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NL-03-099
June 12, 2003

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
Revision to Proposed Technical Specification Amendment for Laboratory Testing of Nuclear-Grade Activated Charcoal per NRC Generic Letter 99-02 (TAC No. MB3329)

References:
1. Letter to the NRC, "Proposed Technical Specification Amendment for Laboratory Testing Of Nuclear-Grade Activated Charcoal per NRC Generic Letter 99-02," dated October 23, 2001 (IPN-01-076).
2. Letter to the NRC, "Response to Request For Additional Information Regarding Proposed Technical Specification Amendment for Laboratory Testing Of Nuclear-Grade Activated Charcoal per NRC Generic Letter 99-02," dated March 29, 2002 (IPN-02-022).
3. NRC Letter "Request For Additional Information Re: Proposed Technical Specification Amendment for Laboratory Testing Of Nuclear-Grade Charcoal (TAC N0. MB3329)," dated February 8, 2002.
4. Letter to the NRC, "Revision to Proposed Technical Specification Amendment for Laboratory Testing Of Nuclear-Grade Activated Charcoal per NRC Generic Letter 99-02 (TAC N0. MB3329)," dated December 17, 2002 (IPN-02-093).

Dear Sir:

Entergy Nuclear Operations, Inc (ENO) is providing a revised safety evaluation (Attachment I) for the proposed amendment to the Indian Point 3 (IP3) technical specifications regarding testing of activated charcoal filters. The revised safety evaluation addresses NRC comments regarding the calculation of safety factor as discussed during a conference call held on May 1, 2003.

A081

Generic Letter 99-02 (GL 99-02) requests that licensees adopt a new test protocol (ASTM D3803-1989) for measuring methyl iodide removal efficiency of charcoal filters and establishes test acceptance criteria in the technical specifications to ensure that the efficiencies assumed in accident analyses remain valid. A discussion of the commitment to adopt the new test protocol and the proposed changes to IP3 technical specifications were submitted in Reference 1.

GL 99-02 also recommends use of a safety factor in establishing test acceptance criteria. The Reference 1 submittal provided safety factor information, with the clarification that the design allowable filter bypass flow (1% of total ventilation flow) was not included in the safety factor calculation. GL 99-02 does not provide guidance on how filter bypass flow should be treated. ENO subsequently updated the safety factors (Reference 2) to include a term for the bypass flow in response to an NRC Request for Additional Information (Reference 3). ENO also submitted a revision (Reference 4) to the proposed technical specification amendment to document a commitment to upgrade the control room filters from a one-inch bed to a two-inch bed. Reference 4 used the same approach to calculating safety factors as previously used in Reference 2. However, during conference calls on May 1 and 19, 2003 ENO discussed and agreed with NRC staff to change how the bypass flow term is treated in the safety factor calculation. The revised Safety Evaluation (Attachment I) reflects the new safety factors and provides additional justification for the resulting safety factors for the fan cooler units and the Control Room Ventilation System (CRVS). The revisions to the safety evaluation do not alter the proposed Technical Specifications or the conclusions of the no significant hazards evaluation previously provided in Reference 4.

During the May 1 telecon, NRC staff also requested a clarification regarding the use of the phrase 'equivalent two-inch bed' in prior discussions regarding the CRVS. This phrase was used in early discussions with the NRC staff before a final design concept was available for upgrading the existing one-inch beds. Reference 4 reflects ENOs intent to upgrade the system with a full two-inch bed, and the phrase 'equivalent two-inch bed' is no longer relevant.

There are no new commitments being made in this submittal. If you have any questions regarding this submittal, please contact Mr. K. Kingsley at (914) 734-5581.

I declare under penalty of perjury that the foregoing is true and correct.

