

Indiana Michigan
Power Company
500 Circle Drive
Buchanan, MI 49107 1395



August 23, 2002
AEP:NRC:2090

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

SUBJECT: Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Amendment Request for Removal of Obsolete and/or
Expired License Conditions from the Unit 1 and 2 Operating
Licenses (OLs), Editorial Changes to the Unit 1 and Unit 2
OLs, and Administrative Changes to the Unit 1 and Unit 2
Technical Specifications

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant Unit 1 and Unit 2, proposes to amend Facility Operating Licenses (OLs) DPR-58 and DPR-74, for Unit 1 and Unit 2, respectively, and Appendix A, Technical Specifications (TS) for Unit 1 and Unit 2. I&M proposes to delete obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLs, and make editorial changes to the Unit 1 and Unit 2 OLs. Administrative changes to specific TS for Unit 1 and Unit 2 are also proposed in this submittal.

Enclosure 1 provides an oath and affirmation affidavit statement. Enclosure 2 provides a detailed description and safety analysis to support the proposed changes, including the 10 CFR 50.92(c) evaluation, which concludes that no significant hazard is involved, and an environmental assessment. TS pages that are marked to show the proposed changes are provided in Attachments 1A and 1B for Unit 1 and Unit 2, respectively. The proposed TS pages, with the changes incorporated, are provided in Attachments 2A and 2B for Unit 1 and Unit 2, respectively.

A001

The OL pages marked to show the proposed changes are provided in Attachments 3A and 3B for Unit 1 and Unit 2, respectively. The proposed OL pages with the changes incorporated are provided in Attachments 4A and 4B for Unit 1 and Unit 2, respectively. No new commitments were identified in this submittal.

I&M requests Nuclear Regulatory Commission (NRC) review and approval in accordance with normal NRC review schedules for this type of request, and requests a 60-day implementation period following approval.

On July 26, 2002, I&M submitted a Unit 1 and 2 amendment request which proposed a one-time extension of the essential service water system allowed outage time. This proposed amendment request will affect the OL pages that are being submitted in this request. As such, I&M will coordinate the changes to the pages with the NRC Project Manager to ensure proper TS/OL page control when the associated license amendment requests are approved.

If you have any questions or require additional information, please contact Mr. Gordon P. Arent, Manager of Regulatory Affairs, at (616) 697-5553.

Sincerely,



J. E. Pollock
Site Vice President

BWO/jen

Enclosures:

- 1 Affidavit
- 2 Evaluation of the Proposed Changes

Attachments:

- 1A and 1B TS Pages Marked To Show Proposed Changes
- 2A and 2B Proposed TS Pages
- 3A and 3B OL Pages Marked to Show Proposed Changes
- 4A and 4B Proposed OL Pages

c: K. D. Curry
J. E. Dyer
MDEQ - DW & RPD
NRC Resident Inspector
R. Whale

bc: G. P. Arent
A. C. Bakken, III
R. W. Gaston, w/o attachments
S. A. Greenlee
S. B. Haggerty
J. T. Hawley
D. W. Jenkins, w/o attachments
J. A. Kobyra
J. E. Pollock
J. F. Stang, Jr., - NRC Washington, DC
T. R. Stephens
T. K. Woods, w/o attachments

AFFIRMATION

I, Joseph E. Pollock, being duly sworn, state that I am Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

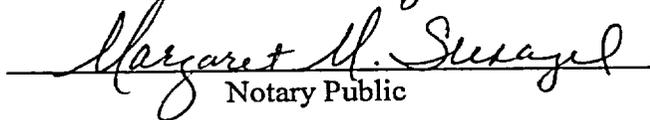
Indiana Michigan Power Company



J. E. Pollock
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 22ND DAY OF August, 2002


Notary Public

My Commission Expires 11/23/2005

MARGARET MARY SUNAGEL
Notary Public, Berrien County, MI
My Commission Expires Nov 23, 2005

**Application for Amendment
Removal of Obsolete and/or Expired License Conditions from the
Unit 1 and Unit 2 Operating Licenses, Editorial Changes to the Unit 1
and Unit 2 Operating Licenses, and Administrative Changes to the
Unit 1 and Unit 2 Technical Specifications**

1.0 DESCRIPTION

Pursuant to 10 CFR 50.90, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Unit 1 and Unit 2, proposes to amend Facility Operating Licenses (OLs) DPR-58 and DPR-74, for Unit 1 and Unit 2, respectively, and Appendix A, Technical Specifications (TS) for Unit 1 and Unit 2. I&M proposes to delete obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLs, and make editorial changes to the Unit 1 and Unit 2 OLs. Administrative changes to specific TS for Unit 1 and Unit 2 are also proposed in this submittal.

2.0 PROPOSED CHANGE

I&M proposes to delete the following obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLs:

Unit 1	Unit 2
License Condition 2.C(8)	License Condition 2.C(3)(u)
License Condition 2.C(9)	License Condition 2.C(3)(w)
License Condition 2.C(10)	License Condition 2.C(3)(x)
	License Condition 2.K(1)
	License Condition 2.K(2)

I&M proposes editorial changes to the Unit 1 and Unit 2 OLs. Specifically, to correct a typographical error in Unit 1 License Condition 2.C(3) and to renumber the Unit 2 OL pages. The renumbering is necessary since several license conditions are being deleted from the Unit 2 OL. No page renumbering is necessary for the Unit 1 OL.

In addition, I&M proposes administrative changes to the following Unit 1 and Unit 2 TS:

Unit 1		Unit 2	
TS 3.3.2.1, Table 3.3-3	TS 6.3.1	TS 3.3.2.1, Table 3.3-3	TS 6.3.1
TS 3.3.3.1, Table 3.3-6	TS 6.6.1.b	TS 3.3.3.1, Table 3.3-6	TS 6.6.1.b
TS 3.3.3.1, Table 4.3-3	TS 6.7.1.a	TS 3.3.3.1, Table 4.3-3	TS 6.7.1.a
TS 3.9.12, Action a	TS 6.7.1.b	TS 3.4.8, Action a	TS 6.7.1.b
TS 4.7.1.2.c and d	TS 6.7.1.c	TS 3.9.12, Action a	TS 6.7.1.c

Unit 1		Unit 2	
TS 6.1.2	TS 6.12.2	TS 4.7.1.2.c and d	TS 6.9.1.9.2
TS 6.2.1.c	TS 6.13.1.b	TS 4.8.1.1.2.e	TS 6.12.2
TS 6.2.2.f	TS 6.14.1.b	TS 6.1.2	TS 6.13.1.b
TS 6.2.2.g		TS 6.2.1.c	TS 6.14.1.b
TS 6.2.2, Table 6.2-1		TS 6.2.2.f	
		TS 6.2.2.g	
		TS 6.2.2, Table 6.2-1	

3.0 BACKGROUND

Since the original issuance of the Unit 1 and Unit 2 OLS, I&M has incorporated several additional requirements (i.e., license conditions) into the license via the 10 CFR 50.90 license amendment process. In some cases, subsequent license amendments have removed certain license conditions that were no longer applicable. In other cases, license conditions have become obsolete or have expired, but remain part of the OLS. I&M proposes several administrative changes to the Unit 1 and Unit 2 OLS to remove those license conditions that no longer apply. In addition, editorial changes to the Unit 1 and Unit 2 OLS are proposed.

I&M also proposes several administrative changes to the Unit 1 and Unit 2 TS to correct, for example, administrative TS errors which were introduced via previous license amendments.

The above changes are being proposed to retain only those license conditions that remain pertinent to current plant operations. The intent is to provide a Unit 1 and Unit 2 license document for license renewal and conversion to the Westinghouse improved technical specifications that does not contain inaccurate, obsolete or expired requirements, and is directly applicable to CNP's current design and licensing basis.

4.0 TECHNICAL ANALYSIS

I&M proposes to delete the following obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLS, and make editorial changes to the Unit 1 and Unit 2 OLS. Administrative changes to specific Unit 1 and Unit 2 TS are also proposed.

Obsolete and/or Expired License Conditions

I&M proposes to delete the following Unit 1 and Unit 2 license conditions.

Unit 1

- License Condition 2.C(8) – “The provisions of Specification 3/4.9.7 are not applicable for loads being moved over the pool for the duration of the spent fuel pool reracking project.

Control of loads moving over the spent fuel pool during the spent fuel pool reracking project shall comply with the criteria of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants." Administrative controls shall be in place to prevent any load not rigged in compliance with the criteria of NUREG-0612 from passing over the spent fuel pool with the crane interlocks, required by T/S 3/4.9.7, disengaged."

This license condition was temporarily added to the Unit 1 license via License Amendment No.169, dated January 14, 1993 (Reference 1), to allow the main load block to be moved over the spent fuel pool while CNP completed the spent fuel pool re-rack project. The spent fuel pool re-rack project was completed in 1993; as such, this license condition is no longer applicable and can be deleted.

- License Condition 2.C(9) – License Amendment No. 227, dated December 30, 1998 (Reference 2), granted a one-time extension of the TS 4.4.5.3 steam generator (SG) surveillance requirement to perform non-destructive examination of SG tubes every 24 months. The relief allowed the examination to be deferred until the start of cycle 17, but not to exceed January 31, 2001. In the event the SGs were replaced prior to the start of cycle 17, the retired SGs are exempted from further surveillance under TS 4.4.5.3.

In 2000, I&M replaced all four Unit 1 SGs prior to the end of cycle 16. As stated in license condition 2.C(9), if the SGs were replaced prior to the start of cycle 17, the retired SGs do not require inspection. Because the SGs were replaced prior to the start of cycle 17, this license condition has been satisfied and can therefore be deleted.

- License Condition 2.C(10) – License Amendment No. 265, dated February 14, 2002 (Reference 3), granted CNP a one-time limited duration exemption from TS 4.6.5.3.1.b.3, 4.6.5.3.1.b.4, and 4.6.5.3.1.b.5, surveillance requirements to verify that the opening, closing, and frictional torque values for the ice condenser inlet doors are within specified limits. The one-time exemption was necessary because the procedure used for verifying the ice condenser inlet door opening, closing, and frictional torque values was determined not to adequately fulfill the TS surveillance requirements. Since Unit 1 was in Mode 1 when this condition was identified, CNP was granted an exemption from the TS requirements to allow the surveillance to be performed during the next Unit 1 entry into Mode 5 of sufficient duration, or prior to ascension into Mode 4 at the completion of the Unit 1 fuel cycle 18 refueling outage.

On May 30, 2002, with Unit 1 in Mode 5, CNP completed surveillance testing of the Unit 1 ice condenser lower inlet doors (Reference 4). The testing was performed to satisfy the requirements of TS 4.6.5.3.1.b.3, 4.6.5.3.1.b.4, and 4.6.5.3.1.b.5. Because license condition 2.C(10) has been satisfied, the condition is no longer required and can therefore be deleted.

Unit 2

- License Condition 2.C.3(u) – “The provisions of Specification 3/4.9.7 are not applicable for loads being moved over the pool for the duration of the spent fuel pool reracking project. Control of loads moving over the spent fuel pool during the spent fuel pool reracking project shall comply with the criteria of NUREG-0612, “Control of Heavy Loads at Nuclear Power Plants.” Administrative controls shall be in place to prevent any load not rigged in compliance with the criteria of NUREG-0612 from passing over the spent fuel pool with the crane interlocks, required by T/S 3/4.9.7, disengaged.”

This license condition was temporarily added to the Unit 2 license via License Amendment No.152, dated January 14, 1993 (Reference 1), to allow the main load block to be moved over the spent fuel pool while CNP completed the spent fuel pool re-rack project. The spent fuel pool re-rack project was completed in 1993; as such, this license condition is no longer applicable and can be deleted.

- License Condition 2.C.3(w) – “The steam generator tube inspection surveillance maximum inspection interval of TS 4.4.5.3 is extended until the start of cycle 13, but no later than June 30, 2002.”

License Amendment No. 232, dated January 30, 2000 (Reference 5), granted I&M an extension of the TS 4.4.5.3 SG tube inspection surveillance interval from 40 to 56 calendar months. The surveillance interval was extended because Unit 2 was shut down for much of the first 40 calendar months of cycle 12. Consequently, the SGs were not exposed to the high temperature conditions generally required for corrosion-induced degradation of the SG tubes. With the surveillance interval extended to 56 calendar months, the actual operating time between inspections would be approximately 18 months.

The SG tube inspection surveillance requirements for TS 4.4.5.3 were successfully completed on February 6, 2002 (Reference 6). Therefore, license condition 2.C.3(w) has been satisfied and can be deleted.

- License Condition 2.C.3(x) - “The emergency diesel generator engine TS surveillance requirements of 4.8.1.1.2.e.1 and 4.8.1.1.2.e.7 have been extended to allow their performance during refueling outage 13, but no later than December 31, 2001. The station battery service testing TS surveillance requirements 4.8.2.3.2.d and 4.8.2.5.2.d have been extended to allow them to be performed during the refueling outage 13, but no later than December 31, 2001.”

In License Amendment No. 234, dated June 11, 2001 (Reference 7), I&M was granted an extension of the TS 4.8.1.1.2.e.1, 4.8.1.1.2.e.7, 4.8.2.3.2.d, and 4.8.2.5.2.d surveillance intervals associated with the emergency diesel generator (EDG) engines and station batteries.

The extension allowed the surveillances to be performed during cycle 13 refueling outage, but no later than December 31, 2001, to preclude the need for a mid-cycle shutdown.

