TECHNICAL REVIEW AND CONTROL

SUMMARY

DOCUMENT No. ODCM UNIT 1 **Rev. No.** 8 ***Prd Rev, NC** ☐

TITLE OFFSITE DOSE CALCULATION MANUAL

Author B. Thomas **Date** 4/3/90

INFORMATION ONLY

Description of Changes (Itemize the nature/reason of general changes)

- CHANGED LIQUID AND GASEOUS DOSE EQUATIONS TO BE CONSISTENT WITH NUREG-0133 AND REGULATORY GUIDE 1.109.
- ADDED PLUME SHINE TO THE DOSE CALCULATIONS TO REPLACE OLD IMMERSION DOSE METHODOLOGY
- ADDED EMERGENCY CONDENSER VENT LIQUID AND GASEOUS EQUATIONS.

MODIFICATION RELATED CHANGES YES ☐ NO ☒ MOD. CONTROL NO.

* IF PERIODIC REVIEW WITH NO CHANGES (Prd Rev, NC), USE THE LAST PUBLISHED REVISION NUMBER AND CONTINUE REVIEW PROCESS..

INTRADISCIPLINARY REVIEW (minimum of one person required)

DEPT. NAME	TITLE	SIGNATURE	DATE
Chem	Chem RC Supv	[signature]	4/3/90

CROSS DISCIPLINARY REVIEW (if not required, use lines for justification statement)

DEPT. NAME	TITLE	SIGNATURE	DATE
Env. Protection	Mgr. Env. Protection	[signature]	4/3/90
(Gaseous Tables Only) Rad Support	Generation Engineer	Gerald Willis	4/3/90
(IMPELL) CHEMISTRY	TECHNICAL SPECIALIST	James M. Tozier	4/3/90

IF NOT IN CONCURRENCE, DO NOT SIGN BUT RETURN DOCUMENT TO THE AUTHOR WITH COMMENTS

Routed to Quality Assurance for review: Yes ☒ No ☐. If No, reason

Q. A. Representative [signature] Date 4/3/90 & comments are attached. ☒

Routed to A.L.A.R.A. for review: Yes ☒. No ☐. If No, reason

A.L.A.R.A. Representative [signature] Date 4/3/90 & comments are attached. ☐.

SAFETY ANALYSIS REQUIRED: NO ☒ YES ☐ (SEE ATTACHED)
IF YES, ANALYSIS ASSIGNED TO: SITE ☐. OR TO ENGINEERING ☐. DATE

REVIEW OF THE SUBJECT DOCUMENT HAS BEEN COMPLETED AND APPROVAL IS RECOMMENDED. (Approvers shall signify approval on the procedure cover sheet).. ☐

DOCUMENT HELD FOR SORC (MEETING # 90-037). **APPROVED. YES** ☒. **NO** ☐.

OWNERSHIP DEPT SUPV Nick Sangiolotti **DEPT** Nuc Tech **DATE** 4/2/90

FIG 2.0-2 SH 1 OF 4

TECHNICAL REVIEW AND CONTROL

EVALUATION OF NEED FOR SAFETY ANALYSIS IN ACCORDANCE WITH 10 CFR 50.59

(Documents that require General Supt. approval per Tech Spec 6.8)

FOR DOCUMENT NO. OOCM 11-1 REV. 8 DATE 4/3/90

The Author (A) and four SORC Members (Minimum - 2 regular members, 2 alternates) are to respond to each of the questions below.

		NO	YES*
Does the document/revision result in a change to the facility or procedures described in the FSAR?	A	☒	☐
	1	☐	☐
	2	☐	☐
	3	☐	☐
	4	☐	☐
Does the document/revision deviate from compliance to Tech Specs, or is the margin of safety defined in the basis reduced?	A	☒	☐
	1	☐	☐
	2	☐	☐
	3	☐	☐
	4	☐	☐
Does the document/revision increase the probability of occurrence, or the consequences of an accident, or malfunction of equipment important to safety (Class 1) evaluated in the FSAR increased?	A	☒	☐
	1	☐	☐
	2	☐	☐
	3	☐	☐
	4	☐	☐
Does the document/revision create the possibility for an accident or malfunction of a different type than any evaluated in the FSAR?	A	☒	☐
	1	☐	☐
	2	☐	☐
	3	☐	☐
	4	☐	☐

*A "MAYBE" constitutes a "YES" response.

SORC MEMBERS RECOMMENDATIONS TO GENERAL SUPERINTENDENT

	1	2	3	4
Recommend Nuclear Engineering or Tech Services perform a safety ANALYSIS to present to SORC (noted by a "YES" response to any of the above questions).	☐	☐	☐	☐
Recommend full SORC committee review this Evaluation of need for Safety Analysis.	☐	☐	☐	☐
Recommend approval - This document does not involve an unreviewed safety question.	/__/	/__/	/__/	/__/

SORC Member Signatures	Date
1	4/3/90
2	
3	
4	

See SORC Mtg

SORC meeting number (if required) 90-032

4/3/90

Figure 2.0-2 SH 2 OF 4

TECHNICAL REVIEW AND CONTROL
REFERENCE DOCUMENTS

The items entered below have been included in the preparation and/or review of the attached reference document and are presented in place of a specific check sheet for the document..