Very truly yours,

Executed on 6/12/03
(Date)

Fred R. Dacimo
Vice President, Operations
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cc: next page

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ATTACHMENT I TO NL-03-099

SAFETY EVALUATION FOR

PROPOSED TECHNICAL SPECIFICATION CHANGE

REGARDING LABORATORY TESTING OF

NUCLEAR-GRADE ACTIVATED CHARCOAL

This Safety Evaluation Supercedes the Safety Evaluation transmitted in IPN-02-093 dated December 17, 2001

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

SAFETY EVALUATION OF TECHNICAL SPECIFICATION CHANGE REGARDING
LABORATORY TESTING OF NUCLEAR-GRADE ACTIVATED CHARCOAL

I. DESCRIPTION OF CHANGE

This application for amendment to the Indian Point 3 Technical Specifications (TS) proposes to amend Section 5.5.10 of Appendix A of the Operating License. The proposed amendment adopts the standard American Society for Testing and Materials (ASTM) D3803-1989 for testing nuclear-grade activated charcoal. This submittal completes a commitment to submit a proposed TS change in response to Generic Letter (GL) 99-02 requirements.

The proposed changes are:

1. In Section 5.5.10, item c, delete the words "at the conditions specified below" and insert the words "in accordance with ASTM D3803-1989, subject to clarification below, at a temperature of 86°F and a relative humidity of 95%."

2. In Section 5.5.10, item c, under the column entitled "Methyl iodide removal efficiency (%) replace "≥ 90" with "≥ 95.5" for the Control Room Ventilation System.

3. In Section 5.5.10, item c, delete the four columns entitled "Methyl iodide inlet concentration (mg/m^3):", "Flow velocity equivalent to following flow rate (cfm):", Temperature (degrees F):", and "Relative Humidity (%)" and delete the note referenced in these columns that says "* Per test 5.b in Table 2 of Regulatory Guide 1.52, March 1978." Insert a new column entitled "ASTM D3803-1989 Clarification:" and insert next to the indicated ventilation systems the following:

   a) Fuel Storage Building Emergency Ventilation System (FSBVS) – "59 ft/min face velocity"

   b) Control Room Ventilation System (CRVS) – "78 ft/min face velocity"

   c) Containment Fan Cooler Units (CFCU) – "59 ft/min face velocity"

   d) Containment Purge System (CPS) – "31 ft/min face velocity"

4. Delete the existing note under the table that says "* Per test 5.b in Table 2 of Regulatory Guide 1.52, March 1978." And add a note that says "Note: For the 1" beds, the Control Room Ventilation System methyl iodide removal efficiency is verified greater than or equal to 93% rather than 95.5% at a face velocity of 50 ft/min under the above requirements. This is done prior to fuel movement in Refuel Outage 12 and every 6 months after Refuel Outage 12 until the end of Refuel Outage 13 or the 2" beds are installed."

II PURPOSE OF THE PROPOSED CHANGE

Entergy has proposed the amendment to adopt the standard ASTM D3803-1989 for testing nuclear-grade activated charcoal in order to complete a commitment to submit a proposed TS change in response to GL 99-02 requirements.

III SAFETY IMPLICATION OF PROPOSED CHANGES

Generic Letter 99-02 Charcoal Testing

In GL 99-02 the NRC documented their determination that testing of nuclear grade activated charcoal to a protocol other than ASTM D3803-1989 does not provide assurance that the charcoal will perform as required by dose analyses to demonstrate compliance with design limits. The current TS 5.5.10 for testing charcoal is therefore a non-conservative TS requiring change. High temperatures used in testing are of concern because they cause regeneration of the charcoal. Testing at 86°F provides assurance that appropriate test results will be obtained. The GL required a TS change request if the ASTM D3803 protocol were adopted. The TS change is to identify the test temperature, the relative humidity, the penetration or iodide removal efficiency, and, if any face velocity is greater than 40 ft/min plus 10 percent, the face velocity. The GL takes a position that a safety factor of 2 or greater should be used unless approved on a case by case basis. The NRC methodology for calculating safety factor (Reference 10) is as follows:

$$SF = \frac{[100\% - \text{accident methyl iodide efficiency}]}{[100\% - (\text{methyl iodide efficiency allowed by TS} - \text{bypass allowable})]}$$