TS 4.8.2.3.2.d and 4.8.2.5.2.d surveillance requirements for the 2AB, 2CD, and the N-train batteries were successfully completed during September 13–25, 2001 (References 8 through 10). In addition, the TS 4.8.1.1.2.e.1 surveillance requirements for the AB and CD EDGs were completed in December 2001 and September 2001, respectively (References 11 and 12). TS surveillance requirement 4.8.1.1.2.e.7 was successfully completed for the AB and CD EDGs on September 16, 2001, and July 28, 2001, respectively (References 13 and 14). As such, license condition 2.C.3(x) has been satisfied and can be deleted.

- License Condition 2.K(1) – “The licensee is authorized to repair Unit 2 steam generators by replacement of major components. Repairs shall be conducted in accordance with the licensee’s commitments identified in the Commission approved Donald C. Cook Nuclear Plant Unit No. 2 Steam Generator Repair Report dated November 7, 1986, as revised through Revision 6, and additional commitments identified in the staff’s related Safety Evaluation dated March 8, 1988.”

In License Amendment No. 100, dated March 8, 1988 (Reference 15), the NRC approved I&M’s plan to replace the SG lower assemblies in all four Unit 2 SGs. The Unit 2 SGs were replaced in 1988 (Reference 16), and the unit was returned to service on March 17, 1989. As such, this license condition is no longer applicable and can be deleted.

- License Condition 2.K(2) – “The Technical Specifications identified in Table 3.2-2 of the Steam Generator Repair Report dated November 7, 1986, as revised through Revision 6 dated February 18, 1988, will not be applicable during the repair program. For purposes of Technical Specification applicability, the Steam Generator Repair Project will begin when the last fuel assembly from the Unit 2 core is placed in the spent fuel pool and will end when the first fuel assembly is removed from the spent fuel pool to refuel the Unit 2 core.”

In License Amendment No. 100, dated March 8, 1988 (Reference 15), License Condition 2.K(2) was added to the Unit 2 OL which states that TS Table 3.2-2 was not applicable during the time that the Unit 2 SGs were being repaired. CNP completed the replacement of the Unit 2 SGs in 1988, and the unit was returned to service on March 17, 1989 (Reference 16). As such, this license condition is no longer applicable and can be deleted.

Proposed Editorial Changes to the OLS

Unit 1

- License Condition 2.C(3) – I&M proposes to correct a typographical error in License Condition 2.C(3). Currently, the condition reads “...with less **that** four reactor coolant loops...” However, the condition should read “...with less **than** four reactor coolant loops...”

to be consistent with Unit 2 License Condition 2.C(3)(j). This typographical error has existed since the Unit 1 license was originally issued.

Unit 2

- Because of the deletion of five license conditions from the Unit 2 OL, the number of pages in the OL has been reduced. As such, I&M proposes to renumber pages 1 through 11 to 1 through 10.

Proposed Administrative TS Changes

Unit 1

- I&M proposes to capitalize the word “purge” in the “*” footnote in TS 3.3.2.1, Table 3.3-3, “Engineered Safety Feature Actuation System Instrumentation” and TS 3.3.3.1, Table 3.3-6, “Radiation Monitoring Instrumentation,” to clarify the meaning of the footnotes. Currently, the footnotes state “This specification only applies during purge.” Terms defined in TS Section 1.0, “Definitions,” should be capitalized so it is clear to the reader that it is a TS-defined term.
- I&M proposes to delete the radiation monitoring instrumentation identification numbers from TS 3.3.2.1, Table 3.3-3, “Engineered Safety Feature Actuation System Instrumentation,” TS 3.3.3.1, Table 3.3-6, “Radiation Monitoring Instrumentation,” and TS 3.3.3.1, Table 4.3-3, “Radiation Monitoring Instrumentation Surveillance Requirements.” The radiation monitoring instruments are currently identified in these tables by both a noun name and their instrument identification number.

I&M installed an Eberline radiation monitoring system to replace various Westinghouse radiation monitors at CNP. This design change to upgrade the radiation monitoring system was performed to address concerns that were identified in I&M’s evaluation of NRC Generic Letter 89-06, “Task Action Plan Item I.D.2 – Safety Parameter Display System – 10 CFR 50.54(f).” The proposed TS change will allow I&M to remove equipment from service and control any future radiation monitoring instrumentation changes under the 10 CFR 50.59 process. This change is also consistent with NUREG-1431, “Standard Technical Specifications, Westinghouse Plants,” Revision 2, dated April 30, 2001.

- I&M proposes to delete the “†” footnote for TS 3.9.12, LCO Action “a,” since it is no longer applicable. This footnote was added via a proposed TS amendment request dated May 28, 1987 (Reference 17) and subsequently approved in License Amendment Nos. 124 and 111, dated May 19, 1989 (Reference 18), to ensure consistency between TS 3.9.7 and TS 3.9.12. The “†” footnote was originally added to TS 3.9.7 to continue to allow the main

load block to be moved over the spent fuel pool while the NRC approved CNP's auxiliary building crane travel load block drop analysis. Upon approval, the "†" footnote was deleted from TS 3.9.7 in License Amendment Nos. 113 and 96, dated December 17, 1987 (Reference 19). Because of overlapping amendments, the "†" footnote was deleted from TS 3.9.7 before the amendment to add the "†" footnote to TS 3.9.12 was approved.

- I&M proposes to add a 31-day frequency to TS surveillance requirements TS 4.7.1.2.c and TS 4.7.1.2.d. A TS amendment request submitted on August 7, 1990 (Reference 20) inadvertently deleted the required 31-day surveillance frequency from TS 4.7.1.2.c and TS 4.7.1.2.d. This administrative error was subsequently issued in License Amendment No. 164, dated April 22, 1992 (Reference 21). As an interim corrective action, I&M maintains an NRC commitment to perform TS surveillance requirements 4.7.1.2.c and d on a 31-day interval until the surveillance frequency is restored (Reference 22).
- I&M proposes to revise several plant position titles and acronyms for CNP's onsite and offsite review committees in TS Sections 6.1.2, 6.2.1.c, 6.2.2.f, 6.2.2.g, Table 6.2-1, 6.3.1, 6.6.1.b, 6.7.1.a, 6.7.1.b, 6.7.1.c, 6.12.2, 6.13.1.b and 6.14.1.b. The following proposed changes reflect CNP's current organizational structure.
 - TS 6.1.2 – replace "Vice President – Nuclear Operations" with "Site Vice President," and "Shift Supervisor" with "Shift Manager"
 - TS 6.2.1.c – replace "Vice President – Nuclear Operations" with "Senior Vice President – Nuclear Operations"
 - TS 6.2.2.f – replace "Shift Supervisor" with "Shift Manager" and delete "Assistant Shift Supervisor"
 - TS 6.2.2.g and 6.3.1 – replace "Operations Superintendent" with "Operations Director"
 - TS Table 6.2-1 – replace "SS" with "SM"
 - TS 6.6.1.b – replace "Senior Vice President – Nuclear Generation" with "Site Vice President"
 - TS 6.6.1.b, 6.7.1.b, 6.13.1.b and 6.14.1.b - replace "PNSRC" with "PORC"
 - TS 6.7.1.a and 6.7.1.c – replace "NSDRC" with "NSRB"
 - TS 6.12.2 – replace "Plant Health Physicist (Plant Radiation Protection Supervisor)" with "Plant Radiation Protection Manager," and "Shift Supervisor" with "Shift Manager"

Unit 2

- I&M proposes to capitalize the word "purge" in the "*" footnote in TS 3.3.2.1, Table 3.3-3, "Engineered Safety Feature Actuation System Instrumentation" and TS 3.3.3.1, Table 3.3-6, "Radiation Monitoring Instrumentation," to clarify the meaning of the footnotes. Currently,

the footnote states "This specification only applies during purge." Terms defined in TS Section 1.0, "Definitions," should be capitalized so it is clear to the reader that it is a TS-defined term.

- I&M proposes to delete the radiation monitoring instrumentation identification numbers from TS 3.3.2.1, Table 3.3-3, "Engineered Safety Feature Actuation System Instrumentation," TS 3.3.3.1, Table 3.3-6, "Radiation Monitoring Instrumentation," and TS 3.3.3.1, Table 4.3-3, "Radiation Monitoring Instrumentation Surveillance Requirements." The radiation monitoring instruments are currently identified in these tables by both a noun name and their instrument identification number.

I&M installed an Eberline radiation monitoring system to replace various Westinghouse radiation monitors at CNP. This design change to upgrade the radiation monitoring system was performed to address concerns that were identified in I&M's evaluation of NRC Generic Letter 89-06, "Task Action Plan Item I.D.2 – Safety Parameter Display System – 10 CFR 50.54(f)." The proposed TS change will allow I&M to remove equipment from service and control any future radiation monitoring instrumentation changes under the 10 CFR 50.59 process. This change is also consistent with NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Revision 2, dated April 30, 2001.

- I&M proposes to revise several incorrect component numbers listed in Unit 2 TS 3.3.2.1, Table 3.3-3. Currently, TS 3.3.2.1, Table 3.3-3 incorrectly identifies Unit 1 components instead of Unit 2 components. References to 4-kV buses "T11A," "T11B," "T11C" and "T11D" will be replaced with "T21A," "T21B," "T21C" and "T21D," respectively. The incorrect references were added to the Unit 2 TS in License Amendment No. 224, dated March 31, 2000 (Reference 23).
- I&M proposes to correct a typographical error in Unit 2 TS 3.4.8, Limiting Condition for Operation (LCO), Action "a." Currently, Action "a" reads "...more than 48 hours during one continuous time interval for exceeding the limit line." However, Action "a" should read "...more than 48 hours during one continuous time interval or exceeding the limit line..." to be consistent with the Unit 1 TS. This typographical error was issued with License Amendment No. 129, dated August 2, 1990 (Reference 24).
- I&M proposes to delete the "†" footnote for TS surveillance requirement 4.8.1.1.2.e, since it is no longer applicable. The "†" footnote states that "The provisions of Technical Specification 4.0.8 are applicable." In License Amendment No. 224, dated March 31, 2000 (Reference 25), TS 4.0.8 was deleted, along with several TS footnotes that referenced TS 4.0.8. However, the deletion of the "†" footnote from TS 4.8.1.1.2.e was missed.

- I&M proposes to delete the “+” footnote for TS 3.9.12, LCO Action “a,” since it is no longer applicable. This footnote was added via a proposed TS amendment request, dated May 28, 1987 (Reference 17), and subsequently approved in License Amendment Nos. 124 and 111 dated May 19, 1989 (Reference 18), to ensure consistency between TS 3.9.7 and TS 3.9.12. The “+” footnote was originally added to TS 3.9.7 to continue to allow the main load block to be moved over the spent fuel pool while the NRC approved CNP’s auxiliary building crane travel load block drop analysis. Upon approval, the “+” footnote was deleted from TS 3.9.7 in Amendment Nos. 113 and 96, dated December 17, 1987 (Reference 19). Because of overlapping amendments, the “+” footnote was deleted from TS 3.9.7 before the amendment to add the “+” footnote to TS 3.9.12 was approved.
- I&M proposes to add a 31-day frequency to TS surveillance requirements TS 4.7.1.2.c and TS 4.7.1.2.d. A TS amendment request submitted on August 7, 1990 (Reference 20) inadvertently deleted the required 31-day surveillance frequency for TS 4.7.1.2.c and TS 4.7.1.2.d. This administrative error was subsequently issued in License Amendment No. 149, dated April 22, 1992 (Reference 21). As an interim corrective action, I&M maintains an NRC commitment to perform TS surveillance requirements 4.7.1.2.c and d on a 31-day interval until the surveillance frequency is restored (Reference 22).
- I&M proposes to revise several plant position titles and acronyms for CNP’s onsite and offsite review committees in TS Sections 6.1.2, 6.2.1.c, 6.2.2.f, 6.2.2.g, Table 6.2-1, 6.3.1, 6.6.1.b, 6.7.1.a, 6.7.1.b, 6.7.1.c, 6.12.2, 6.13.1.b and 6.14.1.b. The following proposed changes reflect CNP’s current organizational structure.
 - TS 6.1.2 – replace “Vice President – Nuclear Operations” with “Site Vice President,” and “Shift Supervisor” with “Shift Manager”
 - TS 6.2.1.c and 6.7.1.c – replace “Vice President – Nuclear Operations” with “Senior Vice President – Nuclear Operations”
 - TS 6.2.2.f – replace “Shift Supervisor” with “Shift Manager,” and delete “Assistant Shift Supervisor”
 - TS 6.2.2.g and 6.3.1 – replace “Operations Superintendent” with “Operations Director”
 - TS Table 6.2-1 – replace “SS” with “SM”
 - TS 6.6.1.b – replace “Senior Vice President – Nuclear Generation” with “Site Vice President”
 - TS 6.6.1.b, 6.7.1.b, 6.13.1.b and 6.14.1.b - replace “PNSRC” with “PORC”
 - TS 6.6.1.b, 6.7.1.a and 6.7.1.c – replace “NSDRC” with “NSRB”
 - TS 6.7.1.c – replace “Senior Vice President – Nuclear Generation” with “Senior Vice President – Nuclear Operations”

- TS 6.12.2 – replace “Plant Health Physicist (Plant Radiation Protection Supervisor)” with “Plant Radiation Protection Manager,” and “Shift Supervisor” with “Shift Manager”
- I&M proposes to add a reference “e” to TS 6.9.1.9.2. which states “WCAP-12610-P-A, “VANTAGE+ Fuel Assembly Reference Core Report.” The new reference “e” reflects Unit 2’s upgrade to VANTAGE+ fuel for Cycle 17. This upgrade to the VANTAGE+ fuel was previously approved in License Amendment Nos. 148 and 134, dated August 27, 1990 (Reference 25).