The following persons were consulted about this procedure

NAME	TITLE	BY
John Blasiak	Chem & Radiochem Supervisor	EDT
Hugh Flanagan	Environmental Manager	EDT
Gary Cornell	Unit 1 Chem. & Radiochem Supervisor	EDT
Gem Wilks	Rad. Engr	EDT
Jim Torser	Impell Tech. Specialist	EDT

Procedure is in compliance with the following Technical Specifications

SECTION	AMENDMENT	BY
3.6.14 + 4.6.14	66/94	EDT
3.6.15 + 4.6.15	66/94	EDT
3.6.16 + 4.6.16	66	[illegible]

Compliance with: CFR / US-NRC

REGULATORY GUIDES(s)	DATED	BY
REGULATORY GUIDE 1.109		EDT
NUREG-0133		EDT
REGULATORY GUIDE 1.113		

Compliance with ANSI STANDARD(s)

ANSI STANDARD(s)	DATED	BY
N/A		

Compliance with: ASME Boiler and Pressure Vessel Code(s)

SECTION	DATE	ADDENDUM	BY
N/A			

is consistent with the following Station or Site procedures:

NUMBER	REV.	BY
NI-CSP-M350 (N.G.)		EDT
NI-CSP-M361 (EDDINE, H2, PART)		EDT
NI-CSP-Q308 (SETPOINTS)		EDT

OTHER INFORMATION SOURCES CONSULTED

	BY
NUCLEAR CHEMISTRY TRAINING COURSE NEW. DA.	EDT

AUTHOR Butch Thomas DATE 4-3-90
REVIEWED BY [signature] DATE 4/3/90

COMMENTS

FIG 2.0-2 SH 3 OF 4

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TECHNICAL REVIEW AND CONTROL

REVIEW CHECK LIST

TO BE PREPARED BY AUTHOR

CHECK LIST FOR DOCUMENT NO. ODCM UNIT 1 REV. 8 DATE 4-3-90

" ✓ " ONLY BOXES THAT APPLY

	YES	NA
All references needed to implement the procedure are clearly identified and available	☑	☐
The procedure contains adequate equipment lists, precautions and limitations, prerequisites, graphs, diagrams or data sheets as required	☑	☐
Surveillance and Maintenance Procedure utilizes PLANT IMPACT statement associated with approval/permission for use	☑	☐
As appropriate, procedure addresses use of MARK - UPs	☐	☑
If appropriate, procedure requires use of fire protection measures. ie, burning permits etc	☐	☑
If leads are lifted, jumpers placed or blocks used in the procedure, the PLANT IMPACT statement acknowledges such use	☐	☑
As appropriate, procedure notifies other affected departments such as Q.C., Operations, I&C, Maintenance, Rad Protection etc	☑	☐
If Technical Specification is exceeded, appropriate action is identified	☑	☐
The procedure references valve numbers, motor control numbers, power supplies. Instrumentation identification is clear and correct	☑	☐
When encountered, E.Q. related equipment is identified as such	☐	☑
Procedure steps are clear and accurate. They are not unnecessarily difficult to implement	☑	☐
The procedure reflects the latest system or component configuration	☑	☐
The procedure reflects work as it is to be done at the station	☑	☐
Procedure removes any jumpers or blocks and restores lifted leads used to effect the work	☐	☑
"RETURN TO SERVICE" uses double verification and identifies specifics being verified	☐	☑
For maintenance procedures, "RETURN TO SERVICE" either performs a POST MAINTENANCE TEST or references a required test	☐	☑
MARK - UPs are cleared or surrendered	☐	☑
"ACCEPTANCE CRITERIA" identifies accomplishment of specific goals	☑	☐

FORM PREPARED BY G. Thomas DATE 4-3-90

FIG 2.0-2 SH 4 OF 4

NINE MILE POINT NUCLEAR STATION

NINE MILE POINT UNIT 1

OFF-SITE DOSE CALCULATION MANUAL (ODCM)

APPROVALS	SIGNATURES	DATE AND INITIALS REVISION 8	REVISION 9	REVISION 10
General Superintendent Nuclear Generation K. A. Dahlberg J. L. Willis	FOR INFORMATION ONLY			

Summary of Pages

Revision 8 (Effective 7/1/90)

Page	Date
1,2,5,6,8,9,11,17,41-44,48, 49,53,54,56-58,90,91,94-96	February 1987
3,4,7,10,20,23,27	December 1987
50,51	January 1988
19,21,22,24-26	February 1990
i,ii,iii,12-16,18,28-40,45-47, 52,55,59-89,92,93,97-129	June 1990

NIAGARA MOHAWK POWER CORPORATION

THIS PROCEDURE NOT TO BE USED AFTER June 1992 SUBJECT TO PERIODIC REVIEW.