This methodology calculates the safety factor of the system rather than the safety factor of just the charcoal. There are two factors justifying a lower safety factor. First, the charcoal does not degrade rapidly over time. This is demonstrated by testing of the FSBVS since charcoal was last replaced in September 1999. The FSBVS charcoal test results are 99.13% in September 1999, 98.5% in January 2001 (the 1999 and 2001 tests were converted from 99.27% and 98.74% using formula 1 in ASTM D3809-1989 to account for testing at a face velocity of 50 ft/min rather than 59 ft/min), 97.55% in January 2002, 96.41% in January 2003, 94.67% in February 2003, 94.52% in March 2003, and 93.18% in May 2003. The FSBVS provides a conservative basis to assess the CRVS and FCU margin. The FSBVS was run approximately 1700 hours between September 1999 and January 2002 with an efficiency drop of 1.58%. The FSBVS was run approximately 2300 hours between September 1999 and the last test with a drop of about 5.95%. The CRVS and FCU charcoal system are not normally in operation and are run only for testing so a margin of 1.8% is adequate to assure dose calculation efficiencies are met. Second, the past surveillances show that bypass is less than one percent to provide additional margin. Recent tests results are provided later to show this.

The following discuss the design characteristics of the ventilation systems subject to TS. The discussions confirm that there will be no changes to the charcoal efficiencies

credited in accident analyses, no changes to system design flow requirements to meet accident analysis assumptions, one hardware change being made in a separate modification is reflected in the TS change (installation of 2 " filters in the CRVS), and no changes to the operation of systems. Therefore there will be no significant increase in the probability or consequences of an accident previously evaluated because the ability of the ventilation systems to perform their function will not be reduced and there has been no change to the design or required operation of the ventilation systems that could affect the probability of or consequences of an accident. There is no possibility of a new or different accident from those previously evaluated because there has been no change to the design or required operation of the ventilation systems. There has been no significant reduction in the margin of safety because the new standard provides greater assurance that the charcoal will perform as credited in accident analyses.

Fuel Storage Building Emergency Ventilation System (FSBVS)

The current TS for FSBVS requires that impregnated charcoal shall have a methyl iodide removal efficiency ≥ 90% at ± 20% of the accident design flow rate with a 0.05 to 0.15 mg/m^3 inlet methyl iodide concentration, a relative humidity ≥ 95%, and a temperature ≥ 125°F. The proposed TS amendment requires no change to the design or operation of the FSBVS. The proposed TS retains the methyl iodide removal efficiency of ≥ 90 % and specifies the requirements of ASTM D3803-1989, including a relative humidity of 95% and a temperature of 86°F. The TS includes the system face velocity of 59 ft/min as required by the GL since the face velocity deviates more than 10% from 40 ft/min. The ASTM standard specifies the allowable variation for air flow in the test rig.

The Indian Point 3 FSBVS is designed with 30 Type II carbon trays (Reference 2) that are 33" long, 28 7/8" wide, and 6 1/4" deep. For a rated 500 cfm, the calculated (per ASME AG-1) residence time is 0.226 seconds (Reference 3). The maximum system flow rate is 20,000 cfm giving a maximum flow rate of about 667 cfm per tray. For the 667 cfm flow rate the residence time is calculated [(500 cfm)(0.226sec)/(667 cfm)] to be 0.17 seconds. The corresponding face velocity (face velocity = thickness / residence time) used for testing is 58.8 ft/min. Surveillance testing (Reference 4) allows an as left flow rate of 18,000 to 20,000 cfm.