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

I&M has evaluated whether or not a significant hazards consideration is involved with the proposed change by focusing on the three standards set forth in 10 CFR 50.92, “Issuance of Amendment,” as discussed below:

1. Does the proposed change involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated?

Response: No

The proposed deletion of obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLS is administrative in nature. The deletion of these license conditions has no impact on plant operations since these requirements are no longer applicable. The proposed TS changes, the renumbering of the Unit 2 OL pages, and the correction of a typographical error in the Unit 1 OL are also administrative in nature and do not impact CNP’s current design and licensing basis. Since the proposed changes are administrative and do not impact plant operations or design, the changes do not involve any significant increase in the probability or the consequences of any accident or malfunction of equipment important to safety previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed deletion of obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLS is administrative in nature. The proposed TS changes, the

renumbering of the Unit 2 OL pages, and the correction of a typographical error in the Unit 1 OL are also administrative in nature. These proposed changes do not impact plant operations or plant equipment in any manner or involve a physical alteration to the plant, nor a change in the methods used to respond to plant transients that has not been previously analyzed. No new or different equipment is being installed and no installed equipment is being removed or operated in a different manner. Consequently, no new failure modes are introduced and the proposed administrative changes to the Unit 1 and Unit 2 OL do not create the possibility of a new or different kind of accident or malfunction of equipment important to safety from any previously evaluated. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed deletion of obsolete and/or expired license conditions from the Unit 1 and Unit 2 OLs does not affect alarm or trip setpoints. The proposed TS changes, the renumbering of the Unit 2 OL pages, and the correction of a typographical error in the Unit 1 OL are administrative in nature and do not impact the condition, design, or performance of any plant structure, system or component. Thus, the results of the accident analyses will not be affected as any input assumptions are protected. The format changes improve readability and appearance and do not alter any requirements. Thus, the proposed changes do not involve a significant reduction in a margin of safety.

In summary, based upon the above evaluation, I&M has concluded that the proposed changes involve no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

5.2.1 Regulations

Information Notice 97-43, "License Condition Compliance" -

One of the many actions taken by the NRC in response to the discovery that some licensees were failing to operate their facilities as described in the plant final safety analysis report (FSAR), was to conduct a brief review of licensee

compliance with the specific conditions listed in the plant operating license. The review found that some licensees were routinely updating the plant license by deleting conditions that have been complied with and by modifying other conditions, as necessary.

Licensees should reexamine their license conditions to ensure compliance with the specific wording of each license condition. If the wording does not adequately reflect the original intent of the condition, the licensee should submit a license amendment to change the wording of the condition to adequately reflect the actions intended, in the licensee's opinion, by that license condition. (Reference 26)

5.2.2 Design Bases

The proposed OL and TS changes are administrative in nature and do not impact CNP's current design basis.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATIONS

I&M has evaluated this license amendment request against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. I&M has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared concerning the proposed amendment.

7.0 REFERENCES

1. Letter from W. M. Dean (NRC) to E. E. Fitzpatrick (I&M), "Donald C. Cook Nuclear Plant, Units 1 and 2 – Amendment Nos. 169 and 152 to Facility Operating License Nos. DPR-58 and DPR-74 (TAC Nos. M80615 and M80616)," dated January 14, 1993
2. Letter from J. F. Stang (NRC) to R. P. Powers (I&M), "Donald C. Cook Nuclear Plant, Unit 1 – Issuance of Amendment Re: Steam Generator Surveillance Interval Extension (TAC No. MA3562)," dated December 30, 1998
3. Letter from J. F. Stang (NRC) to A. C. Bakken (I&M), "Donald C. Cook Nuclear Plant, Unit 1 – Issuance of Amendment Re: Ice Condenser Lower Inlet Doors (TAC No. MB3989)," dated February 14, 2002
4. CNP Job Order R0210872, "1-OME-ICE-COND, As-Found and As-Left Lower Inlet Door Surveillance," dated May 30, 2002
5. Letter from J. F. Stang (NRC) to R. P. Powers (I&M), "Donald C. Cook Nuclear Plant, Unit 2 – Issuance of Amendment 232 (TAC No. MB 0156)," dated January 30, 2001
6. CNP Job Order 00326044, "Perform Eddy Current and Tube Repair," dated February 6, 2002
7. Letter from J. F. Stang (NRC) to R. P. Powers (I&M), "Donald C. Cook Nuclear Plant, Unit 2 – Issuance of Amendment 234 (TAC No. MB1082)," dated June 11, 2001
8. CNP Job Order R0097446, "Perform 2-BATT-AB 18 Month Surveillance," dated September 28, 2001
9. CNP Job Order R0099355, "Perform 2-BATT-CD 18 Month Surveillance," dated September 14, 2001
10. CNP Job Order R0096967, "Perform 2-BATT-N 18 Month Surveillance," dated September 16, 2001
11. CNP Job Order R0097255, "2-OME-150-AB, Perform 18 Month Diesel Surveillance," dated December 13, 2001
12. CNP Job Order R0098470, "2-OME-150-CD, Perform 18 Month Diesel Surveillance," dated September 17, 2001
13. CNP Job Order R0215985, "AB Diesel Generator Fast Start," dated July 28, 2001
14. CNP Job Order R0215475, "CD Diesel Generator Fast Start," dated September 16, 2001
15. Letter from J. F. Stang (NRC) to M. P. Alexich (I&M), "Amendment No. 100 to Facility Operating License No. DPR-74: Steam Generator Repair Program (TAC Nos. 63997, 65113 and 65114)," dated March 8, 1988
16. Letter from R. P. Powers (I&M) to Document Control Desk (NRC), "License Amendment Request – Steam Generator Tube Surveillance Interval Extension," submittal C0900-04, dated September 30, 2000
17. Letter from M. P. Alexich (I&M) to T. E. Murley (NRC), "ESF and Storage Pool Ventilation System Technical Specification Changes," submittal AEP NRC 0959, dated May 28, 1987
18. Letter from J. F. Stang (NRC) to M. P. Alexich (I&M), "Amendment Nos. 124 and 111 to Facility Operating License Nos. DPR-58 and DPR-74: Technical Specification Changes for the Engineered Safety Features and Storage Pool Ventilation System (TAC Nos. 65559 and 65560)," dated May 19, 1989

19. Letter from D. L. Wigginton (NRC) to J. Dolan (I&M), "Amendment No. 113 to Operating License DPR-58 and Amendment No. 96 to Operating License DPR-74," dated December 17, 1987
20. Letter from M. P. Alexich (I&M) to T. E. Murley (NRC), "Changes to Make Technical Specifications more Consistent with ASME Code Requirements," submittal AEP:NRC:0433N, dated August 7, 1990
21. Letter from J. F. Stang (NRC) to E. E. Fitzpatrick (I&M), "Donald C. Cook Nuclear Plant, Units 1 and 2 – Amendment Nos. 164 and 149 Facility Operating License Nos. DPR-58 and 74: Changes to Make Technical Specifications more Consistent with ASME Code Requirements (TAC Nos. M77478)," dated April 22, 1992
22. NRC commitment No. 7874
23. Letter from C. M. Craig (NRC) to R. P. Powers (I&M), "Issuance of Amendments 243 and 224 Re: Administrative Changes (TAC Nos. MA4922 and MA4923)," dated March 31, 2000
24. Letter from T. G. Colburn (NRC) to M. P. Alexich (I&M), "Amendment Nos. 142 and 129 to Facility Operating License Nos. DPR-58 and DPR-74 (TAC Nos. 74198 and 74199)," dated August 2, 1990
25. Letter from T. G. Colburn (NRC) to M. P. Alexich (I&M), "Amendment Nos. 148 and 134 to Facility Operating License Nos. DPR-58 and DPR-74 (TAC Nos. 75395 and 76816)," dated August 27, 1990
26. NRC Information Notice 97-43, "License Condition Compliance"

TECHNICAL SPECIFICATIONS PAGES
MARKED TO SHOW PROPOSED CHANGES

REVISED PAGES
UNIT 1

3/4 3-19

3/4 3-36

3/4 3-36a

3/4 3-38

3/4 3-38a

3/4 7-6

3/4 9-13

6-1

6-2

6-3

6-4

6-5

6-14

6-15

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
3. CONTAINMENT ISOLATION					
a. Phase "A" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) From Safety Injection Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
b. Phase "B" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
3) Containment Pressure -- High-High	4	2	3	1, 2, 3	16
c. Purge and Exhaust Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Containment Radioactivity-* High Train A (VRS-1101, ERS-1301, ERS-1305)	3	1	2	1, 2, 3, 4	17
3) Containment Radioactivity-* High Train B (VRS-1201, ERS-1401, ERS-1405)	3	1	2	1, 2, 3, 4	17

*This specification only applies during purge PURGE.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-6
 RADIATION MONITORING INSTRUMENTATION
 (OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment ⁺ (VRS-1101/1201)	1	N/A	≤ 54 mR/hr	21
ii. Containment High Range (VRA-1310/1410)	2	≤ 10R/hr	N/A	22A
B. Process Monitors				
i. Particulate Channel ⁺ (ERS-1301/1401)	1	N/A	≤ 2.52 μCi	20
ii. Noble Gas Channel ⁺ (ERS-1305/1405)	1	N/A	≤ 4.4x10 ⁻³ μCi/cc	20
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS-1505)	----- (see the ODCM) -----			
b. Mid Range (VRS-1507)	1	N/A	N/A	22B
c. High Range (VRS-1509)	1	N/A	N/A	22B
ii. Steam Generator PORV				
a. MRA-1601 (Loop 1)	1	N/A	N/A	22B
b. MRA-1602 (Loop 4)	1	N/A	N/A	22B
c. MRA-1701 (Loop 2)	1	N/A	N/A	22B
d. MRA-1702 (Loop 3)	1	N/A	N/A	22B
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA-1805)	----- (see the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA-1905)	----- (see the ODCM) -----			
b. Mid Range (SRA-1907)	1	N/A	N/A	22B
c. High Range (SRA-1909)	1	N/A	N/A	22B

3/4 **LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**
 3/4.3 **INSTRUMENTATION**

TABLE 3.3-6 (Continued)
RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
2. Mode 6				
A. Train A	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel (VRS-1101)		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺ (ERS-1301)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺ (ERS-1305)		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
B. Train B	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel (VRS-1201)		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺ (ERS-1401)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺ (ERS-1405)		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
3. Mode ***				
A. Spent Fuel Storage (RRC-330)	1	≤ 15 mR/hr	≤ 15 mR/hr	21

⁺ This specification only applies during purge PURGE

^{***} With fuel in storage pool or building

3/4 **LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**
 3/4.3 **INSTRUMENTATION**

TABLE 4.3-3
RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment (VRS-1101/1201)	S*	R	Q	1, 2, 3, 4
ii. Containment High Range (VRA-1310/1410)	S	R	Q	1, 2, 3, 4
B. Process Monitors				
i. Particulate Channel (ERS-1301/1401)	S*	R	Q	1, 2, 3, 4
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS-1505)	----- (See the ODCM) -----			
b. Mid Range (VRS-1507)	S	R	N/A	1, 2, 3, 4
c. High Range (VRS-1509)	S*	R	N/A	1, 2, 3, 4
ii. Steam Generator PORV				
a. MRA-1601 (Loop 1)	S*	R	Q	1, 2, 3, 4
b. MRA-1602 (Loop 4)	S*	R	Q	1, 2, 3, 4
c. MRA-1701 (Loop 2)	S*	R	Q	1, 2, 3, 4
d. MRA-1702 (Loop 3)	S*	R	Q	1, 2, 3, 4
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA-1805)	----- (See the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA-1905)	----- (See the ODCM) -----			
b. Mid Range (SRA-1907)	S	R	Q	1, 2, 3, 4
c. High Range (SRA-1909)	S*	R	N/A	1, 2, 3, 4

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 4.3-3 (Continued)
 RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
2. Mode 6				6
A. Train A				6
i. Containment Area Radiation Channel (VRS-1101)	S*	R	Q	
ii. Particulate Channel (ERS-1301)	S*	R	Q	
iii. Noble Gas Channel (ERS-1305)	S*	R	Q	
B. Train B				6
i. Containment Area Radiation Channel (VRS-1201)	S*	R	Q	
ii. Particulate Channel (ERS-1401)	S*	R	Q	
iii. Noble Gas Channel (ERS-1405)	S*	R	Q	
3. Mode **				**
A. Spent Fuel Storage (RRC-330)	S	R	Q	**

* To include SOURCE CHECK per T/S Section 1.27
 ** With fuel in storage pool or building

SURVEILLANCE REQUIREMENTS (Continued)

- 4.7.1.2 Each auxiliary feedwater pump shall be demonstrated OPERABLE when tested pursuant to Specification 4.0.5 by:
- a. Verifying that each motor driven auxiliary feedwater pump's developed head at the test flow point is greater than or equal to the required developed head.
 - b. Verifying that the turbine driven auxiliary feedwater pump's developed head at the test flow point is greater than or equal to the required developed head. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3.
 - c. Verifying at least once per 31 days that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.
 - d. Verifying at least once per 31 days that each automatic valve in the flow path is in the correct position whenever the auxiliary feedwater system is placed in automatic control or when above 10% RATED THERMAL POWER. This requirement is not applicable for those portions of the auxiliary feedwater system being used intermittently to maintain steam generator water level.
 - e. Verifying at least once per 18 months during shutdown that each automatic valve in the flow path actuates to its correct position upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - f. Verifying at least once per 18 months during shutdown that each auxiliary feedwater pump starts as designed automatically upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - g. Verifying at least once per 18 months during shutdown that the unit cross-tie valves can cycle full travel. Following cycling, the valves will be verified to be in their closed positions.

