Attachment 2

Non-proprietary Calculations

Non - PROPRIETARY version

AREVA TRANSNUCLEAR INC.	Form 3.2-1 Calculation Cover Sheet TIP 3.2 (Revision 3)	Calculation No.:	13302-0600
		Revision No.:	1
		Page: 1 of 35	

DCR NO (if applicable) : *13302-001*	PROJECT NAME: SMUD General Services
PROJECT NO: 13302	CLIENT: SMUD

CALCULATION TITLE:

Rancho Seco NUHOMS®-24P Criticality Analysis – Damaged Fuel Evaluation for As Loaded FO- and FC- DSCs

SUMMARY DESCRIPTION:

1) Calculation Summary

This calculation evaluates the effect on criticality of the Rancho Seco NUHOMS®-24P FO- / FC –DSCs due to loading of damaged fuel assemblies. A bounding configuration based on actual loaded fuel assemblies is utilized to determine the impact on criticality. The SCALE 4.4 computer code system is utilized to perform this evaluation. The design basis KENO models utilized in the previous calculations are re-evaluated using SCALE 4.4 in order to determine the effect on criticality. ***This revision is an editorial correction to change the number of loaded DSCs (with fuel assemblies) from 24 to 20 in Section 1.0***

2) Storage Media Description

1 CD-ROM attached. ***All Computer Cases from Revision 0 remain unchanged for Revision 1***

If original issue, is licensing review per TIP 3.5 required? ***N/A since this is a revision***

Yes ☐ **No** ☒ **(explain below)**

This calculation is prepared in support of a submittal by SMUD that is subject to review by the NRC for a system that is governed by a site specific license. Therefore, a licensing review per TIP 3.5 by Transnuclear is not required.
See Page 2 for Licensing references.

Software Utilized: ***NONE (For Rev. 1). Software used in Rev. 0 is listed below:*** SCALE 4.4 PC (CSAS25 Module)	**Version:** C00545MNYCP00
Calculation is complete: Originator Name and Signature: **George Jackson** G M Jackson	Date: 9/19/08
Calculation has been checked for consistency, completeness and correctness: Checker Name and Signature: **Prakash Narayanan** A. Prakash	Date: 09/19/2008
Calculation is approved for use: Joyant Banerjee for Ian McInnes Project Engineer Name and Signature:	Date: 9/19/2008

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REVISION SUMMARY

REV.	DATE	DESCRIPTION	AFFECTED PAGES	AFFECTED DISKS
0	*04/23/2008*	Initial Issue	ALL	1
1	9/19/08	*Revised to correct a typographical error. Changed pages shown by a Revision bars – Pages 1,2 and 5*	*ALL*	*None*

Licensing References:

- Rancho Seco Independent Spent Fuel Storage Installation Material License No. SNM-2510
- Appendix to the Material License No. SNM-2510: Technical Specifications
- Rancho Seco ISFSI Final Safety Analysis Report, Revision 3 (as updated in June 2006)

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