The TS efficiency of 90% (equivalent to 10% penetration) provides a factor of safety of 2.72 based upon a 1% allowable bypass and, prior to Technical Specification Amendment 215, a dose analysis assumption of methyl iodide removal efficiency of 70%. The FSBVS charcoal was tested in January 2001 using the criteria of the proposed TS with a 50 ft/min face velocity and a test result of 98.74% efficiency was achieved (Reference 4). This test result was judged acceptable based on the correlation in equation 1 of ASTM D3809-1989, Section 9. The formula is used for insufficient samples of charcoal to convert the results of a substandard depth to the standard depth. The formula may be used to correlate an insufficient face velocity to the required face velocity since the log linear function of penetration to depth and the log linear function of penetration to face velocity are the same (Reference 5). The FSBVS filtration system has nevertheless been declared inoperable and the charcoal was tested in accordance with the proposed TS before it was used again. That test showed a 2.4% penetration (Reference 13).

The FSAR will be revised to clarify that TS surveillance testing of the ventilation system is based upon a maximum flow of 20,000 cfm and a minimum safety factor of 2 for the assumed methyl iodide removal efficiency plus a 1% factor for bypass.

Control Room Ventilation System (CRVS)

The current TS for CRVS requires that impregnated charcoal shall have a methyl iodide removal efficiency ≥ 90% at ± 20% of the accident design flow rate, 0.05 to 15 mg/m^3 inlet methyl iodide concentration, ≥ 95% relative humidity and a temperature ≥ 125°F. The proposed TS amendment reflects plans to replace the existing 1" charcoal beds with 2" charcoal beds prior to or during refuel outage 13. A design change to the filter train has been determined to be feasible but engineering work has not progressed to the point where on-line replacement is considered feasible. The proposed TS increases the methyl iodide removal efficiency to ≥ 93 % for the existing 1" beds and 95.5% for the replacement 2" beds and specifies the requirements of ASTM D3803-1989, including a relative humidity of 95% and a temperature of 86°F for both. The TS includes the system face velocity of 50 ft/min for the 1" bed depth and 78 ft/min for the 2" bed as required by the GL since the face velocity deviates more than 10% from 40 ft/min. The ASTM standard specifies the allowable variation for air flow in the test rig.

The Indian Point 3 CRVS has two filters (Reference 6) with each having a 1" bed depth that was designed with a residence time of 0.075 seconds at 1,000 cfm. This equates to a face velocity of 66.7 ft/min (Reference 3). Based on the administratively controlled CRVS maximum flow through the filters of 1,500 cfm (750 cfm per filter), the associated face velocity is 50 ft/min and the associated residence time is 0.101 seconds. The maximum flow is less than maximum system filter rated flow of 2,000 cfm to assure that filter efficiency is maximized. To assure we limit the maximum recirculation flow to 1500 cfm, the system functional test (Reference 7) limits the combined flow from the outside air intake and the control room envelop. The minimum flow to meet accident analysis assumptions (Reference 8) is 1,080 cfm of recirculated air and 40 cfm of outside air (there is a maximum of 400 cfm of outside air). The note added to the TS indicates that the 1" charcoal beds will be in service until the 2" filter beds are installed which will be no later than start up from Refuel Outage 13. The above flow rates will be maintained during this time as indicated by the 50 ft/min in the note. The efficiency of ≥ 93% in the note will provide a safety factor of 1.25 when calculated according to prior formulas. The TS note specifies that the charcoal be tested to demonstrate an efficiency of ≥ 93% at a six month interval. The 6 month interval was derived by assuming that charcoal degrades linearly over the period of use. The safety factor of 1.25 for 6 months and safety factor of 1.818 for 24 months provide approximately the same margin using this assumption. This assumption is considered conservative since the charcoal is seeing flow about 15 minutes per month during testing. The 93% acceptance criteria is considered acceptable since the last two tests on new charcoal have results of 94.285% and 93.18% and it is our intent to accomplish the six month test by replacing the charcoal with tested charcoal.