STORAGE POOL VENTILATION SYSTEM**

LIMITING CONDITION FOR OPERATION

3.9.12 The spent fuel storage pool exhaust ventilation system shall be OPERABLE.

APPLICABILITY: Whenever irradiated fuel is in the storage pool.

ACTION:

- a. With no fuel storage pool exhaust ventilation system OPERABLE, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool ‡ until at least one spent fuel storage pool exhaust ventilation system is restored to OPERABLE status.*
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required fuel storage pool ventilation system shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:
 1. Deleted
 2. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1980 while operating the exhaust ventilation system at a flow rate of 30,000 cfm $\pm 10\%$.

* The crane bay roll-up door and the south door of the auxiliary building crane bay may be opened under administrative control during movement of fuel within the storage pool or crane operation with loads over the storage pool.

** Shared system with D.C. COOK - UNIT 2.

‡ ~~This does not include the main load block. For purposes of this specification, a de-energized main load block need not be considered a load.~~

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.1 The Plant Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.
- 6.1.2 The Shift Supervisor ~~Manager~~ (or during his absence from the control room complex, a designated individual) shall be responsible for the control room command function. A management directive to this effect signed by the ~~Vice President - Nuclear Operations~~ Site Vice President shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

ONSITE AND OFFSITE ORGANIZATIONS

- 6.2.1 Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.
- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management level through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts. These organizational charts will be documented in the UFSAR and updated in accordance with 10 CFR 50.71(e).
 - b. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
 - c. The ~~Senior~~ Vice President - Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
 - d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.0 ADMINISTRATIVE CONTROLS

6.2 ORGANIZATION (Continued)

FACILITY STAFF

6.2.2 The Facility organization shall be subject to the following:

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in Mode 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room.
- c. An individual* qualified in radiation protection procedures shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be directly supervised by a licensed Senior Operator trained or qualified in refueling and CORE ALTERATIONS (SO-CA) who has no other concurrent responsibilities during this operation.
- e. The amount of overtime worked by plant staff members performing safety-related functions must be limited in accordance with NRC Policy Statement on working hours (Generic Letter 82-12).
- f. The Shift Supervisor ~~Manager~~, ~~Assistant Shift Supervisor~~, and Unit Supervisor shall hold a Senior Operator License.
- g. The Operations Superintendent ~~Director~~ must hold or have held a Senior Operator License at Cook Nuclear Plant or a similar reactor, or have been certified for equivalent senior operator knowledge. If the Operations Superintendent ~~Director~~ does not hold a Senior Operator License, then a line (v. staff) operations middle manager shall hold a Senior Operator License for the purposes of directing operational activities.

* The unexpected absence, for a period of time not to exceed 2 hours, of the on-site individual qualified in radiation protection procedures is permitted provided immediate action is taken to fill the required position.

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION*

LICENSE CATEGORY	APPLICABLE MODES	
	1, 2, 3, & 4	5 & 6
SS SM	1**	1**#
SOL	1	None
OL	2	1
Non-Licensed	2	1
Shift Technical Adv.	1**	None

Does not include the licensed Senior Operator - CA supervising CORE ALTERATIONS.

* Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1.

** Shared with Cook Nuclear Plant Unit 2.

6.0 ADMINISTRATIVE CONTROLS

6.3 FACILITY STAFF QUALIFICATIONS

- 6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Plant Radiation Protection Manager, who shall meet or exceed qualifications of Regulatory Guide 1.8, September 1975, (2) the Shift Technical Advisor, who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents and, (3) the Operations Superintendent Director, who must be qualified as specified in Section 6.2.2.g.

6.4 TRAINING

- 6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and 10 CFR Part 55.

6.5 DELETED

6.0 ADMINISTRATIVE CONTROLS

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73.
- b. Each REPORTABLE EVENT shall be reviewed by the PNSRC PORC, and the results of this review shall be submitted to the NSDRG NSRB and the Senior Vice President — Nuclear Generation Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Chairman of the NSDRG NSRB shall be notified within 24 hours.
- b. A Safety Limit Violation Report shall be prepared. This report shall be reviewed by the PNSRC PORC. This report shall describe (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence.
- c. The Safety Limit Violation Report shall be submitted to the Commission, the Chairman of the NSDRG NSRB and the Senior Vice President — Nuclear Generation Operations within 14 days of the violation.
- d. Operation of the unit shall not be resumed until authorized by the Commission.

6.0 ADMINISTRATIVE CONTROLS

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of 10 CFR 20.1601(a) and (b), each high radiation area in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 100 mrem but less than or equal to 1000 mrem in 1 hour at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the radiation level at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates is greater than 1000 mrem in 1 hour. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Supervisor Manager on duty and/or the ~~Plant Health Physicist~~ (Plant Radiation Protection Supervisor Manager). Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

* Health Physics (Radiation Protection) personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.0 ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the PNSRC PORC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the level of radioactive effluent control pursuant to 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the PNSRC PORC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

Attachment 1B to AEP:NRC:2090

TECHNICAL SPECIFICATIONS PAGES
MARKED TO SHOW PROPOSED CHANGES

REVISED PAGES
UNIT 2

3/4 3-17
3/4 3-19
3/4 3-20
3/4 3-35
3/4 3-35a
3/4 3-37
3/4 3-37a
3/4 4-20
3/4 7-6
3/4 8-4
3/4 9-12
6-1
6-2
6-3
6-4
6-5
6-12
6-14
6-15

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
3. CONTAINMENT ISOLATION					
a. Phase "A" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) From Safety Injection Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
b. Phase "B" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
3) Containment Pressure -- High-High	4	2	3	1, 2, 3	16
c. Purge and Exhaust Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Containment Radioactivity-* High Train A (VRS-2101, ERS-2301, ERS-2305)	3	1	2	1, 2, 3, 4	17
3) Containment Radioactivity-* High Train B (VRS-2201, ERS-2401, ERS-2405)	3	1	2	1, 2, 3, 4	17

*This specification only applies during purge PURGE.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
e. Steam Line Pressure-Low					
Four Loops Operating	1 pressure/loop	2 pressures any loops	1 pressure any 3 loops	1, 2, 3 [#]	14*
Three Loops Operating	1 pressure/operating loop	1 ^{##} pressure in any operating loop	1 pressure in any 2 operating loops	3 [#]	15
5. TURBINE TRIP & FEEDWATER ISOLATION					
a. Steam Generator Water Level -- High-High	3/loop	2/loop in any operating loop	2/loop in each operating loop	1, 2, 3	14*
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS					
a. Steam Generator Water Level -- Low-Low	3/Stm. Gen.	2/Stm. Gen. any Stm. Gen.	2/Stm. Gen.	1, 2, 3	14*
b. 4 kV Bus Loss of Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3	14*
Pump Start		2/bus (T1121A - Train B; T1121D - Train A)			
Valve Actuation (Both trains)		2/bus on (T1121A & T1121B or T1121C & T1121D)	2	1, 2, 3	18*
c. Safety Injection	2	1	2	1, 2	18*
d. Loss of Main Feedwater Pumps	2	2			

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
7. TURBINE DRIVEN AUXILIARY FEEDWATER PUMPS					
a. Steam Generator Water Level – Low-Low	3/Stm. Gen.	2/Stm. Gen. any 2 Stm. Gen.	2/Stm. Gen.	1, 2, 3	14*
b. Reactor Coolant Pump Bus Undervoltage	4-1/Bus	2	3	1, 2, 3	19*
8. LOSS OF POWER					
a. 4 kV Bus Loss of Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3, 4	14*
b. 4 kV Bus Degraded Voltage	3/Bus (T4121A - Train B) (T4121D - Train A)	2/Bus (T4121A-Train B) (T4121D-Train A)	2/Bus (T4121A-Train B) (T4121D-Train A)	1, 2, 3, 4	14*
9. MANUAL					
a. Safety Injection (ECCS) Feedwater Isolation Reactor Trip (SI) Containment Isolation-Phase "A" Containment Purge and Exhaust Isolation Auxiliary Feedwater Pumps Essential Service Water System	2/train	1/train	2/train	1, 2, 3, 4	18
b. Containment Spray Containment Isolation - Phase "B" Containment Purge and Exhaust Isolation	1/train	1/train	1/train	1, 2, 3, 4	18
c. Containment Isolation - Phase "A" Containment Purge and Exhaust Isolation	1/train	1/train	1/train	1, 2, 3, 4	18
d. Steam Line Isolation	2/steam line (1 per train)	2/steam line (1 per train)	2/operating steam line (1 per train)	1, 2, 3	20

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment ⁺ (VRS 2101/2201)	1	N/A	≤ 54 mR/hr	21
ii. Containment High Range (VRA 2310/2410)	2	≤ 10R/hr	N/A	22A
B. Process Monitors				
i. Particulate Channel ⁺ (ERS 2301/2401)	1	N/A	≤ 2.52 μCi	20
ii. Noble Gas Channel ⁺ (ERS 2305/2405)	1	N/A	≤ 4.4x10 ⁻³ μCi/cc	20
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS 2505)	----- (see the ODCM) -----			
b. Mid Range (VRS 2507)	1	N/A	N/A	22B
c. High Range (VRS 2509)	1	N/A	N/A	22B
ii. Steam Generator PORV				
a. MRA 2601 (Loop 1)	1	N/A	N/A	22B
b. MRA 2602 (Loop 4)	1	N/A	N/A	22B
c. MRA 2701 (Loop 2)	1	N/A	N/A	22B
d. MRA 2702 (Loop 3)	1	N/A	N/A	22B
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA 2805)	----- (see the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA 2905)	----- (see the ODCM) -----			
b. Mid Range (SRA 2907)	1	N/A	N/A	22B
c. High Range (SRA 2909)	1	N/A	N/A	22B

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-6 (Continued)

RADIATION MONITORING INSTRUMENTATION
 (OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
2. Mode 6				
A. Train A	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel (VRS-2101)		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺ (ERS-2301)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺ (ERS-2305)		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
B. Train B	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel (VRS-2201)		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺ (ERS-2401)		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺ (ERS-2405)		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
3. Mode ***				
A. Spent Fuel Storage (RRC-330)	1	≤ 15 mR/hr	≤ 15 mR/hr	21

*** With fuel in storage pool or building

+ This specification only applies during purge PURGE

3/4 **LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**
 3/4.3 **INSTRUMENTATION**

TABLE 4.3-3
RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment (VRS 2101/2201)	S*	R	Q	1, 2, 3, 4
ii. Containment High Range (VRA 2310/2410)	S	R	Q	1, 2, 3, 4
B. Process Monitors				
i. Particulate Channel (ERS 2301/2401)	S*	R	Q	1, 2, 3, 4
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range (VRS 2505)	----- (see the ODCM) -----			
b. Mid Range (VRS 2507)	S	R	N/A	1, 2, 3, 4
c. High Range (VRS 2509)	S*	R	N/A	1, 2, 3, 4
ii. Steam Generator PORV				
a. MRA-2601 (Loop 1)	S*	R	Q	1, 2, 3, 4
b. MRA-2602 (Loop 4)	S*	R	Q	1, 2, 3, 4
c. MRA-2701 (Loop 2)	S*	R	Q	1, 2, 3, 4
d. MRA-2702 (Loop 3)	S*	R	Q	1, 2, 3, 4
iii. Gland Steam Condenser Vent Monitor				
a. Low Range (SRA 2805)	----- (see the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range (SRA 2905)	----- (see the ODCM) -----			
b. Mid Range (SRA 2907)	S	R	Q	1, 2, 3, 4
c. High Range (SRA 2909)	S*	R	N/A	1, 2, 3, 4

TABLE 4.3-3 (Continued)

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
2. Mode 6				
A. Train A				6
i. Containment Area Radiation Channel (VRS 2101)	S*	R	Q	
ii. Particulate Channel (ERS 2301)	S*	R	Q	
iii. Noble Gas Channel (ERS 2305)	S*	R	Q	
B. Train B				6
i. Containment Area Radiation Channel (VRS 2201)	S*	R	Q	
ii. Particulate Channel (ERS 2401)	S*	R	Q	
iii. Noble Gas Channel (ERS 2405)	S*	R	Q	
3. Mode **				
A. Spent Fuel Storage (RRC 330)	S	R	Q	**

* To include SOURCE CHECK per T/S Section 1.27

** With fuel in storage pool or building

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
3/4.4 REACTOR COOLANT SYSTEM

SPECIFIC ACTIVITY

LIMITING CONDITION FOR OPERATION

3.4.8 The specific activity of the primary coolant shall be limited to:

- a. Less than or equal to 1 microCurie per gram DOSE EQUIVALENT I-131, and
- b. Less than or equal to $100/\bar{E}$ microCuries per gram of gross radioactivity.

APPLICABILITY: MODES 1, 2, 3, 4 and 5

ACTION:

MODES 1, 2 and 3*

- a. With the specific activity of the reactor coolant greater than 1 microCurie per gram DOSE EQUIVALENT I-131 for ~~for~~ ^{or} more than 48 hours during one continuous time interval for exceeding the limit line shown on Figure 3.4-1, be in HOT STANDBY with T_{avg} less than 500°F within 6 hours.
- b. With the specific activity of the reactor coolant greater than $100/\bar{E}$ microCuries per gram, be in HOT STANDBY with T_{avg} less than 500°F within 6 hours.

