification of Wet Radioactive Waste

This specification ensures that the packaging of wet radioactive wastes meets the requirements of 10 CFR Part 20 and 10 CFR Part 71 prior to their shipment from the site for disposal.

- 3.17.1.5 The provisions of Specification 3.0 are not applicable.
- 3.17.1.6 Deviations are permitted from the required sampling schedule if specimens are unobtainable due to hazardous conditions, seasonal unavailability, or to malfunction of automatic sampling equipment. If the latter, every effort shall be made to complete corrective action prior to the end of the next sampling period.

3.17.2 Land Use Census

Applicability

Applies to the land use census.

Objective

To define the requirements for the conduct of the land use census.

Specification

- 3.17.2.1 A land use census shall be conducted and shall identify the location of the nearest milk animal, the nearest residence and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of the 16 meteorological sectors within a distance of five miles.
- 3.17.2.2 With a land use census identifying a location(s) that yields a calculated dose or dose commitment greater than the values currently being calculated in Specification 4.10.4.1, identify the new location(s) in the next Semiannual Radioactive Effluent Release report, pursuant to Specification 6.9.1.d.

3.17.2.3 With the land use census identifying a location which yields an annual calculated dose or dose commitment of a specific pathway which is 20% greater than that at a current sampling location:

- (a) add the new location(s) to the radiological, environmental monitoring program within 30 days and,
- (b) if desired, delete the sampling location having the lowest calculated dose or dose commitments via the same exposure pathway, excluding the control station location, from the monitoring program after October 31 of the year in which the land use census was conducted, and
- (c) identify the new location(s) in the next Semiannual Radioactive Effluent Release Report, Specification 6.9.1.d, including a revised figure(s) and table for the ODCM reflecting the new location(s).

3.17.3 Interlaboratory Comparison Program

Applicability

Applies to the interlaboratory comparison program of like media.

Objective

To ensure precision and accuracy of laboratory analyses.

Specification

3.17.3.1 Analyses shall be performed on radioactive materials supplied by EPA as a part of an Interlaboratory Comparison Program of like media within the environmental program as per Table 3.17-1.

3.17.3.2 With analyses not being performed as required above, report the corrective actions taken to prevent a recurrence to the



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO. DPR-23
CAROLINA POWER AND LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261

1. INTRODUCTION

By letter dated November 6, 1985, Carolina Power and Light Company (the licensee) submitted proposed changes to the technical specifications for the H.B. Robinson nuclear power plant. These changes include numerous editorial changes, the elimination of the requirement for shutting down the ventilation system in the fuel handling building on a high radiation signal, the reduction of the waste gas decay tank radioactivity limit and a correction of the bases for control of explosive gas mixtures in the waste gas decay tanks.

2. EVALUATION

2.1 Editorial Changes

These changes do not have a significant impact on the substance of the technical specifications. The proposed changes are:

- (a) In numerous places in Table 3.5-6, Table 3.5-7 and Section 3.17.2 reference to specific subsections (6.9.1.d.4, 6.9.1.d.b, etc.) would be replaced with more general references to the section addressing the Semiannual Radioactive Effluent Release Report (6.9.1.d).
- (b) The requirement of Table 3.5-7 for analysis of grab samples from the plant stack would be changed from "analyzed for radionoble gases once per 24 hours" to "within 24 hours."
- (c) Item 1.c.b of Table 3.5-7 is changed from "as provided by" to "as required by."

These proposed changes have been reviewed. It is concluded that the changes are not substantive but constitute minor improvements in phraseology. Therefore, these proposed changes are acceptable.

2.2 Lower Level Fuel Handling Building (FHB) Ventilation Isolation

The ventilation system for the lower level of the fuel handling building is now required to be shutdown if there is a high radiation signal. In response to an NRC Inspector Follow-Up Item (IFI 81-07-34) the licensee reevaluated the desirability of ventilation system deactivation.

The principal considerations were:

- (1) the only significant potential accident in this area is an inadvertent release from a waste gas decay tank;
- (2) the acceptance criteria for a waste gas decay tank failure accident are met without credit for holdup in the building; and
- (3) the fuel handling building is not leak-tight, so shutdown of the ventilation system would not contain the radioactive gases but would change the release pathway so the release would be unmonitored and unfiltered.

The licensee thus concluded that deactivation of the ventilation system on a high radiation signal was neither necessary nor desirable. The system was then modified to eliminate the automatic trip capability. A corresponding change in the technical specifications is now requested.

The staff evaluated the licensee's proposal and found that it meets the acceptance criteria of Branch Technical position ETSR 11-5 and, therefore, is acceptable.

2.3 Waste Gas Decay Tank Radioactivity Inventory Limit

Technical Specification 3.16.5 requires that the content of each waste gas decay tank be limited to 60,000 curies Xe-133 equivalent. The purpose of this limit is to ensure that inadvertent release of the contents would not result in an off-site dose of more than 0.5 rem. The licensee has reevaluated this limit and concluded that it should be reduced to 19,000 curies Xe-133 equivalent. The proposed technical specification change so reduces the limit.

The staff evaluated this proposed change and concluded that its only significant impact is to reduce the possible consequences of an accident. The change, therefore, is acceptable.

2.4 Waste Gas Decay Tank, Hydrogen and Oxygen

Technical Specification 3.16.4 limits the concentrations of hydrogen and oxygen in the waste gas decay tanks to prevent explosions. The control system and the technical specification requirements have been evaluated by the staff and found acceptable. The "bases" discussion, however, was found to include reference to automatic control features that are neither necessary nor present at the Robinson plant. The licensee now proposes to change the "bases" to more accurately reflect plant systems.

The staff evaluated this proposal and concluded that it does not change the requirements and, therefore, is acceptable.

3. ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents

that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 51.22(c)(9). This amendment also involves changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4. CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 18, 1986

Principal Contributor:

C. Willis