The new charcoal filter system will have a 2" depth with a calculated residence time of 0.128 seconds with a flow of 2,000 cfm (1000 cfm per filter). The residence time of

0.128 seconds equates to a 78 ft/min face velocity for the 2" bed. This exceeds the 40 ft/min criteria of the ASTM by more than 10% and has been included in the proposed TS. The flow velocity of 2000 cfm was used for the proposed TS because the charcoal filter modification will increase the current 1500 cfm limit (750 cfm per filter), if feasible, to increase the cleanup rate. The CRVS will be adjusted to assure that the maximum cfm is not exceeded using the functional test. The proposed TS efficiency of 95.5% provides a safety factor of 1.818 (characterized as 1.81 in the FSAR licensing basis change) based on a 1% allowable for bypass and a dose analyses assumed methyl iodide removal efficiency of 90%. This constitutes an exception to the safety factor of 2 discussed in GL 99-02. The safety factor is justified based upon the lack of significant degradation in charcoal, discussed previously, and the margin provided by the difference between 1% and the last bypass test result of 0.08% The installed system is expected to have a maximum differential pressure that is less than the current TS value of 6. Administrative controls will be used to control the differential pressure to an acceptable value until the TS 5.5.10d can be changed.

The FSAR will be revised, when the modification is complete, to clarify that TS surveillance testing of the ventilation system is based upon a maximum flow to be defined by the filter modification and a safety factor of 1.81 for the assumed methyl iodide removal efficiency.

Containment Fan Cooler Units (CFCU)

The current TS for CFCU requires that impregnated charcoal from each of the five fan cooler units shall have a methyl iodide removal efficiency ≥ 85% at ± 20% of the accident design flow rate, 5 to 15 mg/m^3 inlet methyl iodide concentration, ≥ 95% relative humidity and a temperature ≥ 250°F. The proposed TS amendment requires no change to the design or operation of the CFCU. The proposed TS retains the methyl iodide removal efficiency of ≥ 85% and specifies the requirements of ASTM D3803-1989, including a relative humidity of 95% and a temperature of 86°F. The TS includes the system face velocity of 59 ft/min as required by the GL since the face velocity deviates more than 10% from 40 ft/min. The ASTM standard specifies the allowable variation for air flow in the test rig.

The proposed TS amendment requires no change to the design or operation of the CFCU. The proposed TS retains the methyl iodide removal efficiency of ≥ 85 % and specifies the requirements of ASTM D3803-1989 with a system face velocity of 59 ft/min. The Indian Point 3 CFCU is designed with 12 carbon filter cells that are 33 1/4" long, 30 1/8" wide, and 7 5/8" deep (Reference 3). For the nominal flow of about 666 cfm per filter cell, the Westinghouse Technical Manual says the face velocity is 53 ft/min. The maximum system flow is calculated to be 8,000 cfm under post accident conditions and with a 10 percent allowance, the maximum system flow would be 8,800 cfm (about 733 cfm per filter cell). The face velocity for the maximum flow is 58.25 ft/min and the corresponding resident time is 0.172 sec (determined by dividing the charcoal thickness (2") by the face velocity (Reference 3)).

The TS efficiency of 85% (equivalent to 15% penetration) provides a factor of safety of 1.875 (characterized as 1.87 in the FSAR licensing basis change) when accounting for a

70% efficiency assumed in dose analysis plus 1% allowable bypass. This constitutes an exception to the safety factor of 2 discussed in GL 99-02. The safety factor is justified based upon the lack of significant degradation in charcoal, discussed previously, and the margin provided by the difference between 1% and the last bypass test results of 0.74% for the 31 FCU, 0,03% for 32 FCU, 0.06% for 33 FCU, 0.39% for 34 FCU and 0.08% for 35 FCU.

The CFCU charcoal was tested in May 2001 using the criteria of the proposed TS with a 40 ft/min face velocity. Test results of 99.02%, 99.30%, 98.52%, 97.95%, and 98.68% efficiency were achieved (Reference 11). This test result was judged acceptable based on the correlation in equation 1 of ASTM D3809-1989, Section 9. The formula is used for insufficient samples of charcoal to convert the results of a substandard depth to the standard depth. The formula may be used to correlate an insufficient face velocity to the required face velocity since the log linear function of penetration to depth and the log linear function of penetration to face velocity are the same (Reference 5). Using this correlation, the efficiency of all the CFCU filters exceeds 96%. The CFCU filtration system is considered operable and the charcoal will be tested during the next refuel outage in accordance with the requirements of the proposed TS.