MODES 1, 2, 3, 4 and 5

- a. With the specific activity of the reactor coolant greater than 1 microCurie per gram DOSE EQUIVALENT I-131 or greater than $100/\bar{E}$ microCuries per gram, perform the sampling and analysis requirements of item 4a of Table 4.4-4 until the specific activity of the reactor coolant is restored to within its limits.

SURVEILLANCE REQUIREMENTS

4.4.8 The specific activity of the reactor coolant shall be determined to be within the limits by performance of the sampling and analysis program of Table 4.4-4.

* With T_{avg} greater than or equal to 500°F.

SURVEILLANCE REQUIREMENTS

- 4.7.1.2 Each auxiliary feedwater pump shall be demonstrated OPERABLE when tested pursuant to Specification 4.0.5 by:
- a. Verifying that each motor driven auxiliary feed pump's developed head at the test flow point is greater than or equal to the required developed head.
 - b. Verifying that the turbine driven auxiliary feedwater pump's developed head at the test flow point is greater than or equal to the required developed head. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3.
 - c. Verifying at least once per 31 days that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.
 - d. Verifying at least once per 31 days that each automatic valve in the flow path is in the correct position whenever the auxiliary feedwater system is placed in automatic control or when above 10% RATED THERMAL POWER. This requirement is not applicable for those portions of the auxiliary feedwater system being used intermittently to maintain steam generator level.
 - e. Verifying at least once per 18 months during shutdown that each automatic valve in the flow path actuates to its correct position upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - f. Verifying at least once per 18 months during shutdown that each auxiliary feedwater pump starts as designed automatically upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - g. Verifying at least once per 18 months during shutdown that the unit cross-tie valves can cycle full travel. Following cycling, the valves will be verified to be in their closed positions.

SURVEILLANCE REQUIREMENTS (Continued)

- a) A kinematic viscosity of greater than or equal to 1.9 centistokes but less than or equal to 4.1 centistokes at 40°C (alternatively, Saybolt viscosity, SUS at 100°F of greater than or equal to 32.6 but less than or equal to 40.1), if gravity was not determined by comparison with supplier's certification.
- b) A flash point equal to or greater than 125°F.
- 2) By verifying, in accordance with the test specified in ASTM D1298-80 and prior to adding the new fuel to the storage tanks, that the sample has either an API gravity of greater than or equal to 30 degrees but less than or equal to 40 degrees at 60°F or an absolute specific gravity at 60/60°F of greater than or equal to 0.82 but less than or equal to 0.88, or an API gravity of within 0.3 degrees at 60°F when compared to the supplier's certificate or a specific gravity of within 0.0016 at 60/60°F when compared to the supplier's certificate.
- 3) By verifying, in accordance with the test specified in ASTM D4176-82 and prior to adding new fuel to the storage tanks, that the sample has a clear and bright appearance with proper color.
- 4) By verifying within 31 days of obtaining the sample that the other properties specified in Table 1 of ASTM D975-81 are within the appropriate limits when tested in accordance with ASTM D975-81 except that the analysis for sulfur may be performed in accordance with ASTM D2622-82.
- d. At least once per 31 days by obtaining a sample of fuel oil from the storage tanks in accordance with ASTM D2276-83, and verifying that total particulate contamination is less than 10 mg/liter when tested in accordance with ASTM D2276-83, Method A*.
- e. At least once per 18 months, during shutdown, by:
 1. Subjecting the diesel engine to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service,

* The actions to be taken should any of the properties be found outside of the specified limits are defined in the Bases.

*—The provisions of Technical Specification 4.0.8 are applicable.—

STORAGE POOL VENTILATION SYSTEM**

LIMITING CONDITION FOR OPERATION

3.9.12 The spent fuel storage pool exhaust ventilation system shall be OPERABLE.

APPLICABILITY: Whenever irradiated fuel is in the storage pool.

ACTION:

- a. With no fuel storage pool exhaust ventilation system OPERABLE, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool⁺ until at least one spent fuel storage pool exhaust ventilation system is restored to OPERABLE status.*
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required fuel storage pool ventilation system shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:
 1. Deleted.
 2. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1980 while operating the exhaust ventilation system at a flow rate of 30,000 cfm $\pm 10\%$.

* The crane bay roll-up door and the south door of the auxiliary building crane bay may be opened under administrative control during movement of fuel within the storage pool or crane operation with loads over the storage pool.

** Shared system with D. C. COOK - UNIT 1.

~~+ This does not include the main load block. For purposes of this specification, a de-energized main load block need not be considered a load.~~

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.1 The Plant Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.
- 6.1.2 The Shift Supervisor ~~Manager~~ (or during his absence from the control room complex, a designated individual) shall be responsible for the control room command function. A management directive to this effect signed by the ~~Vice President - Nuclear Operations~~ Site Vice President shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

ONSITE AND OFFSITE ORGANIZATIONS

- 6.2.1 Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.
- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management level through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts. These organizational charts will be documented in the UFSAR and updated in accordance with 10 CFR 50.71(e).
 - b. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
 - c. The ~~Senior~~ Vice President - Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
 - d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.0 ADMINISTRATIVE CONTROLS

6.2 ORGANIZATION (Continued)

FACILITY STAFF

6.2.2 The Facility organization shall be subject to the following:

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in Mode 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room.
- c. An individual* qualified in radiation protection procedures shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be directly supervised by a licensed Senior Operator trained or qualified in refueling and CORE ALTERATIONS (SO-CA) who has no other concurrent responsibilities during this operation.
- e. The amount of overtime worked by plant staff members performing safety-related functions must be limited in accordance with NRC Policy Statement on working hours (Generic Letter 82-12).
- f. The Shift Supervisor ~~Manager~~, ~~Assistant Shift Supervisor~~, and Unit Supervisor shall hold a Senior Operator License.
- g. The Operations Superintendent ~~Director~~ must hold or have held a Senior Operator License at Cook Nuclear Plant or a similar reactor, or have been certified for equivalent senior operator knowledge. If the Operations Superintendent ~~Director~~ does not hold a Senior Operator License, then a line (v. staff) operations middle manager shall hold a Senior Operator License for the purposes of directing operational activities.

* The unexpected absense, for a period of time not to exceed 2 hours, of the on-site individual qualified in radiation protection procedures is permitted provided immediate action is taken to fill the required position.

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION*

LICENSE CATEGORY	APPLICABLE MODES	
	1, 2, 3 & 4	5 & 6
SS <u>SM</u>	1**	1**
SOL	1	None
OL	2	1
Non-Licensed	2	1
Shift Technical Adv.	1**	None

Does not include the licensed Senior Operator - CA supervising CORE ALTERATIONS.

* Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1.

** Shared with Cook Nuclear Plant Unit 1

6.0 ADMINISTRATIVE CONTROLS

6.3 FACILITY STAFF QUALIFICATIONS

- 6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Plant Radiation Protection Manager, who shall meet or exceed qualifications of Regulatory Guide 1.8, September 1975, (2) the Shift Technical Advisor, who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents and, (3) the Operations Superintendent Director, who must be qualified as specified in Section 6.2.2.g.

6.4 TRAINING

- 6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and 10 CFR Part 55.

6.5 DELETED

6.0 ADMINISTRATIVE CONTROLS

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73.
- b. Each REPORTABLE EVENT shall be reviewed by the ~~PNSRC~~ PORC, and the results of this review shall be submitted to the ~~NSDRC~~ NSRB and the ~~Senior Vice President — Nuclear Generation~~ Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Chairman of the ~~NSDRC~~ NSRB shall be notified within 24 hours.
- b. A Safety Limit Violation Report shall be prepared. This report shall be reviewed by the ~~PNSRC~~ PORC. The report shall describe (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence.
- c. The Safety Limit Violation Report shall be submitted to the Commission, the Chairman of the ~~NSDRC~~ NSRB and the Senior Vice President - Nuclear Generation Operations within 14 days of the violation.
- d. Operation of the unit shall not be resumed until authorized by the Commission.

6.0 ADMINISTRATIVE CONTROLS

MONTHLY REACTOR OPERATING REPORT

- 6.9.1.8 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves, shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission (Attn: Document Control Desk), Washington, D.C. 20555, with a copy to the Regional Office no later than the 15th of each month following the calendar month covered by the report.

CORE OPERATING LIMITS REPORT

- 6.9.1.9.1 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:
- a. Moderator Temperature Coefficient Limits for Specification 3/4.1.1.4,
 - b. Rod Drop Time Limits for Specification 3/4.1.3.4,
 - c. Shutdown Rod Insertion Limits for Specification 3/4.1.3.5,
 - d. Control Rod Insertion Limits for Specification 3/4.1.3.6,
 - e. Axial Flux Difference for Specification 3/4.2.1,
 - f. Heat Flux Hot Channel Factor for Specification 3/4.2.2,
 - g. Nuclear Enthalpy Rise Hot Channel Factor for Specification 3/4.2.3, and
 - h. Allowable Power Level for Specification 3/4.2.6.
- 6.9.1.9.2 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in:
- a. WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," July 1985 (Westinghouse Proprietary),
 - b. WCAP-8385, "Power Distribution Control and Load Following Procedures - Topical Report," September 1974 (Westinghouse Proprietary),
 - c. WCAP-10216-P-A, Revision 1A, "Relaxation of Constant Axial Offset Control/ F_Q Surveillance Technical Specification," February 1994 (Westinghouse Proprietary),
 - d. WCAP-10266-P-A Rev. 2, "The 1981 Version of Westinghouse Evaluation Mode Using BASH Code," March 1987 (Westinghouse Proprietary).
 - e. WCAP-12610-P-A, "VANTAGE+ Fuel Assembly Reference Core Report," July 1991 (Westinghouse Proprietary).

6.0 ADMINISTRATIVE CONTROLS

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of 10 CFR 20.1601(a) and (b), each high radiation area in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 100 mrem but less than or equal to 1000 mrem in 1 hour at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the radiation level at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates is greater than 1000 mrem in 1 hour. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Supervisor ~~Manager~~ on duty and/or the Plant Health Physicist ~~(Plant Radiation Protection Supervisor Manager)~~. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

* Health Physics (Radiation Protection) personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.0 ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the ~~PNSRC~~ PORC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the level of radioactive effluent control pursuant to 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the ~~PNSRC~~ PORC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

PROPOSED TECHNICAL SPECIFICATIONS PAGES

REVISED PAGES

UNIT 1

3/4 3-19

3/4 3-36

3/4 3-36a

3/4 3-38

3/4 3-38a

3/4 7-6

3/4 9-13

6-1

6-2

6-3

6-4

6-5

6-14

6-15

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
3. CONTAINMENT ISOLATION					
a. Phase "A" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) From Safety Injection Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
b. Phase "B" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
3) Containment Pressure -- High-High	4	2	3	1, 2, 3	16
c. Purge and Exhaust Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Containment Radioactivity-* High Train A	3	1	2	1, 2, 3, 4	17
3) Containment Radioactivity-* High Train B	3	1	2	1, 2, 3, 4	17

*This specification only applies during PURGE.

TABLE 3.3-6
RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment ⁺	1	N/A	≤ 54 mR/hr	21
ii. Containment High Range	2	≤ 10R/hr	N/A	22A
B. Process Monitors				
i. Particulate Channel ⁺	1	N/A	≤ 2.52 μCi	20
ii. Noble Gas Channel ⁺	1	N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	20
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range	----- (see the ODCM) -----			
b. Mid Range	1	N/A	N/A	22B
c. High Range	1	N/A	N/A	22B
ii. Steam Generator PORV				
a. Loop 1	1	N/A	N/A	22B
b. Loop 4	1	N/A	N/A	22B
c. Loop 2	1	N/A	N/A	22B
d. Loop 3	1	N/A	N/A	22B
iii. Gland Steam Condenser Vent Monitor				
a. Low Range	----- (see the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range	----- (see the ODCM) -----			
b. Mid Range	1	N/A	N/A	22B
c. High Range	1	N/A	N/A	22B

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-6 (Continued)
 RADIATION MONITORING INSTRUMENTATION
 (OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
2. Mode 6				
A. Train A	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
B. Train B	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
3. Mode ***				
A. Spent Fuel Storage	1	≤ 15 mR/hr	≤ 15 mR/hr	21

⁺ This specification only applies during PURGE

*** With fuel in storage pool or building

TABLE 4.3-3
 RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment	S*	R	Q	1, 2, 3, 4
ii. Containment High Range	S	R	Q	1, 2, 3, 4
B. Process Monitors				
i. Particulate Channel	S*	R	Q	1, 2, 3, 4
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range	----- (See the ODCM) -----			
b. Mid Range	S	R	N/A	1, 2, 3, 4
c. High Range	S*	R	N/A	1, 2, 3, 4
ii. Steam Generator PORV				
a. Loop 1	S*	R	Q	1, 2, 3, 4
b. Loop 4	S*	R	Q	1, 2, 3, 4
c. Loop 2	S*	R	Q	1, 2, 3, 4
d. Loop 3	S*	R	Q	1, 2, 3, 4
iii. Gland Steam Condenser Vent Monitor				
a. Low Range	----- (See the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range	----- (See the ODCM) -----			
b. Mid Range	S	R	Q	1, 2, 3, 4
c. High Range	S*	R	N/A	1, 2, 3, 4

TABLE 4.3-3 (Continued)
 RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
2. Mode 6				
A. Train A				6
i. Containment Area Radiation Channel	S*	R	Q	
ii. Particulate Channel	S*	R	Q	
iii. Noble Gas Channel	S*	R	Q	
B. Train B				6
i. Containment Area Radiation Channel	S*	R	Q	
ii. Particulate Channel	S*	R	Q	
iii. Noble Gas Channel	S*	R	Q	
3. Mode **				
A. Spent Fuel Storage	S	R	Q	**

* To include SOURCE CHECK per T/S Section 1.27
 ** With fuel in storage pool or building

SURVEILLANCE REQUIREMENTS (Continued)

- 4.7.1.2 Each auxiliary feedwater pump shall be demonstrated OPERABLE when tested pursuant to Specification 4.0.5 by:
- a. Verifying that each motor driven auxiliary feedwater pump's developed head at the test flow point is greater than or equal to the required developed head.
 - b. Verifying that the turbine driven auxiliary feedwater pump's developed head at the test flow point is greater than or equal to the required developed head. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3.
 - c. Verifying at least once per 31 days that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.
 - d. Verifying at least once per 31 days that each automatic valve in the flow path is in the correct position whenever the auxiliary feedwater system is placed in automatic control or when above 10% RATED THERMAL POWER. This requirement is not applicable for those portions of the auxiliary feedwater system being used intermittently to maintain steam generator water level.
 - e. Verifying at least once per 18 months during shutdown that each automatic valve in the flow path actuates to its correct position upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - f. Verifying at least once per 18 months during shutdown that each auxiliary feedwater pump starts as designed automatically upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - g. Verifying at least once per 18 months during shutdown that the unit cross-tie valves can cycle full travel. Following cycling, the valves will be verified to be in their closed positions.

3/4 **LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**
3/4.9 **REFUELING OPERATIONS**

STORAGE POOL VENTILATION SYSTEM**

LIMITING CONDITION FOR OPERATION

3.9.12 The spent fuel storage pool exhaust ventilation system shall be OPERABLE.

APPLICABILITY: Whenever irradiated fuel is in the storage pool.

ACTION:

- a. With no fuel storage pool exhaust ventilation system OPERABLE, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool until at least one spent fuel storage pool exhaust ventilation system is restored to OPERABLE status.*
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required fuel storage pool ventilation system shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:
 1. Deleted
 2. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1980 while operating the exhaust ventilation system at a flow rate of 30,000 cfm $\pm 10\%$.

* The crane bay roll-up door and the south door of the auxiliary building crane bay may be opened under administrative control during movement of fuel within the storage pool or crane operation with loads over the storage pool.

** Shared system with D.C. COOK - UNIT 2.

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.1 The Plant Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.
- 6.1.2 The Shift Manager (or during his absence from the control room complex, a designated individual) shall be responsible for the control room command function. A management directive to this effect signed by the Site Vice President shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

ONSITE AND OFFSITE ORGANIZATIONS

- 6.2.1 Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.
- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management level through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts. These organizational charts will be documented in the UFSAR and updated in accordance with 10 CFR 50.71(e).
 - b. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
 - c. The Senior Vice President - Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
 - d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.0 ADMINISTRATIVE CONTROLS

6.2 ORGANIZATION (Continued)

FACILITY STAFF

6.2.2 The Facility organization shall be subject to the following:

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in Mode 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room.
- c. An individual* qualified in radiation protection procedures shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be directly supervised by a licensed Senior Operator trained or qualified in refueling and CORE ALTERATIONS (SO-CA) who has no other concurrent responsibilities during this operation.
- e. The amount of overtime worked by plant staff members performing safety-related functions must be limited in accordance with NRC Policy Statement on working hours (Generic Letter 82-12).
- f. The Shift Manager and Unit Supervisor shall hold a Senior Operator License.
- g. The Operations Director must hold or have held a Senior Operator License at Cook Nuclear Plant or a similar reactor, or have been certified for equivalent senior operator knowledge. If the Operations Director does not hold a Senior Operator License, then a line (v. staff) operations middle manager shall hold a Senior Operator License for the purposes of directing operational activities.

* The unexpected absence, for a period of time not to exceed 2 hours, of the on-site individual qualified in radiation protection procedures is permitted provided immediate action is taken to fill the required position.

TABLE 6.2-1
 MINIMUM SHIFT CREW COMPOSITION*

LICENSE CATEGORY	APPLICABLE MODES	
	1, 2, 3, & 4	5 & 6
SM	1**	1**#
SOL	1	None
OL	2	1
Non-Licensed	2	1
Shift Technical Adv.	1**	None

- # Does not include the licensed Senior Operator - CA supervising CORE ALTERATIONS.
- * Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1.
- ** Shared with Cook Nuclear Plant Unit 2.

6.0 ADMINISTRATIVE CONTROLS

6.3 FACILITY STAFF QUALIFICATIONS

- 6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Plant Radiation Protection Manager, who shall meet or exceed qualifications of Regulatory Guide 1.8, September 1975, (2) the Shift Technical Advisor, who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents and, (3) the Operations Director, who must be qualified as specified in Section 6.2.2.g.

6.4 TRAINING

- 6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and 10 CFR Part 55.

6.5 DELETED

6.0 ADMINISTRATIVE CONTROLS

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73.
- b. Each REPORTABLE EVENT shall be reviewed by the PORC, and the results of this review shall be submitted to the NSRB and the Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Chairman of the NSRB shall be notified within 24 hours.
- b. A Safety Limit Violation Report shall be prepared. This report shall be reviewed by the PORC. This report shall describe (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence.
- c. The Safety Limit Violation Report shall be submitted to the Commission, the Chairman of the NSRB and the Senior Vice President – Nuclear Operations within 14 days of the violation.
- d. Operation of the unit shall not be resumed until authorized by the Commission.

6.0 ADMINISTRATIVE CONTROLS

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of 10 CFR 20.1601(a) and (b), each high radiation area in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 100 mrem but less than or equal to 1000 mrem in 1 hour at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the radiation level at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates is greater than 1000 mrem in 1 hour. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Manager on duty and/or the Plant Radiation Protection Manager. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

Health Physics (Radiation Protection) personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.0 ADMINISTRATIVE CONTROLS

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of 10 CFR 20.1601(a) and (b), each high radiation area in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 100 mrem but less than or equal to 1000 mrem in 1 hour at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the radiation level at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates is greater than 1000 mrem in 1 hour. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Manager on duty and/or the Plant Radiation Protection Manager. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

* Health Physics (Radiation Protection) personnel may be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.0 ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the PORC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the level of radioactive effluent control pursuant to 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the PORC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

Attachment 2B to AEP:NRC:2090

PROPOSED TECHNICAL SPECIFICATIONS PAGES

REVISED PAGES
UNIT 2

3/4 3-17
3/4 3-19
3/4 3-20
3/4 3-35
3/4 3-35a
3/4 3-37
3/4 3-37a
3/4 4-20
3/4 7-6
3/4 8-4
3/4 9-12
6-1
6-2
6-3
6-4
6-5
6-12
6-14
6-15

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
3. CONTAINMENT ISOLATION					
a. Phase "A" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) From Safety Injection Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
b. Phase "B" Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Automatic Actuation Logic	2	1	2	1, 2, 3, 4	13
3) Containment Pressure -- High-High	4	2	3	1, 2, 3	16
c. Purge and Exhaust Isolation					
1) Manual	----- See Functional Unit 9 -----				
2) Containment Radioactivity-* High Train A	3	1	2	1, 2, 3, 4	17
3) Containment Radioactivity-* High Train B	3	1	2	1, 2, 3, 4	17

*This specification only applies during PURGE.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
 3/4.3 INSTRUMENTATION

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
e. Steam Line Pressure-Low					
Four Loops Operating	1 pressure/loop	2 pressures any loops	1 pressure any 3 loops	1, 2, 3 ^{**}	14*
Three Loops Operating	1 pressure/operating loop	1 ^{***} pressure in any operating loop	1 pressure in any 2 operating loops	3 ^{**}	15
5. TURBINE TRIP & FEEDWATER ISOLATION					
a. Steam Generator Water Level – High-High	3/loop	2/loop in any operating loop	2/loop in each operating loop	1, 2, 3	14*
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS					
a. Steam Generator Water Level – Low-Low	3/Stm. Gen.	2/Stm. Gen. any Stm. Gen.	2/Stm. Gen.	1, 2, 3	14*
b. 4 kV Bus Loss of Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3	14*
Pump Start		2/bus (T21A - Train B; T21D - Train A)			
Valve Actuation (Both trains)		2/bus on (T21A & T21B or 2/busses T21C & T21D)			
		1			
		2	2	1, 2, 3	18*
c. Safety Injection	2		2	1, 2	18*
d. Loss of Main Feedwater Pumps	2				

3/4 **LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**
 3/4.3 **INSTRUMENTATION**

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
7. TURBINE DRIVEN AUXILIARY FEEDWATER PUMPS					
a. Steam Generator Water Level -- Low-Low	3/Strm. Gen.	2/Strm. Gen. any 2 Strm. Gen.	2/Strm. Gen.	1, 2, 3	14*
b. Reactor Coolant Pump Bus Undervoltage	4-1/Bus	2	3	1, 2, 3	19*
8. LOSS OF POWER					
a. 4 kV Bus Loss of Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3, 4	14*
b. 4 kV Bus Degraded Voltage	3/Bus (T21A - Train B) (T21D - Train A)	2/Bus (T21A-Train B) (T21D-Train A)	2/Bus (T21A-Train B) (T21D-Train A)	1, 2, 3, 4	14*
9. MANUAL					
a. Safety Injection (ECCS) Feedwater Isolation Reactor Trip (SI) Containment Isolation-Phase "A" Containment Purge and Exhaust Isolation Auxiliary Feedwater Pumps Essential Service Water System	2/train	1/train	2/train	1, 2, 3, 4	18
b. Containment Spray Containment Isolation - Phase "B" Containment Purge and Exhaust Isolation	1/train	1/train	1/train	1, 2, 3, 4	18
c. Containment Isolation - Phase "A" Containment Purge and Exhaust Isolation	1/train	1/train	1/train	1, 2, 3, 4	18
d. Steam Line Isolation	2/steam line (1 per train)	2/steam line (1 per train)	2/operating steam line (1 per train)	1, 2, 3	20

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment ⁺	1	N/A	≤ 54 mR/hr	21
ii. Containment High Range	2	≤ 10R/hr	N/A	22A
B. Process Monitors				
i. Particulate Channel ⁺	1	N/A	≤ 2.52 μCi	20
ii. Noble Gas Channel ⁺	1	N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	20
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range	----- (see the ODCM) -----			
b. Mid Range	1	N/A	N/A	22B
c. High Range	1	N/A	N/A	22B
ii. Steam Generator PORV				
a. Loop 1	1	N/A	N/A	22B
b. Loop 4	1	N/A	N/A	22B
c. Loop 2	1	N/A	N/A	22B
d. Loop 3	1	N/A	N/A	22B
iii. Gland Steam Condenser Vent Monitor				
a. Low Range	----- (see the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range	----- (see the ODCM) -----			
b. Mid Range	1	N/A	N/A	22B
c. High Range	1	N/A	N/A	22B

TABLE 3.3-6 (Continued)

RADIATION MONITORING INSTRUMENTATION
(OPERABILITY BASES DISCUSSED IN BASES SECTION 3/4 3.3.1)

<u>OPERATION MODE/INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ALARM SETPOINT</u>	<u>TRIP SETPOINT</u>	<u>ACTION</u>
2. Mode 6				
A. Train A	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
B. Train B	any 2/3 channels			22
i. Containment Area ⁺ Radiation Channel		N/A	≤ 54 mR/hr	
ii. Particulate Channel ⁺		N/A	≤ 2.52 μCi	
iii. Noble Gas Channel ⁺		N/A	≤ 4.4x10 ⁻³ $\frac{\mu\text{Ci}}{\text{cc}}$	
3. Mode ***				
A. Spent Fuel Storage	1	≤ 15 mR/hr	≤ 15 mR/hr	21

*** With fuel in storage pool or building

+ This specification only applies during PURGE

TABLE 4.3-3
 RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
1. Modes 1, 2, 3 & 4				
A. Area Monitors				
i. Upper Containment	S*	R	Q	1, 2, 3, 4
ii. Containment High Range	S	R	Q	1, 2, 3, 4
B. Process Monitors				
i. Particulate Channel	S*	R	Q	1, 2, 3, 4
C. Noble Gas Effluent Monitors				
i. Unit Vent Effluent Monitors				
a. Low Range	----- (see the ODCM) -----			
b. Mid Range	S	R	N/A	1, 2, 3, 4
c. High Range	S*	R	N/A	1, 2, 3, 4
ii. Steam Generator PORV				
a. Loop 1	S*	R	Q	1, 2, 3, 4
b. Loop 4	S*	R	Q	1, 2, 3, 4
c. Loop 2	S*	R	Q	1, 2, 3, 4
d. Loop 3	S*	R	Q	1, 2, 3, 4
iii. Gland Steam Condenser Vent Monitor				
a. Low Range	----- (see the ODCM) -----			
iv. Steam Jet Air Ejector Vent Monitors				
a. Low Range	----- (see the ODCM) -----			
b. Mid Range	S	R	Q	1, 2, 3, 4
c. High Range	S*	R	N/A	1, 2, 3, 4

TABLE 4.3-3 (Continued)

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>OPERATION MODE/INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>APPLICABLE MODES</u>
2. Mode 6				
A. Train A				6
i. Containment Area Radiation Channel	S*	R	Q	
ii. Particulate Channel	S*	R	Q	
iii. Noble Gas Channel	S*	R	Q	
B. Train B				6
i. Containment Area Radiation Channel	S*	R	Q	
ii. Particulate Channel	S*	R	Q	
iii. Noble Gas Channel	S*	R	Q	
3. Mode **				
A. Spent Fuel Storage	S	R	Q	**

* To include SOURCE CHECK per T/S Section 1.27

** With fuel in storage pool or building

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
3/4.4 REACTOR COOLANT SYSTEM

SPECIFIC ACTIVITY

LIMITING CONDITION FOR OPERATION

3.4.8 The specific activity of the primary coolant shall be limited to:

- a. Less than or equal to 1 microCurie per gram DOSE EQUIVALENT I-131, and
- b. Less than or equal to $100/\bar{E}$ microCuries per gram of gross radioactivity.