The FSAR will be revised to clarify that TS surveillance testing of the ventilation system is based upon a maximum flow of 8,800 cfm and a safety factor of 1.87 for the assumed methyl iodide removal efficiency considering a 1% factor for bypass.

Containment Purge System (CPS)

The current TS for CPS requires that impregnated charcoal have a methyl iodide removal efficiency $\geq$ 90% at $\pm$ 20% of operating air flow velocity with methyl iodide concentration, temperature and relative humidity determined per test 5.b in Table 2 of Regulatory Guide 1.52, March 1978. The proposed TS amendment requires no change to the design or operation of the CPS. The proposed TS retains the methyl iodide removal efficiency of $\geq$ 90 % and specifies the requirements of ASTM D3803-1989, including a relative humidity of 95% and a temperature of 86°F. The TS includes the system face velocity of 31 ft/min as required by the GL since the face velocity deviates more than 10% from 40 ft/min. The ASTM standard specifies the allowable variation for air flow in the test rig.

The proposed TS amendment requires no change to the design or operation of the CPS. The proposed TS retains the methyl iodide removal efficiency of $\geq$ 90 % and specifies the requirements of ASTM D3803-1989 with a system face velocity of 31 ft/min. The Indian Point 3 CPS is designed with 7 carbon filter beds that have a calculated effective screen area of 143.22 ft^2 (Reference 3). For the original design flow of 40,000 cfm, the face velocity is approximately 39.9 ft/min. However, the system flow has been reduced to 28,000 cfm, giving a face velocity of about 28 ft/min. The maximum system flow is 30,800 cfm (about 4,400 cfm per filter cell) since surveillance testing (Reference 12) allows an as left flow rate of 28,000 cfm plus or minus 10%. The face velocity at maximum flow is 30.72 ft/min and the corresponding residence time for the 2 inch beds is 0.325 seconds.

The TS efficiency of 90% (equivalent to 10% penetration) provides a factor of safety of 2.72 based on 1% for allowable bypass and the dose analyses assumption of methyl iodide removal efficiency of 70%. The CPS charcoal was tested in April 2001 using the criteria of the proposed TS with a face velocity of 30 ft/min and a test result of 99.28% efficiency was achieved (Reference 12). This test result was judged acceptable based on the correlation in equation 1 of ASTM D3809-1989, Section 9.

The FSAR will be revised to clarify that TS surveillance testing of the ventilation system is based upon a maximum flow of 30,800 cfm (28,000 cfm plus 10%) and a minimum safety factor of 2 for the assumed methyl iodide removal efficiency when considering a 1% bypass.

The proposed changes will not adversely affect the ALARA and the Environmental Programs, the Security and Fire Protection Programs or the Emergency Plan. This conclusion is based on the type of changes being made in comparison to the purpose, scope and content of these programs. The FSAR will be revised as described above.

IV EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION

Consistent with the criteria of 10 CFR 50.92, the enclosed application is judged to involve no significant hazards based on the following information:

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

Response:

The proposed license amendment adopts the new test method and acceptance criteria of ASTM D3803-1989 for activated charcoal filters. The changes require laboratory performance testing of adsorber carbon that yields a more accurate result than the testing currently required by the TS. The proposed change to delete non-conservative TS requirements for testing of adsorber carbon is not a plant accident initiator as described in the Final Safety Analysis Report (FSAR). The proposed amendment does not change the function of any structure, system or component (SSC). The function of the ventilation systems is filtration of radiological releases during postulated accidents. The proposed changes will provide greater assurance that this function is provided. The revised TS requirements are for laboratory tests that are currently in place to address Generic Letter 99-02, with two exceptions to the safety factor of 2, and accommodate the change of the Control Room Ventilation System (CRVS) charcoal beds to two inches. The change only affects the TS testing requirements since the modification to the CRVS will be accomplished separately from the TS change. The TS changes will not result in any changes to the efficiency assumed in accident analysis. The changes do not alter, degrade or prevent actions described or assumed in an accident described in the FSAR. Therefore, the proposed amendment does not change the possibility of an

accident previously evaluated or significantly increase the consequences of an accident previously evaluated.

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

Response:

The proposed license amendment adopts the new test method and acceptance criteria of ASTM D3803-1989 for activated charcoal filters. The change does not involve any modifications to the plant but will accommodate the planned modification of the CRVS to change the charcoal beds from 1 inch to 2 inches. The change will not require changes to how the plant is operated nor will it affect the operation of the plant. The changes require laboratory performance testing of adsorber carbon that yields a more accurate result than the testing currently required by the TS. The proposed changes to delete non-conservative TS requirements for testing of adsorber carbon is not a plant accident initiator as described in the Final Safety Analysis Report (FSAR). The proposed amendment does not change the function of any structure, system or component (SSC). The function of the ventilation systems is filtration of radiological releases during postulated accidents. The proposed changes will provide greater assurance that this function is provided. The revised TS requirements are for laboratory tests that are currently in place to address Generic Letter 99-02, with two exceptions to the safety factor of 2, and accommodate the change of the Control Room Ventilation System (CRVS) charcoal beds to two inches. The change only affects the TS testing requirements since the modification to the CRVS will be accomplished separately from the TS change. The TS changes will not result in any changes to the efficiency assumed in accident analysis. The changes do not alter, degrade or prevent actions described or assumed in an accident described in the FSAR. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response:

The proposed license amendment adopts the new test method and acceptance criteria of ASTM D3803-1989 for activated charcoal filters. The proposed license amendment does not reduce the margin of safety but enhances it by requiring more accurate testing. The proposed test change will require the use of a current and improved ASTM standard to ensure that the carbon ability to adsorb radioactive material will remain at or above the capability credited in our accident analysis.

V IMPLEMENTATION OF THE PROPOSED CHANGE

This amendment request meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) as follows:

(i) The amendment involves no significant hazards consideration.

As described in Section IV of this evaluation, the proposed change involves no significant hazards consideration.

(ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The proposed change does not involve the installation of any new equipment, or the modification of any equipment that may affect the types or amounts of effluents that may be released offsite. Therefore, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed changes do not involve any physical plant changes, or introduce any new mode of plant operation. Therefore, there is no significant increase in individual or cumulative occupational radiation exposure.

Based on the above, Entergy concludes that the proposed changes meet the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.21 relative to requiring a specific environmental assessment by the Commission.

VI CONCLUSIONS

The proposed changes will not alter assumptions relative to the mitigation of an accident or transient event, and will not adversely affect normal plant operation and testing. The proposed changes are consistent with the current safety analysis assumptions.

The Onsite Safety Review Committee and Safety Review Committee have reviewed this proposed change to the TS and have concluded that it does not involve a significant hazards consideration and will not endanger the health and safety of the public.

VII REFERENCES

1. Deleted

2. Drawing ASK-1743-980.

3. Engineering Report IP3-RPT-HVAC-03370, "Charcoal Filtration System Design Requirements," dated February 23, 2001.

4. Surveillance test 3PT-R32A, "Fuel Storage Building Filtration System".

5. Discussions with representative of NCS, Corporation.

6. Deleted.

7. Surveillance test 3PT-R032C "Control Room Filtration System Functional,"

8. Calculation 83990.164-2-HVAC-092.

9. Deleted.

10. NRC letter "Request for Additional Information Re: Proposed Technical Specification Amendment for Laboratory Testing of Nuclear-Grade Charcoal," Dated February 8, 2002.

11. Surveillance tests 3PT-R032B1, 3PT-R032B2, 3PT-R032B3, 3PT-R032B4, and 3PT-R032B5, "Fan Cooler Unit Functional Test,".

12. Surveillance test 3PT-R32H, "VC Purge Exhaust Filtration System,".

13. NCS Corporation "Radioactive Penetration And Retention Test Report," January 25, 2002.