APPLICABILITY: MODES 1, 2, 3, 4 and 5

ACTION:

MODES 1, 2 and 3*

- a. With the specific activity of the reactor coolant greater than 1 microCurie per gram DOSE EQUIVALENT I-131 or more than 48 hours during one continuous time interval for exceeding the limit line shown on Figure 3.4-1, be in HOT STANDBY with T_{avg} less than 500°F within 6 hours.
- b. With the specific activity of the reactor coolant greater than $100/\bar{E}$ microCuries per gram, be in HOT STANDBY with T_{avg} less than 500°F within 6 hours.

MODES 1, 2, 3, 4 and 5

- a. With the specific activity of the reactor coolant greater than 1 microCurie per gram DOSE EQUIVALENT I-131 or greater than $100/\bar{E}$ microCuries per gram, perform the sampling and analysis requirements of item 4a of Table 4.4-4 until the specific activity of the reactor coolant is restored to within its limits.

SURVEILLANCE REQUIREMENTS

4.4.8 The specific activity of the reactor coolant shall be determined to be within the limits by performance of the sampling and analysis program of Table 4.4-4.

* With T_{avg} greater than or equal to 500°F.

SURVEILLANCE REQUIREMENTS

- 4.7.1.2 Each auxiliary feedwater pump shall be demonstrated OPERABLE when tested pursuant to Specification 4.0.5 by:
- a. Verifying that each motor driven auxiliary feed pump's developed head at the test flow point is greater than or equal to the required developed head.
 - b. Verifying that the turbine driven auxiliary feedwater pump's developed head at the test flow point is greater than or equal to the required developed head. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3.
 - c. Verifying at least once per 31 days that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position is in its correct position.
 - d. Verifying at least once per 31 days that each automatic valve in the flow path is in the correct position whenever the auxiliary feedwater system is placed in automatic control or when above 10% RATED THERMAL POWER. This requirement is not applicable for those portions of the auxiliary feedwater system being used intermittently to maintain steam generator level.
 - e. Verifying at least once per 18 months during shutdown that each automatic valve in the flow path actuates to its correct position upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - f. Verifying at least once per 18 months during shutdown that each auxiliary feedwater pump starts as designed automatically upon receipt of the appropriate engineered safety features actuation test signal required by Specification 3/4.3.2.
 - g. Verifying at least once per 18 months during shutdown that the unit cross-tie valves can cycle full travel. Following cycling, the valves will be verified to be in their closed positions.

SURVEILLANCE REQUIREMENTS (Continued)

- a) A kinematic viscosity of greater than or equal to 1.9 centistokes but less than or equal to 4.1 centistokes at 40°C (alternatively, Saybolt viscosity, SUS at 100°F of greater than or equal to 32.6 but less than or equal to 40.1), if gravity was not determined by comparison with supplier's certification.
- b) A flash point equal to or greater than 125°F.
- 2) By verifying, in accordance with the test specified in ASTM D1298-80 and prior to adding the new fuel to the storage tanks, that the sample has either an API gravity of greater than or equal to 30 degrees but less than or equal to 40 degrees at 60°F or an absolute specific gravity at 60/60°F of greater than or equal to 0.82 but less than or equal to 0.88, or an API gravity of within 0.3 degrees at 60°F when compared to the supplier's certificate or a specific gravity of within 0.0016 at 60/60°F when compared to the supplier's certificate.
- 3) By verifying, in accordance with the test specified in ASTM D4176-82 and prior to adding new fuel to the storage tanks, that the sample has a clear and bright appearance with proper color.
- 4) By verifying within 31 days of obtaining the sample that the other properties specified in Table 1 of ASTM D975-81 are within the appropriate limits when tested in accordance with ASTM D975-81 except that the analysis for sulfur may be performed in accordance with ASTM D2622-82.
- d. At least once per 31 days by obtaining a sample of fuel oil from the storage tanks in accordance with ASTM D2276-83, and verifying that total particulate contamination is less than 10 mg/liter when tested in accordance with ASTM D2276-83, Method A*.
- e. At least once per 18 months, during shutdown, by:
 - 1. Subjecting the diesel engine to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service,

* The actions to be taken should any of the properties be found outside of the specified limits are defined in the Bases.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
3/4.9 REFUELING OPERATIONS

STORAGE POOL VENTILATION SYSTEM**

LIMITING CONDITION FOR OPERATION

3.9.12 The spent fuel storage pool exhaust ventilation system shall be OPERABLE.

APPLICABILITY: Whenever irradiated fuel is in the storage pool.

ACTION:

- a. With no fuel storage pool exhaust ventilation system OPERABLE, suspend all operations involving movement of fuel within the storage pool or crane operation with loads over the storage pool until at least one spent fuel storage pool exhaust ventilation system is restored to OPERABLE status.*
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required fuel storage pool ventilation system shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system, by:
 1. Deleted.
 2. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1980 while operating the exhaust ventilation system at a flow rate of 30,000 cfm $\pm 10\%$.

* The crane bay roll-up door and the south door of the auxiliary building crane bay may be opened under administrative control during movement of fuel within the storage pool or crane operation with loads over the storage pool.

** Shared system with D. C. COOK - UNIT 1.

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.1 The Plant Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.
- 6.1.2 The Shift Manager (or during his absence from the control room complex, a designated individual) shall be responsible for the control room command function. A management directive to this effect signed by the Site Vice President shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

ONSITE AND OFFSITE ORGANIZATIONS

- 6.2.1 Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.
- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management level through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts. These organizational charts will be documented in the UFSAR and updated in accordance with 10 CFR 50.71(e).
 - b. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
 - c. The Senior Vice President - Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
 - d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.0 ADMINISTRATIVE CONTROLS

6.2 ORGANIZATION (Continued)

FACILITY STAFF

6.2.2 The Facility organization shall be subject to the following:

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in Mode 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room.
- c. An individual* qualified in radiation protection procedures shall be on site when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be directly supervised by a licensed Senior Operator trained or qualified in refueling and CORE ALTERATIONS (SO-CA) who has no other concurrent responsibilities during this operation.
- e. The amount of overtime worked by plant staff members performing safety-related functions must be limited in accordance with NRC Policy Statement on working hours (Generic Letter 82-12).
- f. The Shift Manager and Unit Supervisor shall hold a Senior Operator License.
- g. The Operations Director must hold or have held a Senior Operator License at Cook Nuclear Plant or a similar reactor, or have been certified for equivalent senior operator knowledge. If the Operations Director does not hold a Senior Operator License, then a line (v. staff) operations middle manager shall hold a Senior Operator License for the purposes of directing operational activities.

* The unexpected absenc, for a period of time not to exceed 2 hours, of the on-site individual qualified in radiation protection procedures is permitted provided immediate action is taken to fill the required position.

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION*

LICENSE CATEGORY	APPLICABLE MODES	
	1, 2, 3 & 4	5 & 6
SM	1**	1**
SOL	1	None
OL	2	1
Non-Licensed	2	1
Shift Technical Adv.	1**	None

Does not include the licensed Senior Operator - CA supervising CORE ALTERATIONS.

* Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1.

** Shared with Cook Nuclear Plant Unit 1

6.0 ADMINISTRATIVE CONTROLS

6.3 FACILITY STAFF QUALIFICATIONS

- 6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Plant Radiation Protection Manager, who shall meet or exceed qualifications of Regulatory Guide 1.8, September 1975, (2) the Shift Technical Advisor, who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents and, (3) the Operations Director, who must be qualified as specified in Section 6.2.2.g.

6.4 TRAINING

- 6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and 10 CFR Part 55.

6.5 DELETED

6.0 ADMINISTRATIVE CONTROLS

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.73.
- b. Each REPORTABLE EVENT shall be reviewed by the PORC, and the results of this review shall be submitted to the NSRB and the Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a safety limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Chairman of the NSRB shall be notified within 24 hours.
- b. A Safety Limit Violation Report shall be prepared. This report shall be reviewed by the PORC. The report shall describe (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence.
- c. The Safety Limit Violation Report shall be submitted to the Commission, the Chairman of the NSRB and the Senior Vice President – Nuclear Operations within 14 days of the violation.
- d. Operation of the unit shall not be resumed until authorized by the Commission.

6.0 ADMINISTRATIVE CONTROLS

MONTHLY REACTOR OPERATING REPORT

- 6.9.1.8 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or safety valves, shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission (Attn: Document Control Desk), Washington, D.C. 20555, with a copy to the Regional Office no later than the 15th of each month following the calendar month covered by the report.

CORE OPERATING LIMITS REPORT

- 6.9.1.9.1 Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:
- a. Moderator Temperature Coefficient Limits for Specification 3/4.1.1.4,
 - b. Rod Drop Time Limits for Specification 3/4.1.3.4,
 - c. Shutdown Rod Insertion Limits for Specification 3/4.1.3.5,
 - d. Control Rod Insertion Limits for Specification 3/4.1.3.6,
 - e. Axial Flux Difference for Specification 3/4.2.1,
 - f. Heat Flux Hot Channel Factor for Specification 3/4.2.2,
 - g. Nuclear Enthalpy Rise Hot Channel Factor for Specification 3/4.2.3, and
 - h. Allowable Power Level for Specification 3/4.2.6.
- 6.9.1.9.2 The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in:
- a. WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," July 1985 (Westinghouse Proprietary),
 - b. WCAP-8385, "Power Distribution Control and Load Following Procedures - Topical Report," September 1974 (Westinghouse Proprietary),
 - c. WCAP-10216-P-A, Revision 1A, "Relaxation of Constant Axial Offset Control/ F_Q Surveillance Technical Specification," February 1994 (Westinghouse Proprietary),
 - d. WCAP-10266-P-A Rev. 2, "The 1981 Version of Westinghouse Evaluation Mode Using BASH Code," March 1987 (Westinghouse Proprietary).
 - e. WCAP-12610-P-A, "VANTAGE+ Fuel Assembly Reference Core Report," July 1991 (Westinghouse Proprietary).

6.0 ADMINISTRATIVE CONTROLS

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to 10 CFR 20.1601(c), in lieu of the requirements of 10 CFR 20.1601(a) and (b), each high radiation area in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 100 mrem but less than or equal to 1000 mrem in 1 hour at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made aware of it.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

6.12.2 The requirements of 6.12.1 shall also apply to each high radiation area in which the radiation level at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates is greater than 1000 mrem in 1 hour. When possible, locked doors shall be provided to prevent unauthorized entry into such areas, and the keys shall be maintained under the administrative control of the Shift Manager on duty and/or the Plant Radiation Protection Manager. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas. In the event that it is not possible or practicable to provide locked doors due to area size or configuration, the area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device.

* Health Physics (Radiation Protection) personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.0 ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the PORC and the approval of the Plant Manager.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by the Quality Assurance Program Description, Appendix C, Section 6.10.2.n. This documentation shall contain:
 1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 2. A determination that the change will maintain the level of radioactive effluent control pursuant to 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the PORC and the approval of the Plant Manager.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

Attachment 3A to AEP:NRC:2090

FACILITY OPERATING LICENSE PAGES
MARKED TO SHOW PROPOSED CHANGES

REVISED PAGES
UNIT 1

Page 3 of 5

Page 4 of 5

(3) Less than Four Loop Operation

The licensee shall not operate the reactor at power levels above P-7 (defined in Table 3.3-1 of Specification 3.3.1.1 of Appendix A to this license) with less ~~that~~ than four reactor coolant loops in operation until (a) safety analyses for less than four loop operation have been submitted, and (b) approval for less than four loop operation at power levels above P-7 has been granted by the Commission by amendment of this license.

Amendment No.
31, 194, 208

- 2.C(4) Indiana Michigan Power Company shall implement and maintain, in effect, all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SERs dated December 12, 1977, July 31, 1979, January 30, 1981, February 7, 1983, November 22, 1983, December 23, 1983, March 16, 1984, August 27, 1985, June 30, 1986, January 28, 1987, May 26, 1987, June 16, 1988, June 17, 1988, June 7, 1989, February 1, 1990, February 9, 1990, March 26, 1990, April 26, 1990, March 31, 1993, April 8, 1993, December 14, 1994, January 24, 1995, April 19, 1995, June 8, 1995, and March 11, 1996, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(5) Spent Fuel Pool Storage

Amendment No.
118, 136, 169

The licensee is authorized to store D. C. Cook Unit 1 and Unit 2 fuel assemblies, new or irradiated up to a total of 3613 fuel assemblies in the shared spent fuel pool at the Donald C. Cook Nuclear Plant subject to the following conditions:

Fuel stored in the spent fuel pool shall not have nominal enrichment greater than 4.95% Uranium-235

- (6) Deleted by Amendment 80.

(7) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the station chemistry manual and shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to measure the values of the critical parameters;
3. Identification of process sampling points;
4. Procedure for the recording and management of data;
5. Procedures defining corrective actions for off control point chemistry conditions; and

Amendment No.
36

6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective actions.

- Amendment No. 169 (8) ~~The provisions of Specification 3/4.9.7 are not applicable for loads being moved over the pool for the duration of the spent fuel pool reracking project. Control of loads moving over the spent fuel pool during the spent fuel pool reracking project shall comply with the criteria of NUREG-0612 "Control of Heavy Loads at Nuclear Power Plants." Administrative controls shall be in place to prevent any load not rigged in compliance with the criteria of NUREG-0612 from passing over the spent fuel pool with the crane interlocks, required by T/S 3/4.9.7, disengaged.~~
- Amendment No. 227 2.C(9) ~~The steam generator tube inspection surveillance requirements of Technical Specification 4.4.5.3 have been extended until the start of cycle 17, not to exceed January 31, 2001. In the event the steam generators are replaced prior to the start of cycle 17, the retired steam generators are exempted from further surveillance under T/S 4.4.5.3.~~
- Amendment No. 265 2.C(10) ~~Technical Specification surveillance requirements 4.6.5.3.1.b.3, 4.6.5.3.1.b.4, and 4.6.5.3.1.b.5 need not be performed until prior to ascension into Mode 4 at the completion of fuel cycle 18 refueling outage. If Unit 1 enters Mode 5 for sufficient duration prior to the fuel cycle 18 refueling outage, I&M will perform the surveillance testing required by TS 4.6.5.3.1.b.3, 4.6.5.3.1.b.4, and 4.6.5.3.1.b.5.~~
- *2.D Physical Protection
- Amendment No. 122 The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Donald C. Cook Nuclear Plant Security Plan," with revisions submitted through July 21, 1988; "Donald C. Cook Nuclear Plant Training and Qualification Plan," with revisions submitted through December 19, 1986; and Donald C. Cook Nuclear Plant Safeguards Contingency Plan," with revisions submitted through June 10, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.
- E. Deleted by Amendment 80.
- ** 2.F. Deleted by Amendment 80.
- * 2.G In all places of this license, the reference to the Indiana and Michigan Power Company is deleted and all references to "the licensees" is amended to read "the licensee". The intent is to recognize the Indiana and Michigan Electric Company as the sole licensee of the Donald C. Cook Nuclear Plant.
- Amendment No. 33

Attachment 3B to AEP:NRC:2090

**FACILITY OPERATING LICENSE PAGES
MARKED TO SHOW PROPOSED CHANGES**

**REVISED PAGES
UNIT 2**

Page 5 of 11

Page 6 of 11

Page 8 of 11

Amendment
No. 12, 180, 192

- (o) Indiana Michigan Power Company shall implement and maintain, in effect, all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SERs dated December 12, 1977, July 31, 1979, January 30, 1981, February 7, 1983, November 22, 1983, December 23, 1983, March 16, 1984, August 27, 1985, June 30, 1986, January 28, 1987, May 26, 1987, June 16, 1988, June 17, 1988, June 7, 1989, February 1, 1990, February 9, 1990, March 26, 1990, April 26, 1990, March 31, 1993, April 8, 1993, December 14, 1994, January 24, 1995, April 19, 1995, June 8, 1995, and March 11, 1996, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

Amendment
No. 64, 121

- (p) Deleted by Amendment
- (q) Deleted by Amendment 2.
- (r) Deleted by Amendment 68.
- (s) Spent Fuel Pool Storage

Amendment
No. 104, 121, 152

The licensee is authorized to store D. C. Cook, Unit 1 and Unit 2 fuel assemblies, new or irradiated up to a total of 3613 fuel assemblies in the shared spent fuel pool at the Donald C. Cook Nuclear Plant subject to the following conditions:

Fuel stored in the spent fuel pool shall not have a nominal enrichment greater than 4.95% Uranium-235.

- * Amendment 3 deleted Paragraph (s), Amendment 13 added a new Paragraph (s).

- (t) Deleted by Amendment 63.

Amendment
No. 152

- ~~(u) The provisions of Specification 3/4.9.7 are not applicable for loads being moved over the pool for the duration of the spent fuel pool reracking project. Control of loads moving over the spent fuel pool during the spent fuel pool reracking project shall comply with the criteria of NUREG-0612, "Controls of Heavy Loads at Nuclear Power Plants." Administrative controls shall be in place to prevent any load not rigged in compliance with the criteria of NUREG-0612 from passing over the spent fuel pool with the crane interlocks, required by T/S 3/4.9.7, disengaged.~~

v. Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the station chemistry manual and shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to measure the values of the critical parameters;
3. Identification of process sampling points;
4. Procedure for the recording and management of data;
5. Procedures defining corrective actions for off control point chemistry conditions; and
6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective actions.

Amendment
No. 18

Amendment
No. 232

~~w. The steam generator tube inspection surveillance maximum inspection interval of Technical Specification 4.4.5.3 is extended until the start of cycle 13, but no later than June 30, 2002.~~

Amendment
No. 234

~~x. The emergency diesel generator engine Technical Specification surveillance requirements of 4.8.1.1.2 e.1 and 4.8.1.1.2 e.7 have been extended to allow their performance during refueling outage 13, but no later than December 31, 2001.~~

~~The station battery service testing Technical Specification surveillance requirements 4.8.2.3.2 d and 4.8.2.5.2 d have been extended to allow them to be performed during the refueling outage 13, but no later than December 31, 2001.~~

Amendment No. 29 ** I. In all places of this license, the reference to the Indiana and Michigan Power Company is deleted and all references to "the licensees" is amended to read "the licensee". The intent is to recognize the Indiana and Michigan Electric Company as the sole licensee of the Donald C. Cook Nuclear Plant.

Amendment No. 98. J. In all places of this license, the reference to the Indiana and Michigan Electric company is amended to read "Indiana Michigan Power Company."

~~K Steam Generator Repair Program~~

Amendment No. 100 ~~(1) The licensee is authorized to repair Unit 2 steam generators by replacement of major components. Repairs shall be conducted in accordance with the licensee's commitments identified in the Commission approved Donald C. Cook Nuclear Plant Unit No. 2 Steam Generator Repair Report dated November 7, 1986, as revised through Revision 6, and additional commitments identified in the staff's related Safety Evaluation dated march 8, 1988.~~

** Amendment 29 – Changed G to H, H to I, and added a new G; Amendment 34 – Changed H to 3, added a new H and K; Amendment 52 – Deleted G, Changed H to G, and K to H; Amendment 14 added H.

~~(2) The Technical Specifications identified in Table 3.2-2 of the Steam Generator Repair Report dated November 7, 1986, as revised through Revision 6 dated February 18, 1988, will not be applicable during the repair program. For purposes of Technical Specification applicability, the Steam Generator Repair Project will begin when the last fuel assembly from the Unit 2 core is placed in the spent fuel pool and will end when the first fuel assembly is removed from the spent fuel pool to refuel the Unit 2 core.~~

Amendment No. 160 L. The licensee is authorized to use digital signal processing instrumentation in the reactor protection system.

Amendment No. 141 3. This license is effective as of the date of issuance and shall expire at midnight, December 23, 2017.

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachment 4A to AEP:NRC:2090

PROPOSED FACILITY OPERATING
LICENSE PAGES

REVISED PAGES
UNIT 1

Page 3 of 5

Page 4 of 5

(3) Less than Four Loop Operation

The licensee shall not operate the reactor at power levels above P-7 (defined in Table 3.3-1 of Specification 3.3.1.1 of Appendix A to this license) with less than four reactor coolant loops in operation until (a) safety analyses for less than four loop operation have been submitted, and (b) approval for less than four loop operation at power levels above P-7 has been granted by the Commission by amendment of this license.

Amendment No.
31, 194, 208

2.C(4) Indiana Michigan Power Company shall implement and maintain, in effect, all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SERs dated December 12, 1977, July 31, 1979, January 30, 1981, February 7, 1983, November 22, 1983, December 23, 1983, March 16, 1984, August 27, 1985, June 30, 1986, January 28, 1987, May 26, 1987, June 16, 1988, June 17, 1988, June 7, 1989, February 1, 1990, February 9, 1990, March 26, 1990, April 26, 1990, March 31, 1993, April 8, 1993, December 14, 1994, January 24, 1995, April 19, 1995, June 8, 1995, and March 11, 1996, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(5) Spent Fuel Pool Storage

Amendment No.
118, 136, 169

The licensee is authorized to store D. C. Cook Unit 1 and Unit 2 fuel assemblies, new or irradiated up to a total of 3613 fuel assemblies in the shared spent fuel pool at the Donald C. Cook Nuclear Plant subject to the following conditions:

Fuel stored in the spent fuel pool shall not have nominal enrichment greater than 4.95% Uranium-235

(6) Deleted by Amendment 80.

(7) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the station chemistry manual and shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to measure the values of the critical parameters;
3. Identification of process sampling points;
4. Procedure for the recording and management of data;
5. Procedures defining corrective actions for off control point chemistry conditions; and

Amendment No.
36

6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective actions.

(8) Deleted by Amendment

2.C(9) Deleted by Amendment

2.C(10) Deleted by Amendment

*2.D Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Donald C. Cook Nuclear Plant Security Plan," with revisions submitted through July 21, 1988; "Donald C. Cook Nuclear Plant Training and Qualification Plan," with revisions submitted through December 19, 1986; and Donald C. Cook Nuclear Plant Safeguards Contingency Plan," with revisions submitted through June 10, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

Amendment No.
122

E. Deleted by Amendment 80.

** 2.F. Deleted by Amendment 80.

* 2.G In all places of this license, the reference to the Indiana and Michigan Power Company is deleted and all references to "the licensees" is amended to read "the licensee". The intent is to recognize the Indiana and Michigan Electric Company as the sole licensee of the Donald C. Cook Nuclear Plant.

Amendment No.
33

* 2.H System Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low a practical levels. The program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

Amendment No.
49

* 2.I Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne concentration in vital areas under accident conditions. This program shall include the following:

Amendment No.
49

1. training of personnel,

Attachment 4B to AEP:NRC:2090

PROPOSED FACILITY OPERATING
LICENSE PAGES

REVISED PAGES
UNIT 2

Page 5 of 10

Page 6 of 10

Page 7 of 10

Amendment
No. 12, 180, 192

- (o) Indiana Michigan Power Company shall implement and maintain, in effect, all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report for the facility and as approved in the SERs dated December 12, 1977, July 31, 1979, January 30, 1981, February 7, 1983, November 22, 1983, December 23, 1983, March 16, 1984, August 27, 1985, June 30, 1986, January 28, 1987, May 26, 1987, June 16, 1988, June 17, 1988, June 7, 1989, February 1, 1990, February 9, 1990, March 26, 1990, April 26, 1990, March 31, 1993, April 8, 1993, December 14, 1994, January 24, 1995, April 19, 1995, June 8, 1995, and March 11, 1996, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

Amendment
No. 64, 121

- (p) Deleted by Amendment
- (q) Deleted by Amendment 2.
- (r) Deleted by Amendment 68.
- (s) Spent Fuel Pool Storage

Amendment
No. 104, 121, 152

The licensee is authorized to store D. C. Cook, Unit 1 and Unit 2 fuel assemblies, new or irradiated up to a total of 3613 fuel assemblies in the shared spent fuel pool at the Donald C. Cook Nuclear Plant subject to the following conditions:

Fuel stored in the spent fuel pool shall not have a nominal enrichment greater than 4.95% Uranium-235.

- * Amendment 3 deleted Paragraph (s), Amendment 13 added a new Paragraph (s).

(t) Deleted by Amendment 63.

Amendment
No. 152

- (u) Deleted by Amendment
- v. Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the station chemistry manual and shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;

- Amendment No. 18
2. Identification of the procedures used to measure the values of the critical parameters;
 3. Identification of process sampling points;
 4. Procedure for the recording and management of data;
 5. Procedures defining corrective actions for off control point chemistry conditions; and
 6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective actions.

Amendment No. 232 w. Deleted by Amendment

Amendment No. 234 x. Deleted by Amendment

D. Physical Protection

Amendment No. 109

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Donald C. Cook Nuclear Plant Security Plan," with revisions submitted through July 21, 1988; "Donald C. Cook Nuclear Plant Training and Qualification Plan," with revisions submitted through December 19, 1986; and "Donald C. Cook Nuclear Plant Safeguards Contingency Plan," with revisions submitted through June 10, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

E. Deleted by Amendment 63.

F. Deleted by Amendment 6.

** G. System Integrity

Amendment No. 34

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and

2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

** H. Iodine Monitoring

Amendment
No. 34

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

Amendment
No. 29

- ** I. In all places of this license, the reference to the Indiana and Michigan Power Company is deleted and all references to "the licensees" is amended to read "the licensee". The intent is to recognize the Indiana and Michigan Electric Company as the sole licensee of the Donald C. Cook Nuclear Plant.

Amendment
No. 98

- J. In all places of this license, the reference to the Indiana and Michigan Electric company is amended to read "Indiana Michigan Power Company."

K. Deleted by Amendment

Amendment
No. 100

(1) Deleted by Amendment

** Amendment 29 – Changed G to H, H to I, and added a new G; Amendment 34 – Changed H to 3, added a new H and K; Amendment 52 – Deleted G, Changed H to G, and K to H; Amendment 14 added H.

(2) Deleted by Amendment

Amendment
No. 160

- L. The licensee is authorized to use digital signal processing instrumentation in the reactor protection system.

Amendment
No. 141

3. This license is effective as of the date of issuance and shall expire at midnight, December 23, 2017.

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation