FEB 26 1999

ENGINEERING DATA TRANSMITTAL

Page 1 of 1
1. EDT 625782

2. To: (Receiving Organization) Distribution		3. From: (Originating Organization) Spent Nuclear Fuel		4. Related EDT No.: N/A	
5. Proj./Prog./Dept./Div.: Spent Nuclear Fuel		6. Cog. Engr.: JJ Irwin, R3-86		7. Purchase Order No.: N/A	
8. Originator Remarks: This Document presents the Supporting Calculation Database for the Cold Vacuum Drying Facility.				9. Equip./Component No.: N/A	
				10. System/Bldg./Facility: N/A	
11. Receiver Remarks: Design Baseline No. <i>✓</i> <i>Bump 2-26-99</i>				12. Major Assem. Dwg. No.: N/A	
				13. Permit/Permit Application No.: N/A	
				14. Required Response Date: 10/23/98	

15. DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Approval Designator	Reason for Transmittal	Originator Disposition	Receiver Disposition
1	SNF-3001		0	Cold Vacuum Drying Facility Supporting Data and Calculation Database	<i>ESQ</i> <i>2-26-99</i>	1		

16. KEY					
Approval Designator (F)		Reason for Transmittal (G)		Disposition (H) & (I)	
E, S, G, D or N/A (see WHC-CM-3-5, Sec.12.7)		1. Approval 2. Release 3. Information	4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment	4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)										(G)	(H)
Reason	Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	Reason	Disp.
1	/	Cog. Eng. JJ Irwin	<i>JJ Irwin</i>	10/14/98	R3-86	CR Miska	<i>CR Miska</i>		R3-86	3X	6
1	/	Cog. Mgr. KA Boes	<i>KA Boes</i>	2/25/99	R3-86	WC Alaconis	<i>WC Alaconis</i>	10/19/98	R3-86	3X	6
1	/	QA SL Mischke	<i>SL Mischke</i>	3/9/99	R3-86	Project Files			R3-11		
1	/	Safety JR Brehm	<i>JR Brehm</i>	2/8/99	R3-26	CVD Files (BM Brown)			R3-86		
3	6	Env. JE Turnbaugh	<i>JE Turnbaugh</i>	10/21/98	R3-79						
1	/	DA: R. Whitehurst	<i>R. Whitehurst</i>	1/29/99	R3-86						
1	/	DA: CC Pitkoff	<i>CC Pitkoff</i>	2/25/99	R3-86						

18. Signature of EDT Originator <i>JJ Irwin</i> 11/14/98		19. Authorized Representative Date for Receiving Organization <i>JJ Irwin</i> 2/26/99		20. Cognizant Manager Date <i>KA Boes</i> 2/25/99		21. DOE APPROVAL (if required) Ctrl. No. ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments	
---	--	--	--	--	--	---	--

SPENT NUCLEAR FUEL PROJECT COLD VACUUM DRYING FACILITY SUPPORTING DATA AND CALCULATION DATABASE

J. J. Irwin, C. R. Miska
Numatec Hanford Corporation, Richland, Washington 99352

C. C. Pitkoff, R. Whitehurst
DE&S Hanford, Inc., Richland, Washington 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: 625782 UC: 721
Org Code: 83300 Charge Code: 105560
B&R Code: 39EW70400 Total Pages: 1315
012-2649.

Key Words: Cold Vacuum Drying, Supporting Calculations Database

Abstract: This document provides a database of supporting calculations for the Cold Vacuum Drying Facility (CVDF). The database was developed in conjunction with HNF-SD-SNF-SAR-002, *Safety Analysis Report for the Cold Vacuum Drying Facility, Phase 2, Supporting Installation of Processing Systems* (Garvin 1998), The HNF-SD-SNF-DRD-002, 1997, *Cold Vacuum Drying Facility Design Requirements*, Rev. 2, and the CVDF Summary Design Report. The database contains calculation report entries for all process, safety and facility systems in the CVDF, a general CVD operations sequence and the CVDF System Design Descriptions (SDDs). This database been developed for the SNFP CVDF Engineering Organization and shall be updated, expanded, and revised in accordance with future design, construction and startup phases of the CVDF until the CVDF final ORR is approved.

TRADEMARK DISCLAIMER. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

Printed in the United States of America. To obtain copies of this document, contact: Document Control Services, P.O. Box 950, Mailstop H6-08, Richland WA 99352, Phone (509) 372-2420; Fax (509) 376-4989.

Release Approval

Date

Approved for Public Release

Rev. 0: 2/4/99						SNF-3001 CVDF SUPPORTING DATA AND CALCULATION DATABASE Rev. 0				
Originator	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)	
Design, Fabrication, Construction and Operations Requirements										
SNFP	WHC-SD-SNF-FRD-020	12/16/98	1	K Basin Spent Nuclear Fuel Cold Vacuum Drying Facility Functions and Requirements	all	GS to SC	N/A	N/A	N/A	
SNFP	HNF-SD-SNF-DRD-002	04/10/98	3A	Cold Vacuum Drying Facility (CVDF) Design Requirements Document, Irwin, Pitkoff, Whitehurst, ECN # 642492, 645034, 645041, 645063, 645065, 651411, 651414, 652251	all	GS to SC	N/A	N/A	N/A	
SNFP	SNF-2356	02/04/99	1	SNFP Cold Vacuum Drying Facility Operations Manual, Irwin, Pitkoff, Whitehurst, EDT 623998	all	GS to SC	N/A	N/A	N/A	
SNFP	SNF-3060		draft	CVDF Personnel Monitoring System SDD	all	GS to SC	N/A	N/A	N/A	
SNFP	SNF-3061		draft	CVDF Civil/Structural System SDD	05	GS	N/A	N/A	N/A	
SNFP	SNF-3062	12/08/98	0	CVDF Vacuum and Purge System SDD, EDT 625179	06	GS to SC	N/A	N/A	N/A	
SNFP	SNF-3063	12/08/98	0	CVDF Residual Gas Monitoring System SDD, EDT 625180	07-1	GS & SC	N/A	N/A	N/A	
SNFP	SNF-3064		draft	CVDF Helium MSLD and Auxiliary Vacuum System SDD	07-2	GS	N/A	N/A	N/A	
SNFP	SNF-3065		draft	CVDF Communications System SDD	07-3	GS	N/A	N/A	N/A	
SNFP	SNF-3066		draft	CVDF Compressed Air System SDD	11	GS	N/A	N/A	N/A	
SNFP	SNF-3067		draft	CVDF General Services Helium System SDD	12	GS	N/A	N/A	N/A	
SNFP	SNF-3068	12/08/98	0	CVDF Safety Class Helium System SDD, EDT 625182	13-1	GS	N/A	N/A	N/A	
SNFP	SNF-3072		draft	CVDF Cranes and Hoists SDD	13-2	GS	N/A	N/A	N/A	
SNFP	SNF-3073		draft	CVDF Effluent Drains System SDD	14	GS	N/A	N/A	N/A	
SNFP	SNF-3074		draft	CVDF Condensate Collection System SDD	18	GS	N/A	N/A	N/A	
SNFP	SNF-3075		draft	CVDF Electrical System SDD	19	GS	N/A	N/A	N/A	
SNFP	SNF-3076		draft	CVDF Specialty Equipment and Special Tools SDD	20	GS	N/A	N/A	N/A	
SNFP	SNF-3077		draft	CVDF Fire Protection System SDD	100 & 101	GS	N/A	N/A	N/A	
SNFP	SNF-3078		draft	CVDF De-Ionized Water System SDD	24	GS	N/A	N/A	N/A	
SNFP	SNF-3079		draft	CVDF Potable Water System SDD	25	GS	N/A	N/A	N/A	
SNFP	SNF-3080		draft	CVDF Sewage Collection System SDD	26	GS	N/A	N/A	N/A	
SNFP	SNF-3081		draft	CVDF HVAC System SDD	27	GS	N/A	N/A	N/A	
SNFP	SNF-3082	12/08/98	0	CVDF Process Water Conditioning System SDD, EDT 625186	30	GS & SS	N/A	N/A	N/A	
SNFP	SNF-3083	12/08/98	0	CVDF Conditioned Water Shipping System SDD, EDT 625187	46-1	GS	N/A	N/A	N/A	
SNFP	SNF-3084	12/08/98	0	CVDF Contaminated Water Sampling and Analysis System SDD, EDT 625188	46-2	GS	N/A	N/A	N/A	
SNFP	SNF-3085	12/08/98	0	CVDF Tempered Water and Tempered Water Cooling System SDD, EDT 625189	46-3	GS	N/A	N/A	N/A	
SNFP	SNF-3086	12/08/98	0	CVDF Chilled Water System SDD, EDT 625190	47-1 & 47-2	GS & SC	N/A	N/A	N/A	
SNFP	SNF-3087	12/08/98	0	CVDF Vacuum and Purge Chilled Water System SDD, EDT 625191	47-3	GS	N/A	N/A	N/A	
SNFP	SNF-3088		draft	CVDF Stack Monitoring System SDD	47-4	GS	N/A	N/A	N/A	
SNFP	SNF-3089		draft	CVDF Security System SDD	50	GS	N/A	N/A	N/A	
SNFP	SNF-3090		draft	CVDF Monitoring and Control System SDD	54	GS	N/A	N/A	N/A	
SNFP	SNF-3091		draft	CVDF Safety Class I&C System SDD	93-1	GS	N/A	N/A	N/A	
					93-2	SC	N/A	N/A	N/A	
DOE Order 6430.1A Compliance Review										
SNFP	SNF-2825	06/04/98	0	SNFP Human Factors Engineering (HFE) Analysis, Romero, H. A., Duke Engineering & Services Hanford, Richland, Washington.	all	N/A	N/A	N/A	N/A	
SNFP	SNF-2408		draft	ALARA Compliance Review	all	N/A	N/A	N/A	N/A	
TRI		09/30/98	draft	DOE 6430.1A Compliance Assessment Deliverable, Letter, R. D. Carrell, Technical Resources International, to C. C. Pitkoff, Duke Engineering and Services Hanford	all	N/A	N/A	N/A	N/A	
MERRICK	HNF-SD-W441-FDR-001		draft	Cold Vacuum Drying Final Design Report (Draft by Merrick Engineers)	all	N/A	N/A	N/A	N/A	
MERRICK	SNF-2408		draft	Cold Vacuum Drying Facility K-Basin SNFP Design Summary Report (Draft by Merrick Engineers)	all	N/A	N/A	N/A	N/A	
MERRICK	SNF-2408		draft	Codes/Standards Compliance Review	all	N/A	N/A	N/A	N/A	
MERRICK	SNF-2408		draft	Reliability and Maintainability Analysis (RMA) Compliance Review	all	N/A	N/A	N/A	N/A	
MERRICK	SNF-2408		draft	DOE Order 6430.1A Compliance Review	all	N/A	N/A	N/A	N/A	
NRC Equivalency Compliance Review										
SNFP	HNF-SD-SNF-DB-003	12/03/98	4A	Spent Nuclear Fuel Project Path Forward Additional NRC Requirements, ECN #637185, Duke Engineering & Services Hanford, Richland, Washington.	all	N/A	N/A	N/A	N/A	
Safety/SAR Reports & Calculations										
SNFP	WHC-SD-SNF-PSE-003	07/02/96	0	Preliminary Safety Evaluation for the Spent Nuclear Fuel Cold Vacuum Drying System, Westinghouse Hanford Company, Richland, Washington.	all	GS to SC	all	N/A	N/A	
SNFP	HNF-SD-SNF-SAR-002	10/28/97	2	Safety Analysis Report for the Cold Vacuum Drying Facility, Phase 1, Supporting Civil/Structural Construction, ECN 637155, Duke Engineering & Services Hanford, Richland, Washington.	all	GS to SC	all	N/A	N/A	

Rev. 0: 2/4/99	Originator	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
	SNFP	HNF-SD-SNF-SAR-002	06/18/98	4	Safety Analysis Report for the Cold Vacuum Drying Facility, Phase 2, Supporting Installation of Processing Systems, Duke Engineering & Services Hanford, Richland, Washington.	all	GS to SC	all	N/A	N/A
	SNFP	HNF-SD-SNF-SEL-002	12/21/98	5	SNFP Cold Vacuum Drying Facility Safety Equipment List, Irwin, J. J., Pitkoff, C. P. and Whitehurst, R., ECN 645067, Duke Engineering & Services Hanford, Richland, Washington.	all	GS to SC	all	N/A	N/A
	SNFP	HNF-SD-SNF-SARR-005	04/01/98	1	SNFP Multicanister Overpack Topical Report, Duke Engineering & Services Hanford, Richland, Washington.	07	SC	PC-3	N/A	N/A
	SNFP	HNF-SD-SNF-HIE-002	10/22/97	0	CVDF Safety Class Equipment Identification Process, C. Pili-Vincenes, Numatec Hanford Corp., Richland, Washington.	all	GS to SC	all	N/A	N/A
	SNFP	HNF-SD-SNF-HIE-004	08/01/98	2A	Cold Vacuum Drying Facility Hazard Analysis Report, D. E. Krahn, Fluor Daniel Hanford Incorporated, Richland, Washington.	all	GS to SC	all	N/A	N/A
	SNFP	HNF-2576	04/22/98	0	CVDF: Phase 1 FMEA/FMECA Session Report, Duke Engineering & Services Hanford, Richland, Washington, C.C. Pitkoff	all	GS to SC	all	N/A	N/A
	SNFP	HNF-SD-SNF-CN-021	01/01/97	1	Cold Vacuum Drying Facility Building Leak Rate Criteria, Fluor Daniel Northwest, Richland, Washington.	06	GS to SC	all	N/A	N/A
	SNFP	HNF-SD-SNF-CN-023	10/03/97	0	Thermal Analysis of Cold Vacuum Drying of Spent Nuclear Fuel, D. R. Duncan and D. E. Ball, EDT-620116, Duke Engineering & Services Hanford, Richland, Washington.	07 & 47-1	SC	PC-3	IR	C
	SNFP	HNF-1910	01/01/97	0	Simulation of Air Ingress into a Multi-Canister Overpack, T.A.Flament, M.G.Plys, and S.J.Lee, Duke Engineering & Services Hanford Inc.	07 & 47-1	SC	PC-3	IR	C
	SNFP	HNF-SD-SNF-ANAL-015		0	Cask Lid Accidental Drops Onto Multi-Canister Overpack, EDT, Fluor Daniel Northwest Hanford, Richland, Washington.	07	SC	PC-1	IR	C
	SNFP	HNF-SD-SNF-TI-059	01/30/98	1	A Discussion on the Methodology for Calculating Radiological and Toxicological Consequences for the Spent Nuclear Fuel Project at the Hanford Site, P. D. Rittmann, ECN 637174, Fluor Daniel Northwest, Inc., Richland, Washington 99352	all	SC	PC-1	N/A	N/A
	SNFP	WHC-SD-WM-CN-079	10/16/96	0	MCO Blowdown Release Fraction, EDT 619414, Fluor Daniel Northwest Hanford, Richland, Washington	all	SC	PC-1	IR	C
	SNFP	SNF-2770	12/22/98	1	Cold Vacuum Drying Facility Design Basis Accident Analysis Documentation	all	SC	PC-3	IR	C
	JMI	JMI-9602-3	09/23/98	1	Simulation of Fuel Heatup Due to Uranium/Water Reaction During Cold Vacuum Drying, John Marvin, Inc., Richland, Washington.	all	SC	PC-1	IR	C
	JMI	JMI-9602-4	08/25/98	1	Validation and Verification for Application to Thermal Analyses of Spent Nuclear Fuel Processes, John Marvin, Inc., Richland, Washington.	all	SC	PC-1	IR	C
	FAUSKE	FAI/97-48	04/03/97	0	Simulation of Cold Vacuum Drying with Modified Scrap Baskets, Fauske and Assoc., Burr Ridge, Illinois	all	SC	PC-1	IR	C
	FAUSKE	FAI/97-31	04/14/97	0	Risk-based Assessment of Fuel Reaction Potential During CVD, Fauske & Associates report, M.G.Plys and B. Malinovic, submitted to J. Swenson and P. Leroy, Duke Engineering & Services Hanford.	all	SC	PC-1	IR	C
	FAUSKE		04/10/97	0	Quick Look: Ignition Theory Application to CVD, Fauske & Associates letter, M. G. Plys to J.Swenson and P.Leroy, Duke Engineering & Services Hanford.	all	SC	PC-1	IR	C
	FAUSKE	FAI/97-37	03/03/97	0	Simulation of Cold Vacuum Drying for Safety Analysis, Fauske & Associates report, M.G.Plys and S.J.Lee.	all	SC	PC-1	IR	C
	FAUSKE		04/21/97	0	Ignition Theory for CVD, Quick Look at Scrap Fins, Fauske & Associates letter, M. G. Plys to J. Swenson and P.Leroy.	all	SC	PC-1	IR	C
	FAUSKE		04/24/97	0	Temperature Field in a Heat Generating Sector of a Circle, Fauske & Associates letter, M.Epstein to H. K.Fauske et al.	all	SC	PC-1	IR	C
	FAUSKE		08/08/96	0	Aerosol Fallout and Leakage Following MCO Blowdown (Memo M. G. Plys to D.Reny, Westinghouse Hanford Company), Fauske and Associates, Burr Ridge, Illinois.	all	SC	PC-1	IR	C
	FAUSKE		08/08/96	0	Post-Combustion MCO Blowdown (Memo M. G. Plys to D. Reny, Westinghouse Hanford Company), Fauske and Associates, Burr Ridge, Illinois.	all	SC	PC-1	IR	C
Criticality, Shielding, Radiation and ALARA Analyses										
	SNFP	JJI-98-003	09/03/98	0	CVDF Facility Worker Radiation Dose Assessment	all	GS	PC-1	GE	C
	SNFP	WHC-SD-SNF-CAVR-001	01/01/96	0	Recent Dose Rate Calculational Summary For N-Reactor Fuel Handling and Shipping from K-Basin (Radiation Field Analysis for MCO/Cask), Westinghouse Hanford Company, Richland, Washington.	all	SC	PC-1	IR	C
	SNFP	HNF-2850	06/12/98	0	Shielding Analysis for the Cold Vacuum Drying Project, J. V. Nelson, EDT 625206, Fluor Daniel Northwest, Inc., Richland, Washington.	all	SC	PC-1	IR	C
	SNFP	8M730-JSL-95-001	11/29/95		Dose Rate Calculational Summary For N-Reactor Fuel in K-Basin Casks and K-Basin Loadout Pit, Memo, Westinghouse Hanford Company, Richland, Washington.	all	SC	PC-1	IR	C
	SNFP	HNF-SD-SNF-CN-026	10/06/97	0	MCO Shield Plug Dose Rate Analysis, K. E. Hillesland, EDT 622976, Fluor Daniel Northwest, Inc, Richland, Washington	all	SC	PC-1	IR	C
	SNFP	HNF-SD-SNF-CSER-005	02/21/97	2	Criticality Safety Evaluation Report for Spent Nuclear Fuel Processing and Storage Facilities, ECN-605707, Duke Eng. & Services Hanford, Richland, WA	all	SC	PC-1	IR	C
	SNFP	HNF-SD-SNF-CSER-006	01/01/97	0	Criticality Safety Evaluation Report for the Cold Vacuum Drying Facility's Process Water Handling System, Fluor Daniel Hanford, Incorporated, Richland, Washington.	all	SC	PC-1	IR	C
	SNFP	HNF-SD-SNF-FRS-CSER-01	01/01/97	0	Fuel Removal System Criticality Safety Evaluation Report, Duke Engineering & Services Hanford, Richland, Washington.	all	SC	PC-1	IR	C
CVDF Environmental Permitting										
	SNFP	DOE/RL-96-47	11/01/96	0	CVDF Notice of Construction to US EPA	all	GS	N/A	N/A	N/A
	SNFP	DOE/RL-96-55		0	CVDF Notice of Construction to WA. State Dept. Of Ecology	all	GS	N/A	N/A	N/A
	SNFP	DOE/RL-96-54		0	CVDF Notice of Construction to WA. State Dept. Of Health	all	GS	N/A	N/A	N/A
	SNFP	2T1A1:DJW:98-013		0	Sanitary Waste Permit	all	GS	N/A	N/A	N/A

Rev. 0: 2/4/99				Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
Originator	Document	Date								
Facility Throughput Analysis										
SNFP	HNF-SD-SNF-RPT-011	01/29/99	1A	Spent Nuclear Fuel Project Design Basis Capacity Study , A. L. Pajunen, ECN-645113, Westinghouse Hanford Company, Richland, Washington	all	GS	N/A	N/A	N/A	
SNFP	WHC-SD-SNF-TI-016	07/21/97	0A	Development of Design Basis Capacity for Spent Nuclear Fuel Project Systems , Pajunen, A. L. , ECN 638939, Westinghouse Hanford Company, Richland, Washington	all	GS	N/A	N/A	N/A	
CVD Process Reports & Calculations										
SNFP	HNF-1851	10/22/98	2	Cold Vacuum Drying Residual Free Water Test Description , A. L. Pajunen, ECN #645093, SGN Eurisys Services Corp., Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-2155	03/03/98	0	MCO Combustible Gas Management Leak Test Acceptance Criteria, D. L. Sherrell, EDT 623984, FDNW, Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-2324	03/02/98	0	Goth-SNF Simulation of the Hanford Spent Nuclear Fuel Cold Vacuum Drying Proof of Concept Tests, C. R. Miska, EDT 623992 (JMI-98030101-1), FDNW, Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-2341	03/09/98	0	Hanford Spent Nuclear Fuel Cold Vacuum Drying Process Goth-SNF Model Simulations of Normal Operations, EDT-623994 (JMI-98030105-1) B. C. Fryer, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-2344	03/01/98	0	Goth-SNF Simulation of the Hanford Spent Nuclear Fuel Cold Vacuum Drying Tempered Water System, D. O. Ogden, FDNW, Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-2402	06/10/98	0	Hanford Spent Nuclear Fuel Cold Vacuum Drying Proof of Performance Test Procedure , K. J. McCracken, EDT 606764, FDNW, Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-2882	06/10/98	0	Cold Vacuum Drying Residual Free Water Removal Issue Closure Package , A. L. Pajunen, EDT #625202, Cogema Engineering Corp., Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-3342	09/01/98	0	Hanford SNF Cold Vacuum Drying First Article Initial Test Finding Report, K. J. McCracken, Fluor Daniel Hanford Corp., Richland, Washington.	07	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-CN-016	12/16/97	0	Evaluation of MCO Pressure Relief Orifice Effectiveness , D.R.Duncan and M.Thurgood, Duke Engineering & Services Hanford Inc.	07	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-CN-022	10/02/97	0	Feasibility of Direct Reactivity Measurement in MCO at the Cold Vacuum Drying Facility , R.G.Cowan, EDT 616163, Duke Engineering & Services Hanford Inc. (Contains FAI/97-32, same title, R.J.Hammersley)	07	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-CN-027	01/22/98	0	SNF Process Validation Requirements Document , EDT 616164, DE&S Hanford, Richland, Washington.	all	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-CN-032	09/04/97	0	Assessment of Feasibility of Proof Test for Radiolytic Generation of Oxygen in an MCO , R.G.Cowan and R.J.Hammersley, EDT 616165, Duke Engineering & Services Hanford Inc.	07	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-OCD-001	10/22/98	3	Spent Nuclear Fuel Project Product Specification , J.P.Sederburg, ECN-645062, Duke Engineering & Services Hanford Inc.	07	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-TM-001	10/07/97	0	Flowsheet Description for the Cold Vacuum Drying Facility Supporting the Spent Nuclear Fuel Project , A. L. Pajunen, EDT-620121, DE&S Hanford, Richland, Washington.	all	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-TM-002	02/24/98	0	Spent Nuclear Fuel Processing Overview , A. N. Praga, EDT-623985, DESH, Richland, Washington.	all	GS	N/A	CK	M	
SNFP	HNF-SD-SNF-TRP-021	08/07/98	0	Hanford Spent Nuclear Fuel Cold Vacuum Drying Proof of Concept Test Report , Ritter, G. A., K. J. McCracken, J. J. Irwin, and B. Fryer, Fluor Daniel Northwest Hanford , Richland, Washington	07	GS	N/A	CK	M	
SNFP	HNF-SD-W441-CN-001	06/11/98	2A	Radionuclide Inventory of Bulk Multi-canister Overpack Water at the Cold Vacuum Drying Facility , D.L.Sherrell, ECN 652277, Duke Engineering & Services Hanford Inc.	all	GS	N/A	CK	M	
SNFP	SNF-4023	02/13/99	0	CVD External Hydrogen Management Evaluation , C. R. Miska, EDT-625813, Fluor Daniel Hanford Corp., Richland, Washington.	all	SS	N/A	CK	M	
SNFP	WHC-SD-SNF-ER-009	06/30/95	0	Vacuum Drying System Evaluation for K Basin Spent Fuel Removal , J. J. Irwin, Westinghouse Hanford Co., Richland, Washington.	07	GS	N/A	CK	M	
SNFP	WHC-SD-WM-ER-607	08/28/96	0	SNFP Vacuum Drying Thermal-Hydraulic Analysis and Dynamic Model Development Status Report , EDT 614687, Westinghouse Hanford Company, Richland, Washington.	07	GS	N/A	CK	M	
SNFP			draft	Goth-SNF Simulation of the Hanford Spent Nuclear Fuel Cold Vacuum Drying First Article Test Predictions, B. Fryer, EDT , FDNW, Richland, Washington.	07	GS	N/A	CK	M	
MERRICK	CVD-13	03/19/97	0	Gamma Radiation Effects on Materials of Construction for the Cold Vacuum Drying Facility	all	GS	N/A	CK	C	
MERRICK	CVD-17	03/29/97	0	Calculation of MCO Cond. Lid/Process Hood Weight for Lifting Sling Sizes and Configurations	06 & 14	GS	N/A	CK	M	
MERRICK	CVD-23 Process General	03/11/98	1	CVD Process Simulation Final Write-up	07	GS	N/A	CK	C	
MERRICK	CVD-24 Process General	04/07/98	0	Determination of Torque Values For Process Piping	all	GS	N/A	CK	M	
JMI	JMI-98030102-1	06/01/98	draft	Hanford SNFP Cold Vacuum Drying Process Pre-Test Goth-SNF Model Simulations of Future Proof of Performance/First Article Tests , B. C. Fryer, John Marvin, Inc., Richland, Washington.	07	GS	N/A	CK	C	
JMI	JMI-98030105-1	04/01/98	0	Hanford Spent Nuclear Fuel Cold Vacuum Drying Process Goth-SNF Model Simulations of Normal Operations, Supplement 1, B. C. Fryer, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	C	

Rev. 0: 2/4/99	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
JMI	JMI-98030105-2	06/18/98	0	Evaluation of Continuous Helium Recirculation Drying of SNF Using The Recirculation Pump, B. C. Fryer, John Marvin, Inc., Richland, Washington.	07	GS	N/A	CK	C
JMI	JMI-98030109-01	01/20/98	0	Evaluation of SNF Tempered Water System, D. M. Ogden, JMI, Richland, Washington.	47-1	GS	N/A	CK	C
JMI	JMI-980305-1	03/20/98	0	Evaluation of Level Swell and Helium Purge Rates Required to Maintain Hydrogen Concentrations Below Flammability Limits in the MCO, M. J. Thurgood, JMI, Richland, Washington.	07 & 13-1	GS	N/A	CK	C
JMI	JMI-980305-2	03/20/98	0	Evaluation of Vacuum Drying At Lower Temperatures and Hydrogen Concentrations During Draining of the MCO, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	C
JMI	JMI-980305-3	08/18/98	0	Evaluation of Methods for Handling Large Reaction Rate Multipliers for Cold Vacuum Drying of Spent Nuclear Fuel, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	C
JMI	JMI-980305-4	11/10/98	0	Study of Effect of Fins on Scrap Basket, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	C
JMI	JMI-980305-5	11/23/98	0	Evaluation of Alternatives for Providing Heat to the MCO for Cold Vacuum Drying Without Using the Tempered Water System Connection to the Cask Bottom, M. J. Thurgood and B. C. Fryer, JMI, Richland, Washington.	47-1	GS	N/A	CK	C
JMI	JMI-980305-6	12/15/98	0	Evaluation of Purge Vacuum Pumping Versus Vacuum Pumping with Helium Purge, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	C
JMI	JMI-980305-7	01/18/99	0	Evaluation of New Intact Fuel Basket Bottom Plate Hole Design on Flow Distribution, Drying, and Heating in the MCO, M. J. Thurgood, JMI, Richland, Washington.	07	GS	N/A	CK	C
JMI		05/30/97		Pressure Drop vs. Flow Characteristics Under 3 Modes of Operation: Pure Steam Pumping Vacuum Pump Only, Pure Steam Pumping Condenser Only, and Helium Recycle, Internal report, B. Fryer, John Marvin, Inc., Richland, WA.	07	GS	N/A	CK	C
JMI		03/19/97		Quantity of Residual Water Remaining in the MCO Following Draining and Drying, and its Distribution, Internal report, B. Fryer, John Marvin, Inc., Richland, WA.	07	GS	N/A	CK	C
JMI		06/01/98		Operations Sequence and Helium Injection Rates, B. C. Fryer, John Marvin, Inc. Richland, Washington	07 & 13-1	GS	N/A	CK	C
FAUSKE	HNF-2256	04/09/98	0	Simulation of Normal and Off-Normal Multi-Canister Overpack Behavior, M. Plys, et. al., EDT#623988, Fauske & Associates, Burr Ridge, Illinois.	07	GS	N/A	CK	C
FAUSKE		03/17/97		Simulation of Normal Operation of CVD, Fauske & Associates letter, M.G.Plys and S.J.Lee to J.Swenson and P.Leroy, Duke Engineering & Services Hanford.	07	GS	N/A	CK	C
FAUSKE		03/21/97		Simulation of Off-Normal Operation of CVD, Fauske & Associates letter, M. Plys and S.J.Lee to J.Swenson and P.Leroy.	07	GS	N/A	CK	C
FAUSKE		06/03/97		Preliminary Feasibility Assessment of Proof Test for Radiolytic Generation of Oxygen in an MCO Following Vacuum Drying, Fauske & Associates fax transmittal from R. Hammersley to D. Duncan.	07	GS	N/A	CK	C
VPS and TW System Reports & Calculations									
MERRICK	CVD-1	07/07/97	3	Size P-3*14 TW Recirculation Pump	47-1	GS	PC-1	CK	C
MERRICK	CVD-4	08/30/96	0	Impact of Automatic Valve Leakage on MCO Pressure Rise Test	07	GS	PC-1	CK	C
MERRICK	CVD-6	09/23/96	0	CVD Vacuum System Model	07	GS	PC-1	CK	C
MERRICK	CVD-10	12/19/97	3	CVDF Mass Balance: Water Removed During Purge & Heat, Vacuum Cycle and Pump Down Steps	07	GS	PC-1	CK	C
MERRICK	CVD-11	12/10/96	0	CVDF Mass Balance During Annulus Draining	47-1	GS	PC-1	CK	M
MERRICK	CVD-12	12/10/96	0	CVDF Mass Balance During Bulk Water Removal Step	46-1	GS	PC-1	CK	M
MERRICK	CVD-14	03/17/97	0	Pressure Drop Calculations for Blower VPS-2*15 Nitrogen Circulation Case	07	GS	PC-1	CK	C
MERRICK	CVD-15	11/17/97	2	Blower VPS-2*05/2*06 Pressure Drop Calculation - Helium Case	07	GS	PC-1	CK	C
MERRICK	CVD-27A	10/22/98	0	Process Gas Flow Rate Through SRV-2*17	07	GS	PC-1	CK	C
MERRICK	CVD-28	10/22/98	0	Pressure Drop of Steam from TW-HTR-3*11 to TW-TK-3*12	47-1	GS	PC-1	CK	C
MERRICK	CVD-28A	10/22/98	0	Pressure Drop of Steam from TW-TK-3*12 to Vent Line	47-1	GS	PC-1	CK	C
MERRICK	CVD-30	10/23/98	0	ASME B31.3 Pressure Design of Components, Pipe Thickness Calculation for Straight Pipe Under Internal Pressure	07 & 47-1	GS	PC-1	CK	C
MERRICK	CVD-31	10/23/98	0	Vent Path Flow on MCO Valve Operator	07	SC	PC-3	CK	C
SCHe System Reports & Calculations									
MERRICK	CVD-16	08/12/98	2	Safety Class Helium Flow Rate and Line Break Scenarios	13-2	SC	PC-3	ALT	C
MERRICK	CVD-16-ALT	08/05/98	0	Alternate Calc for CVD-16	13-2	SC	PC-3	CK	C
MERRICK	CVD-21	02/15/98	0	SCHe Losses Due to Isolation Valve Leakage	13-2	SC	PC-3	CK	C
MERRICK	CVD-25	09/30/98	0	SCHe Flow Requirements	13-2	SS	PC-3	ALT	C
MERRICK	CVD-25-ALT	09/30/98	0	Alternate Calculation for CVD-25	13-2	SS	PC-3	CK	C
MERRICK	CVD-29	10/22/98	0	Maximum Flow Rate Through (SCHe)-PCV-5*04	13-2	SC	PC-3	CK	C
MERRICK	CVD-29A	10/22/98	0	Pressure Drop from (SCHe)-PCV-5*04 to PCV-5*08 at Pin = 25 psig	13-2	SC	PC-3	CK	C
MERRICK	CVD-29B	10/22/98	0	Maximum Pressure in SCHe Supply Line After Rupture of PSE-5*05	13-2	SC	PC-3	CK	C
MERRICK	CVD-29C	10/22/98	0	Area Required for Flow Rate of Helium through PSE-5*05	13-2	SC	PC-3	CK	M

Rev. 0: 2/4/99				Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
Originator	Document	Date	Rev. #						
PWC System Reports & Calculations									
SNFP	WHC-SD-SNF-ES-022	06/18/95	0	Study for the Disposal of Process Water from the K Basins Cold Vacuum Drying Facility, Westinghouse Hanford Company, Richland, Washington.	46-1	GS	PC-2	GE	M
SNFP	HNF-SD-SNF-CN-022	01/01/97	0	Feasibility of Direct Reactivity Measurement in Multi-Canister Overpacks at the Cold Vacuum Drying Facility, EDT 616163, Duke Engineering & Services Hanford, Richland, Washington (FAI/97-32, Fauske and Assoc., Burr Ridge, Illinois.	46-1	GS	PC-2	GE	M
		10/16/96		Brown, G.N., Work Order ED6546, "Participation in the Spent Nuclear Fuel Project Cold Vacuum Drying Facility Design Sub-Project (Evaluation of Ion Exchange Resins)", Pacific Northwest National Laboratory, Richland, WA	46-1	GS	PC-2	GE	M
MERRICK	CVD-2	08/26/96	0	Compare IX Columns to IX Modules	46-1	GS	PC-2	CK	C
MERRICK	CVD-5	09/12/96	0	Calculate the RLW Tank LW-TK-4032 Cooling	46-1	GS	PC-2	CK	C
MERRICK	CVD-7	10/20/96	0	RLW System Cost Estimate	46-1	GS	PC-2	CK	C
MERRICK	CVD-9	11/04/96	0	IXM Modification with Filter Element	46-1	GS	PC-2	CK	C
MERRICK	CVD-18A	01/14/98	3	Size PWC-EJR-4031,	46-1	GS	PC-2	CK	C
MERRICK	CVD-18B	01/14/98	3	Size PWC-P-4035/6	46-1	GS	PC-2	CK	C
MERRICK	CVD-22	11/24/98	1	Velocity Required to Transport Particulates From the MCO	46-1	GS	PC-2	CK	C
MERRICK	MEI-2288-ME-01	03/05/98	1	Pump PWC-P-4001	46-1	GS	PC-2	CK	M
Civil Reports & Calculations									
MERRICK	MEI-2288-CV-01-A	08/21/96	0	Storm Runoff System	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-B	03/11/97	0	Flood	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-C	03/11/97	0	Storm 1	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-D	03/11/97	0	Storm 2	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-E	03/11/97	0	Flagnotes for page 202	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-F	03/11/97	0	Volume at point 1 from Area 1-3	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-G	03/11/97	0	Volume at point 2 from Area 3	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-H	03/11/97	0	Peak Flow and Time of Concentration	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-I	03/11/97	0	Point 3	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-J	03/11/97	0	Channel Section at Point 1 & 2	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-K	03/12/97	0	Check Channel Velocities	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-L	03/11/97	0	Storm 3	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-M	09/19/96	0	Retention Ponds	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-N	09/20/96	0	Area 2	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-O	09/20/96	0	Area 3 & 4	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-P	09/20/96	0	Area 5	06	GS	PC-1	CK	M
MERRICK	MEI-2288-CV-01-Q	03/11/96	0	Time of Concentration	06	GS	PC-1	CK	M
Structural Reports & Calculations									
CEG	NHC-9760595	11/07/97		Cold Vacuum Drying Facility Precast Panel Calculation Summary Report, external letter, G. P. Chevrier, Numatec Hanford Company to A. S. Daughtridge, Duke Engineering and Services Hanford					
MERRICK	MEI-2288-ST-01-A	08/31/96	0	Snow Drifts	06	GS	PC-1	CK	M
Administration Area									
MERRICK	MEI-2288-ST-02-A	04/29/96	0	Design Foundation, 50' x 60' Pre-Eng. Bldg.	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-B	04/29/96	0	Footing Type A	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-C	04/29/96	0	Snow	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-D	01/25/95	0	F 202 Exterior	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-E	04/29/96	0	Footing Type C & B	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-F	01/25/95	0	F 201 Exterior	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-G	08/20/96	0	Footing Type D	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-H	02/14/95	0	F 204 Exterior	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-I	08/21/96	0	Footing Type A	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-J	08/30/96	0	Hair Pins Along Gridline 7 thru 9	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-K	01/17/95	0	Hair Pins	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-L	09/03/96	0	Allowable deflection of Building	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-M	09/12/96	0	Office Vestibule	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-N	09/12/96	0	Roof Section	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-O	09/12/96	0	Joist	06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-02-P	09/12/96	0	Walls	06	GS	PC-1	CK	M

Rev. 0: 2/4/99		Rev. #		Document Title		System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
Originator		Document		Date						
Administration Area: Ceiling Framing										
MERRICK	MEI-2288-ST-03-A	09/15/96	0	Size Ceiling Framing		06	GS	PC-1	CK	M
MERRICK	MEI-2288-ST-03-B	09/15/96	0	Size Header		06	GS	PC-1	CK	M
Process Area: Wind Forces										
MERRICK	MEI-2288-ST-04-A	08/30/96	0	Wind Forces & Tornado		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-04-B	08/30/96	0	Corners & Edges		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-04-C	08/29/96	0	Missile Impact		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-04-D	10/28/96	0	Revised Missile Criteria		06	GS	PC-2	IR	
Process Area: Roof										
MERRICK	MEI-2288-ST-05-A	08/30/96	0	Process Area Roof Design		06	SS	PC-3	IR	
MERRICK	MEI-2288-ST-05-B	08/30/96	0	Roof Deck		06	SS	PC-3	IR	
MERRICK	MEI-2288-ST-05-C	08/31/96	0	Roof Beam		06	SS	PC-3	IR	
MERRICK	MEI-2288-ST-05-D	08/31/96	0	Purlins at Middle Roof		06	SS	PC-3	IR	
MERRICK	MEI-2288-ST-05-E	08/31/96	0	Preliminary E-W Beam		06	SS	PC-3	IR	
MERRICK	MEI-2288-ST-05-F	08/31/96	0	Purlin Flange Bracing		06	SS	PC-3	IR	
MERRICK	MEI-2288-ST-05-G	08/31/96	0	Ponding		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-05-H	09/06/96	0	Roof Beam Line 2 & 7		06	SS	PC-3	IR	
Process Area: Bridge Crane										
MERRICK	MEI-2288-ST-06-A	05/01/96	0	Estimated Bridge Crane loads		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-06-B	05/21/96	0	Loads to Runway Beam		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-06-C	05/02/96	0	Loads to Column		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-06-D	08/26/96	0	Bridge Crane		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-06-E	03/18/97	0	Crane Runway and Connections		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-06-F	03/15/97	0	Lateral Force from Bridge Crane		06	GS	PC-2	IR	
MERRICK	MEI-2288-ST-06-G	03/15/97	0	Seismic Forces on Bridge Crane		06	GS	PC-3	IR	
MERRICK	MEI-2288-ST-06-H	03/15/97	0	STADD Model of Bridge Crane		06		PC-2	IR	
MERRICK	MEI-2288-ST-06-I	03/16/97	0	Check "Stub Beam" Connection		06		PC-2	IR	
MERRICK	MEI-2288-ST-06-J	03/15/97	0	Stub Beam		06		PC-2	IR	
MERRICK	MEI-2288-ST-06-K	03/16/97	0	Shear Stress		06		PC-2	IR	
MERRICK	MEI-2288-ST-06-L	03/24/97	0	Check Stress on Welded Connection		06		PC-2	IR	
MERRICK	MEI-2288-ST-06-M	03/16/97	0	Brace				PC-2	IR	
Process Area: 2nd Floor										
MERRICK	MEI-2288-ST-07-A	06/26/96	0	Size Beams for 2nd Floor		06	SC	PC-3	IR	
MERRICK	MEI-2288-ST-07-B	06/26/96	0	Check Deck Plate		06	SC	PC-3	IR	
MERRICK	MEI-2288-ST-07-C	06/26/96	0	Stairs		06	GS	PC-1	IR	
MERRICK	MEI-2288-ST-07-D	06/26/96	0	Beams A & B		06			IR	
MERRICK	MEI-2288-ST-07-E	07/08/96	0	Beams C & D		06			IR	
MERRICK	MEI-2288-ST-07-F	07/09/96	0	Beams E & F		06			IR	
MERRICK	MEI-2288-ST-07-G	07/09/96	0	Beam G		06			IR	
MERRICK	MEI-2288-ST-07-H	07/09/96	0	Beam L		06			IR	
MERRICK	MEI-2288-ST-07-I	07/09/96	0	Wind Girt		06			IR	
MERRICK	MEI-2288-ST-07-J	09/09/96	0	Strut From Girt to 2nd Floor		06			IR	
MERRICK	MEI-2288-ST-07-K	07/09/96	0	Mezzanine Columns		06	SC	PC-3	IR	
MERRICK	MEI-2288-ST-07-L	07/09/96	0	Column C		06			IR	
MERRICK	MEI-2288-ST-07-M	08/19/96	0	Footings for Mezzanine Columns		06			IR	
MERRICK	MEI-2288-ST-07-N	03/18/97	0	Wind Girt at Line E/L = 10'-3"		06			IR	
MERRICK	MEI-2288-ST-07-O	07/14/97	0	Check Mezzanine for Loads		06			IR	
Process Area: Wind Lateral Loads										
MERRICK	MEI-2288-ST-08-A	09/13/96	0	Lateral Wind Loads Due to Wind and Tornado		06	SC	PC-2	IR	
MERRICK	MEI-2288-ST-08-B	09/13/96	0	Design Wall Panel Line A&E		06			IR	
MERRICK	MEI-2288-ST-08-C	09/13/96	0	East-West Direction		06			IR	
MERRICK	MEI-2288-ST-08-D	09/13/96	0	Provide Brace to Transfer Force		06			IR	
MERRICK	MEI-2288-ST-08-E	07/01/96	0	Bracing STADD Model		06			IR	
MERRICK	MEI-2288-ST-08-F	10/28/96	0	Point Loads for Tornado		06			IR	

Rev. 0: 2/4/99									
Originator	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
MERRICK	MEI-2288-ST-08-G	10/30/96	0	Check Connection, detail 5, sht 82129	06			IR	
MERRICK	MEI-2288-ST-08-H	09/05/96	0	Endwall, Line 2 & 7	06			IR	
MERRICK	MEI-2288-ST-08-I	08/28/96	0	Middle Endwall Columns	06			IR	
MERRICK	MEI-2288-ST-08-J	09/06/96	0	Columns at Endwall	06			IR	
MERRICK	MEI-2288-ST-08-K	09/06/96	0	Girts, Line A	06			IR	
MERRICK	MEI-2288-ST-08-L	09/06/96	0	Section F	06			IR	
MERRICK	MEI-2288-ST-08-M	09/05/96	0	Section E	06			IR	
MERRICK	MEI-2288-ST-08-N	09/05/96	0	Shielding at Columns C & 1-7	06			IR	
MERRICK	MEI-2288-ST-08-O	01/04/97	0	Tank Area	06			IR	
MERRICK	MEI-2288-ST-08-P	01/04/97	0	East West	06			IR	
MERRICK	MEI-2288-ST-08-Q	01/04/97	0	Shear Wall East	06			IR	
MERRICK	MEI-2288-ST-08-R	01/04/97	0	Shear Wall A	06			IR	
MERRICK	MEI-2288-ST-08-S	01/04/97	0	Shear Wall 7	06			IR	
MERRICK	MEI-2288-ST-08-T	01/04/97	0	Shear Wall Line 2	06			IR	
MERRICK	MEI-2288-ST-08-U	01/04/97	0	Shear Wall F & C.8	06			IR	
MERRICK	MEI-2288-ST-08-V	01/04/97	0	Shear Wall Line 1	06			IR	
MERRICK	MEI-2288-ST-08	01/13/97	0	Check Process Area for Tornado Loads from Admin. Bldg.	06			IR	
MERRICK	MEI-2288-ST-08	01/13/97	0	Uplift from Admin. Bldg.	06			IR	
MERRICK	MEI-2288-ST-08-Y	01/13/97	0	Uplift from Additional Admin. Bldg.	06			IR	
MERRICK	MEI-2288-ST-08-Z	01/13/97	0	Uplift From Transfer Corridor	06			IR	
MERRICK	MEI-2288-ST-08-AA	01/14/97	0	Check W12x50 Wind Girt	06			IR	
MERRICK	MEI-2288-ST-08-BB	01/14/97	0	Check Increase in Uplift from Transfer Bldg.	06			IR	
MERRICK	MEI-2288-ST-08-CC	01/17/97	0	RCR 4-6, Roof Plate Diaphragm	06			IR	
MERRICK	MEI-2288-ST-08-DD	01/17/97	0	WLE-W Direction	06			IR	
MERRICK	MEI-2288-ST-08-EE	01/13/97	0	Spring Constant for Concrete shear Wall	06			IR	
MERRICK	MEI-2288-ST-08-FF	01/13/97	0	Redo Shear Wall on pg. L43	06			IR	
MERRICK	MEI-2288-ST-08-GG	01/17/97	0	WLE-W/Tank Room	06			IR	
MERRICK	MEI-2288-ST-08-HH	01/17/97	0	WLN-S/Tank Room	06			IR	
MERRICK	MEI-2288-ST-08-II	01/13/97	0	RCR 4-8 (Shear Wall)	06			IR	
MERRICK	MEI-2288-ST-08-JJ	01/04/97	0	Redo Shear Wall on pg. L44	06			IR	
MERRICK	MEI-22888-ST-08-KK	08/27/97	0	Design Embedded Connection in Panels	06			IR	
MERRICK	MEI-22888-ST-08-LL	08/26/97	0	Determine Load on Panel Embeds from Lateral Bracing for Girts at Column Line A	06			IR	
MERRICK	MEI-22888-ST-08-MM	08/26/97	0	Determine Load on Panel Embeds from Lateral Bracing for Girts at Column Line 5	06			IR	
MERRICK	MEI-22888-ST-08-NN	08/28/97	0	Determine Ultimate Load on Precast/Prestressed Panel	06			IR	
MERRICK	MEI-22888-ST-08-OO	08/27/97	0	Determine Load on Transfer Corridor 2nd Floor Connection	06			IR	
MERRICK	MEI-22888-ST-08-PP	08/26/97	0	Determine Load on Ladder Support Embed	06			IR	
MERRICK	MEI-22888-ST-08-QQ	08/28/97	0	Determine Loads for Columns Connection to Precast/Prestressed Panel	06			IR	
MERRICK	MEI-22888-ST-08-RR	08/27/97	0	Determine Tornado Uplift Loads on Precast/Prestressed Panels	06			IR	
Process Area: Truck Restraints					06				
MERRICK	MEI-2288-ST-09-A	08/02/96	1	Cast Trailer Support Foundations				IR	
Process Area: Foundation					06				
MERRICK	MEI-2288-ST-10-A	08/23/96	0	Combined Footings				IR	
MERRICK	MEI-2288-ST-10-B	08/23/96	0	Footing at FTG-5	06			IR	
MERRICK	MEI-2288-ST-10-C	08/23/96	0	Footing along Gridline C	06			IR	
MERRICK	MEI-2288-ST-10-D	08/23/96	0	Footing along Gridline A	06			IR	
MERRICK	MEI-2288-ST-10-E	08/22/96	0	Continuous Footings	06			IR	
MERRICK	MEI-2288-ST-10-F	01/08/97	0	continuous Footing along Gridline F	06			IR	
MERRICK	MEI-2288-ST-10-G	09/05/96	0	Process Area Floor Slab	06			IR	
MERRICK	MEI-2288-ST-10-H	07/16/97	1	Check Skid Beam Anchorage	06			IR	
MERRICK	MEI-2288-ST-10-I	01/08/97	0	Footing 7	06			IR	
MERRICK	MEI-2288-ST-10-J	11/02/96	0	Footing Uplift	06			IR	
MERRICK	MEI-2288-ST-10-K	03/29/97	0	Anchor Bolts at Tank Room	06			IR	
MERRICK	MEI-2288-ST-10-L	03/29/97	0	Anchor Bolts at Line 2 & 7	06			IR	
MERRICK	MEI-2288-ST-10-M	03/29/97	0	Anchor Bolts at C 3-6	06			IR	

Rev. 0: 2/4/99					System	Safety Class	Performance	Review	Calc
Originator	Document	Date	Rev. #	Document Title	Affected	Reqmnts(a)	Category(b)	Type(c)	Type (d)
MERRICK	MEI-2288-ST-10-N	03/29/97	0	Anchor Bolts at A-3-6	06			IR	
MERRICK	MEI-2288-ST-10-O	04/01/97	0	Anchor Bolts at E 3-6	06			IR	
MERRICK	MEI-2288-ST-10-P	03/18/97	0	Revise Connection Section A/H-1-82126	06			IR	
MERRICK	MEI-2288-ST-10-Q	03/18/97	0	Check Column for Shears	06			IR	
MERRICK	MEI-2288-ST-10-R	03/18/97	0	Check Section Wt for Section A	06			IR	
MERRICK	MEI-2288-ST-10-S	04/29/97	0	Precast Panel(s) Anchor Bolts	06			IR	
MERRICK	MEI-2288-ST-10-T	04/30/97	0	Line 2	06			IR	
MERRICK	MEI-2288-ST-10-U	04/30/97	0	Line 3, 4, 5, 6 (At line A or Line E)	06			IR	
MERRICK	MEI-2288-ST-10-V	04/29/97	0	Line 3, 4, 5, 6 At location where (1) embed takes load from (2) panel	06			IR	
MERRICK	MEI-2288-ST-10-W	04/30/97	0	Precast Panel(s) Footing Anchors	06			IR	
MERRICK	MEI-2288-ST-10-X	04/30/97	0	Design Footing Anchor "F" for Maximum Seismic and Wind Loads From Precast Panels on Line E, C, 7, F, and 1.	06			IR	
MERRICK	MEI-2288-ST-10-Y	04/30/97	0	Design Footing Anchor "E" for Twice the Maximum Seismic and Wind Loads used for Footing Anchor "F".	06			IR	
MERRICK	MEI-2288-ST-10-Z	04/30/97	0	Base Connections at A&7, A&2, E&2, C.7 & 2	06			IR	
MERRICK	MEI-2288-ST-10-AA	01/21/98	0	Design Sump Pit for Process Bays	06			IR	
MERRICK	MEI-2621-ST-10-BB	09/11/98	0	Per NCR 29, (2) #5 Bars in Wall not Properly Installed. Provide New Wall Reinforcing	06			IR	
MERRICK	MEI-2621-ST-10-CC	01/06/99	0	Check Process Water Conditioning Skid Support Plates in PWC Tank Room	06			IR	
Corridor & Spaces: Roof									
MERRICK	MEI-2288-ST-11-A	09/03/96	0	Transfer Corridor Roof Framing	06			IR	
MERRICK	MEI-2288-ST-11-B	07/09/97	0	Purlins	06			IR	
Corridor & Spaces: Ceiling Framing									
MERRICK	MEI-2288-ST-12-A	06/26/96	0	Mechanical Room Beam Size	06			IR	
MERRICK	MEI-2288-ST-12-B	06/26/96	0	Beam A & B	06			IR	
MERRICK	MEI-2288-ST-12-C	06/27/96	0	Mechanical Room Mezzanine Column Size	06			IR	
MERRICK	MEI-2288-ST-12-D	07/14/97	0	Maximum Loads due to HVAC Equipment	06			CK	
MERRICK	MEI-2288-ST-12-E	07/15/97	0	Check Concrete Diaphragm for Ultimate Shear Load	06			CK	
Corridor & Spaces: Lateral Loads									
MERRICK	MEI-2288-ST-13-A	09/05/96	0	Lateral Loads on "Lean To"	06			IR	
MERRICK	MEI-2288-ST-13-B	09/05/96	0	Stadd Model of "Lean To"	06			IR	
MERRICK	MEI-2288-ST-13-C	01/06/97	0	Determine Kz for W10x49 Columns in "Lean To" Stadd	06			IR	
MERRICK	MEI-2288-ST-13-D	09/05/96	0	Wind in N-S Direction	06			IR	
MERRICK	MEI-2288-ST-13-E	09/05/96	0	Braced Bay	06			IR	
MERRICK	MEI-2288-ST-13-F	10/30/96	0	Size Rod Bracing to Transfer Loads	06			IR	
MERRICK	MEI-2288-ST-13-G	01/06/96	0	Alternative to 1/2" Rod Bracing	06			IR	
Corridor & Spaces: Ceiling Framing									
MERRICK	MEI-2288-ST-14-A	09/15/96	0	Area Under "Lean To" Mezzanine	06			IR	
MERRICK	MEI-2288-ST-14-B	09/16/96	0	Alternative Header	06			IR	
Process Tank Room									
MERRICK	MEI-2288-ST-15-A	12/10/96	0	Size steel Section for Tank Room	06			IR	
MERRICK	MEI-2288-ST-15-B	12/10/96	0	Roof Framing	06			IR	
MERRICK	MEI-2288-ST-15-C	12/10/96	0	Beam D & F	06			IR	
MERRICK	MEI-2288-ST-15-D	12/11/96	0	Columns & Roof Deck	06			IR	
MERRICK	MEI-2288-ST-15-E	12/31/96	0	Footings	06			IR	
MERRICK	MEI-2288-ST-15-F	02/14/95	0	F203 Exterior, Resistance to Uplift	06			IR	
MERRICK	MEI-2288-ST-15-G	12/31/96	0	Footings at Gridlines E and Z	06			IR	
MERRICK	MEI-2288-ST-15-H	12/31/96	0	Anchor Bolts	06			IR	
MERRICK	MEI-2288-ST-15-I	12/31/96	0	Base Plates	06			IR	
MERRICK	MEI-2288-ST-15-J	03/16/97	0	Wind Girt at Tank Room	06			IR	
MERRICK	MEI-2288-ST-15-K	04/03/97	2	Tank Anchors	06			IR	
MERRICK	MEI-2288-ST-15-L	04/03/97	0	Clip Angle	06			IR	
MERRICK	MEI-2288-ST-15-M	04/03/97	0	Tank Foundation	06			IR	
MERRICK	MEI-2288-ST-15-N	04/03/97	0	Wind Loads	06			IR	
MERRICK	MEI-2288-ST-15-O	04/04/97	0	Angle Iron	06			IR	
MERRICK	MEI-2288-ST-15-P	04/03/97	0	IXM Foundation	06			IR	

Rev. 0: 2/4/99					System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
Originator	Document	Date	Rev. #	Document Title					
Exterior Stairways									
MERRICK	MEI-2288-ST-16-A	09/12/96	0	Stair Tower	06			CK	
MERRICK	MEI-2288-ST-16-B	09/12/96	0	Support Beam	06			CK	
MERRICK	MEI-2288-ST-16-C	09/12/96	0	Wall Design	06			CK	
MERRICK	MEI-2288-ST-16-D	09/12/96	0	Strap Bracing	06			CK	
MERRICK	MEI-2288-ST-16-E	09/12/96	0	Shear Walls	06			CK	
MERRICK	MEI-2621-ST-16-F	01/08/99	0	Exterior Stairway Calcs	06			CK	
SAIC		08/01/96		Analysis of Tornado/Tornado Missile Risk to New SNFP Facility; Final Report, M. M. Beary, Contract MRV-SBW-482901, Science Applications International Corporation, Richland, Washington	06				
S&W	Report 1435-001	01/01/97		Shannon and Wilson, Geotechnical Engineering Studies, Cold Drying Vacuum Facility, 100KW Area, Hanford Reservation, Washington , Shannon and Wilson Company, Kennewick, Washington.	06				
Equipment									
MERRICK	MEI-2621-EQ-01	10/13/98	0	Check Supports for Wall Mounted Piping In Process Bays	06			CK	
MERRICK	MEI-2621-EQ-02	10/30/98	0	Check Hold Down For Airborne Effluent Monitoring System	06			CK	
MERRICK	MEI-2621-EQ-03	11/11/98	0	HVAC W8X18 Support Beam	06			CK	
MERRICK	MEI-2621-EQ-04	11/19/98	0	Check HVAC Unit Weld	06			CK	
Seismic Reports & Analyses									
SNFP	SCS-W-96-1453	08/02/96		Cold Vacuum Drying Trailer Seismic Restraints and Trailer Stability under Tornado-Generated Missile Loading , External Letter, H. P. Shrivastava, ICF Kaiser Hanford to J. J. Irwin, Westinghouse Hanford Company.	06		PC-3		
SNFP	HNF-2179	03/05/98	0	Seismic Analysis of the TN-DE&SH Cask Transportation Trailer System for the CVD Facility , (RFP-W-A36182-GW), PacTec Inc, Tacoma, Washington	06		PC-3		
SNFP	HNF-3034	08/18/98	0	SNF Cask Coupling Seismic and Stress Analysis , EDT# 625218, D. M. Chenault, Duke Engineering & Services Hanford, Richland, Washington.	06		PC-3		
MERRICK	MER-2228-S-01	11/01/97	0	Exhaust Stack and Pipe Runs	06		PC-2		
MERRICK	MER-2288-S-02	11/01/97	0	Bridge Crane Support	06		PC-3		
MERRICK	MER-2288-S-03	11/01/97	0	HEPA Filter Containment Housing	06		PC-2		
MERRICK	MER-2228-S-04	11/01/97	0	Supports for IXM	06				
MERRICK	MER-2288-S-05	11/01/97	0	SCHe and MCO Valves	06		PC-3		
MERRICK	MER-2288-S-06	11/01/97	0	PLC Remote I/O Enclosure	06				
MERRICK	MER-2228-S-07	11/01/97	0	Sampling Equipment and Pipe Runs	06				
MERRICK	MER-2288-S-07A	04/24/98	0	Stack Monitoring Equipments Shelf using .46g	06				
MERRICK	MER-2288-S-08	11/01/97	0	Cask Transporter Restraint System Structures	06				
MERRICK	MER-2288-S-09a	11/24/97	0	MCO Process Hood/Seal Ring Support Seismic Analysis	06			CK	
MERRICK	MER-2288-S-09b	03/27/98	0	MCO Process Hood/Seal Ring Support Seismic Analysis using Interim In-Structure Response Spectrum	06		PC-3	CK	
MERRICK	MER-2288-S-09C	11/12/98	0	MCO Process Hood Support Seismic Analysis Using In-Structure Response Spectra Reported by Advent	06	SC	PC-3	CK	C
MERRICK	MER-2288-S-010	03/21/98	0	Computer Program Validation for RISA-3D	06				
MERRICK	MER-2288-S-11	11/01/97	0	HVAC Isolation Dampers Supports	06		PC-3		
MERRICK	MER-2288-S-12	11/01/97	0	VPS Skid Frame and Piping/equipment	06				
MERRICK	MER-2288-S-012A	05/04/98	0	Process Equipment Skid using Hanford Site Ground Response Spectra	06			CK	
MERRICK	MER-2288-S-13	04/15/97	0	Hanford CVDF PWC Skid Seismic Evaluation	06				
MERRICK	MER-2288-S-014	04/16/97	0	Computer Program Validation for STADD-III	06				
MERRICK	MER-2288-S-15	03/23/98	0	Analysis of Piping on Process Hood	06			CK	
MERRICK	MER-2288-S-016	04/08/97	0	Analysis of Lifting Lugs Process Hood	06		PC-1		
MERRICK	MER-2288-S-017	05/06/98	0	Design of Transformer Support Rack in Room 108	06				
Advent	96004.1.2	12/18/96	0	Seismic Evaluation of Cold Vacuum Drying Facility Secondary Enclosure and Process Water Tank Room	06		PC-3		
Electrical Power Reports & Calculations									
MERRICK	MEI-2288-EL-01	09/21/96	0	Lighting Levels and Fixture Type Determination	20	GS	PC-1	CK	M
MERRICK	MEI-2288-EL-02	09/21/96	0	Aluminum Company of America SAG and Tension Data	20	GS	PC-1	CK	M
MERRICK	MEI-2288-EL-03	09/21/96	0	Electrical Service & Feeder Sizing Determination	20	GS	PC-1	CK	M
MERRICK	MEI-2288-EL-04	09/21/96	0	Fault Current & Equipment Rating Determination	20	GS	PC-1	CK	M
MERRICK	MEI-2288-EL-05	09/21/96	0	Fire Alarm Power Supply & Battery Size Determination	20	GS	PC-1	CK	M
MERRICK	DCN-057-E.1	02/03/98		UPS Sizing and Load List/ Facility UPS Design	20	GS	PC-1	CK	M
HVAC/Ref. Air/Stack Monitoring Reports & Calculations									
PNNL	PNL-10816/UC-702	01/01/95	0	Generic Air Sampler Probe Tests , Pacific Northwest Laboratory, Richland, Washington.	50	GS	PC-1	CK	M

Rev. 0: 2/4/99	Originator	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
MERRICK	MER-MER-2288-HV-01	11/01/96	1	General Design Parameters	30					
MERRICK	MER-MER-2288-HV-02	11/01/96	1	Building Transmission Factors	30					
MERRICK	MER-MER-2288-HV-C, C1	11/01/96	1	HVAC Computer Load Calculation	30					
MERRICK	MER-MER-2288-HV-C2	11/06/96	0	Sample Zone Load Calculation for Computer Load Program Verification	30					
MERRICK	MER-2288-HV-C2.1	03/06/97	0	Sample HVAC Load Calculation for Computer Load Program Validation (Sample #2)	30					
MERRICK	MER-2288-HV-03	09/18/96	0	Process Bays Room Design Criteria	30					
MERRICK	MER-2288-HV-04	11/01/96	1	Process Bays Cooling and Heating Load Summary	30					
MERRICK	MER-2288-HV-05	11/01/96	1	Process Bays Psychometrics (Cooling)	30					
MERRICK	MER-2288-HV-06	11/01/96	1	Process Bays Psychometrics (Heating)	30					
MERRICK	MER-2288-HV-07	11/01/96	1	General Supply System Room Design Criteria	30					
MERRICK	MER-2288-HV-08	11/01/96	1	General Supply System Cooling and Heating Load Summary	30					
MERRICK	MER-2288-HV-09	11/01/96	1	General Supply System Psychometrics (Cooling)	30					
MERRICK	MER-2288-HV-10	11/01/96	1	General Supply System Psychometrics (Heating)	30					
MERRICK	MER-2288-HV-11	11/01/96	1	Administration Area Room Design Criteria	30					
MERRICK	MER-2288-HV-12	11/01/96	1	Administration Area Cooling and Heating Load Summary	30					
MERRICK	MER-2288-HV-13	11/01/96	1	Administration Area System Psychometrics (Cooling)	30					
MERRICK	MER-2288-HV-14	11/01/96	1	Administration Area System Psychometrics (Heating)	30					
MERRICK	MER-2288-HV-15	11/01/96	1	Chilled Water Load Summary	30					
MERRICK	MER-2288-HV-16, 16.1	11/01/96	1	Electric Heating Coil Load Summary/Unit Heater Calculations	30					
MERRICK	MER-2288-HV-17	08/28/96	0	Fan Pressure Calculations	30					
MERRICK	MER-2288-HV-18	09/24/96	0	Pump Pressure Calculations	30					
MERRICK	MER-2288-HV-19			No longer applies (Local Exhaust Hood Calculations)	30					
MERRICK	MER-2288-HV-20	12/09/96	1	Exhaust Stack Sizing	30					
MERRICK	MER-2288-HV-21	10/01/96	0	Seismic Restraints for Ductwork	30					
MERRICK	MER-2288-HV-22	07/02/96	0	Trane Split Chilled Refrigerant Line Sizing	30					
MERRICK	MER-2288-HV-23	09/10/96	0	Chilled Water System Expansion Tank Sizing	30					
MERRICK	CVD-8 Stack Monitoring	11/01/96	0	Differential Pressure through CVDF Stack	30				CK	
MERRICK	CVD-19 Stack Monitoring	09/15/97	0	Determination of the Minimum Stack Air Flow to Remain Turbulent	30				CK	
MERRICK	CVD-20 Stack Monitoring	09/15/97	0	Analysis of the Flow Velocity in the Sample Line used for Stack Monitoring	30				CK	
SCIC Reports & Calculations										
MERRICK	I/C-CVDF-97-001 SCI&C	03/06/98	0	CV-PT-1 Setpoint Calculation	93-2	SC	PC-3	CK		M
MERRICK	I/C-CVDF-97-002 SCI&C	03/06/98	0	PT-1*08,*10 Setpoint Calculation	93-2	SC	PC-3	CK		M
MERRICK	I/C-CVDF-97-003 SCI&C	03/06/98	0	FIT-1*20,*21 Setpoint Calculation	93-2	SC	PC-3	CK		M
MERRICK	I/C-CVDF-97-004 SCI&C	07/07/98	0	TSH-1*28, *29, *38, *39, TSSH-1*28, *29, *38, *39	93-2	SC	PC-3	CK		M
MERRICK	I/C-CVDF-97-005 SCI&C	10/15/98	0	CVDF SCIC Heat Load	93-2	GS	PC-1	CK		M
I&C Reports & Calculations										
SNFP	HNF-2058	04/01/98	0	CVD Project MCS Computer Software Requirements Specification, R. Whitehurst, EDT-623977, Duke Engineering & Services						
IC ³ E	I/C-CVDF-97-001		A	CV-PT-1*36,*37 Setpoint Calculation	93-1	GS	PC-1	CK		M
IC ³ E	I/C-CVDF-97-002		A	CV-PT-1*08,*10 Setpoint Calculation	93-1	GS	PC-1	CK		M
Mechanical Utilities Reports & Calculations										
MERRICK	CVD-3	10/30/98	1	FV-1*19 Sizing	13-1	GS	PC-1	CK		M
MERRICK	CVD-3 PH	08/26/96	1	Size FV-1*19 Nitrogen/Helium Purge Control	13-1	GS	PC-1	CK		C
MERRICK	CVD-26	10/22/98	0	Maximum Flowrate Through CA-PCV-1*13 AT Pin = 100 psig & Pout = 30 psig	12	GS	PC-1	CK		C
MERRICK	CVD-26a	10/22/98	0	Maximum Flowrate Through CA-SRV-1*18	12	GS	PC-1	CK		C
MERRICK	CVD-27	10/22/98	0	Process Gas Flowrate Through He-FV-1*20	13-1	GS	PC-1	CK		C
MERRICK	MEI-2288-ME-01-A	09/23/96	0	Correction Factor for SCM 160 Pipe		GS	PC-1	CK		M
MERRICK	MEI-2288-ME-01-B	09/23/96	0	System Curve		GS	PC-1	CK		M
MERRICK	MEI-2288-ME-01-D	10/16/96	0	Determine Size of LW-TK-4002		GS	PC-1	CK		M
MERRICK	MEI-2288-ME-01-E	09/13/96	0	Determine Size & Depth of Fire Water Retention Basin	18	GS	PC-1	CK		M
MERRICK	MEI-2288-ME-01-F	09/13/96	0	Confirm Adequate Scope in EF	18	GS	PC-1	CK		M
MERRICK	MEI-2288-ME-01-G	03/14/97	1	Design a Temporary Holding Tank Sewage System	27	GS	PC-1	CK		M
MERRICK	MEI-2288-ME-01-H	07/26/96	0	Determine Depth of Sans Main	27	GS	PC-1	CK		M

Rev. 0: 2/4/99						System	Safety Class	Performance	Review	Calc
Originator	Document	Date	Rev. #	Document Title		Affected	Reqmnts(a)	Category(b)	Type(c)	Type (d)
MERRICK	MEI-2288-ME-01-I	09/12/96	0	Estimate N2 & He use		13-1	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-J	09/12/96	0	Estimate Total N2 & He use		13-1	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-L	09/12/96	0	Determine Pipe Size for Gas System		13-1	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-M	08/14/96	0	Determine Cost of Compressed Air		12	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-N	09/12/96	0	Determine Size of Air Compressor		12	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-O	09/13/96	0	Determine DI Pressure Available at Skid		12	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-P	09/13/96	0	DI Tank Loss		25	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-Q	09/13/96	0	Total Pressure Loss			GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-R	10/16/96	0	Estimate Change Pressure Required for TWC		47-2	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-S	09/19/96	0	Determine Supply & Initial Pressures for TWC		47-2	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-T	09/19/96	0	Determine Pressure Tank Size for TWC		47-2	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-U	09/19/96	0	Estimate Temperature and Change Pressure for VPSCHW		47-4	GS	PC-1	CK	M
MERRICK	MEI-2288-ME-01-V	10/16/96	0	Determine Pump Head for VPSCHW Chiller		47-4	GS	PC-1	CK	M
MERRICK	MEI-2621-ME-01	09/17/98	0	Size the Compressed Air Receiver Tank for the CVDF		12	GS	PC-1	CK	M
MERRICK	MEI-2621-ME-02	10/20/98	0	Determine Colling Requirements for the UPS in Room 129 to CVDF		20	GS	PC-1	CK	M
MERRICK	MEI-2621-ME-03	01/29/99	0	Size the Helium Gas Piping for the CVDF		13	GS	PC-1	CK	M
MERRICK	MER-2288-CA1	03/29/98	0	CVDF CA/IA Consumption Calculation (and Receiver Sizing)		12	GS	PC-1	CK	M
Fire Hazard Analysis/Fire Protection										
SNFP	HNF-SD-SNF-FHA-003	06/20/97	1	Preliminary Fire Hazard Analysis for the Cold Vacuum Drying System Facility 142K, DynCorp Tri-Cities Services Inc., Richland, Washington.		24	GS	PC-1	CK	M
MERRICK	MEI-2288-FP-01	08/05/96	0	Hydraulic Calculations		24	GS	PC-1	CK	M
MERRICK	MEI-2288-FP-02	04/07/97	1	Hydraulic Area 1		24	GS	PC-1	CK	M
MERRICK	MEI-2288-FP-03	09/20/96	0	Hydraulic Area 2		24	GS	PC-1	CK	M
SNF Supporting Reports & Calculations (MCO/Cask & Contents)										
SNFP	HNF-SD-SNF-OMM-003	06/18/98	0A	Cask and Transportation System Installation, Operations, Repair and Maintenance, D. M. Chenault, ECN #645092, Duke Engineering & Services Hanford, Richland, Washington.		all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-DR-003	08/17/98	1	MCO Design Report, L. H. Goldmann, ECN-645053, Duke Engineering & Services Hanford, Richland, Washington.		all	NA	NA	NA	NA
SNFP	WHC-SD-W442-DR-002	01/01/95	0	K-Basin MCO Shield Plug Thickness Technical Evaluation (Shielding Analysis), Duke Engineering & Services Hanford, Richland, Washington.		all	NA	NA	NA	NA
SNFP	FDNW-97-010	11/19/96		Internal Pressure Limit for the Multi-Canister Overpack (MCO) Assembly Under Accident Condition (ASME Service Level D), External Letter, H. P. Shrivastava, Flour Daniel Northwest to J. J. Irwin, Numatec Hanford Corp.		all	NA	NA	NA	NA
SNFP	FDNW-97-TWRS-025	02/18/97		Detonation Review of Light Water Reactor Hydrogen Manual, External Letter, C. J. Moore, Flour Daniel Northwest to J. J. Irwin, Numatec Hanford Corp.		all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-014	06/05/97	0	Probability Analysis of a MCO Over-Pressurization During Staging, EDT 620099, Pajunen, A. L., SGN Eurisys Services Corporation, Richland, Washington.		all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-016	12/15/97	0	Evaluation of MCO Pressure Relief Orifice Effectiveness, EDT 616199, Duke Engineering & Services Hanford Company, Richland, Washington.		all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-029	08/29/96	0	MCO Pressurization Analysis, EDT 600541, Westinghouse Hanford Company, Richland, Washington.		all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-ER-014	09/20/96	0	MCO Pressurization Analysis of Spent Nuclear Fuel Transportation and Fuel Storage, EDT 614689, Westinghouse Hanford Company, Richland, Washington.		all	NA	NA	NA	NA
SNFP	WHC-SD-WM-CN-079	10/17/96	0	MCO Blowdown Release Fraction, EDT 619414, Fluor Daniel Northwest, Richland, Washington		all	NA	NA	NA	NA
SNFP	74A50-96-TRB-011	03/27/96		Results of Scoping Calculation to Determine Internal MCO Flow Splits for Various Mark IA and Mark IV Basket Designs, Internal Letter, T. R. Beaver to C. R. Miska, Westinghouse Hanford Company, Richland, Washington.		all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-FDR-003	02/05/97	0	Design Analysis Report for the TN-WHC Cask and Transportation System, EDT 620085, Duke Engineering & Services Hanford, Richland, Washington.		all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-DRCR-001	01/17/97	0	Design Review Summary, Duke Engineering & Services Hanford, Richland, Washington.		all	NA	NA	NA	NA
SNFP	HNF-SD-TP-SARP-017	07/14/97	1	Safety Analysis Report for Packaging (Onsite) Multicanister Overpack Cask, Edwards, W. S., et.al., Duke Engineering & Services Hanford, Richland, Washington.		all	NA	NA	NA	NA
JMI	JMI-9602-2	08/28/98	0	MCO Pressurization Evaluation for Spent Nuclear Fuel Process: Transportation and Storage, John Marvin, Inc., Richland, Washington.		all	SC	PC-1	IR	C
Q-METRICS		09/01/95		Final Report For Technical Services for Spent Nuclear Fuel Thermal Analysis Support, G. Banken, Q-Metrics, Inc., Woodinville, Washington		all	NA	NA	NA	NA
Q-METRICS		09/01/95		Final Report For Technical Services for Spent Nuclear Fuel Thermal Analysis Support, G. Banken, Q-Metrics, Inc., Woodinville, Washington.		all	NA	NA	NA	NA

Rev. 0: 2/4/99	Originator	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
SNF Data and Characterization Reports & Calculations										
SNFP	HNF-1523	10/23/98	1		K-Basins Particulate Water Content, Behavior, and Impact, D.R.Duncan and D.R.Ball, EDT 616191, Duke Engineering & Services Hanford Inc., Richland, WA. (Contains as an attachment K-Basins Particulate Water Content Behavior).	all	NA	NA	NA	NA
SNFP	HNF-1527	10/22/98	2		Estimates of Particulate Mass in Multi-canister Overpacks, D. L. Sherrell, EDT-648605, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-1728	02/01/98	0		Analysis of Sludge from Hanford K West Canisters, B. J. Makenas, et. al. Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2047	01/27/98	0		Pressurization of Whole Element Canister During Staging, L. A. Lawrence, et. al. EDT-615131, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2191	04/27/98	0		Release of Water Trapped in Damaged Fuel Subsurface Voids, F. F. Huang, EDT #620804, Flour Daniel Northwest Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2234	10/21/98	2		Sensitivity of Probabilistic MCO Water Content Estimates to Key Assumptions, D.R.Duncan and M. G. Plys, ECN 645071, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2314	03/09/98	0		Statistical Analysis of K West Fuel Element Visual Examination Results, A. L. Pitner, T. L. Welsh, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2458	06/17/98	0A		Design Basis for Hydrogen Generation in the Cold Vacuum Drying Facility, A.L. Pajunen, ECN #645094, Cogema Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2586	04/23/98	0		Summary Assessment of Fuel Damage Distributions in the K-Basins, Pitner, A. L., EDT-620810, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2732	05/13/98	0		Potential Reaction Rate Increase -- Alternative Definition, Pajunen, A. L., EDT #624319, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-2786	08/28/98	0		Assessment of Potential for Rapid Ignition of Submerged N Reactor Fuel, Duncan, D. R., Plys, M. G., and Ballinger, R. G., EDT #624323, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-3035	09/25/98	0B		MCO Gas Composition for Low Reactive Surface Areas, M. J. Packer, EDT #625223, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-3048	08/12/98	0		Post Fuel-Cleaning Corrosion of Uranium Within MCO Payloads, D. L. Sherrell, EDT #625194, Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-3372	10/05/98	0		Uranium Hydride in MCO, A. L. Pajunen, EDT #625684, Cogema Engineering Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-005	01/01/97	0		Sensitivity of CSB Staging Conditions to Reaction Rates and Fuel Surface Area, EDT 620088, Thurgood, M. J., Duke Engineering & Services Hanford, Richland, Washington	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-006	10/05/98	0A		Evaluation of Radiolytic Gas Generation From Water Dissociation in a Multi-Canister Overpacks, ECN 648609, Duke Engineering & Services Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-008	04/07/97	0		Particulate Inventory of a Multi-Canister Overpack, EDT 620087, Pajunen, A. L., L. D. Muhlestein, and M. R. Allen, SGN Eurisys Services Corporation, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-010	01/01/97	0		Uncertainty Analysis of Available Water in Fuel Particulate Loaded in an MCO Scrap Basket, EDT 620092, Duke Engineering & Services Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-012	06/05/97	0		Estimated Fuel Inventory in Fuel and Scrap Baskets (MCO Quantities), EDT 620097, Pajunen, A. L., SGN Eurisys Services Corporation, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-017	07/30/98	3		Fuel Surface Area, Lawrence, L. A., Duke Engineering & Services Hanford, Richland, Washington., ECN-645054	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-019	04/29/97	0		Reaction Rate Constant for Dry Air Oxidation of N Reactor Fuel, Lawrence, L. A., Duke Engineering & Services Hanford, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-022	10/02/97	0		Feasibility of Direct Reactivity Measurement in Multi-Canister Overpacks at the Cold Vacuum Drying Facility, EDT 620113, Duke Engineering & Services Hanford, Richland, Washington (FAI/97-32, Fauske and Assoc., Burr Ridge, Illinois).	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-028	10/14/97	0		Cumulative Oxygen Production in a MCO as a Function of Time, EDT 616155, A. L. Pajunen, SGN, Richland, Washington	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-032	09/04/97	0		Assessment of Feasibility of Proof Test for Radiolytic Generation of Oxygen in an Multi-Canister Overpacks, EDT 616165, Duke Engineering & Services Hanford, Richland, Washington (Fauske and Assoc., Burr Ridge, Illinois).	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-035	02/06/98	1		Statistical Analysis of Oxidation Rates for K-Basin Fuel in Dry Air, D. J. Trimble, and T. L. Welsh, ECN #614814 Duke Engineering & Services Hanford, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-CN-036	10/16/97	0		Assessment of Cesium and Strontium Leaching Effect of G Values, R.G.Cowan and J.P.Sederburg,(EDT 616181), Duke Engineering & Services Hanford Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-TI-009	08/12/98	2		105-K Basin Material Design Feed Description for SNF Project Facilities, A. N. Praga, ECN 645117, DE&S Hanford, Inc., Richland, WA.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-TI-015	10/23/98	6		SNFP Technical Data Book, D. R. Duncan, ECN 645102, Duke Engineering & Services Hanford, Richland, Washington.	all	NA	NA	NA	NA

Rev. 0: 2/4/99 Originator	Document	Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
SNFP	HNF-SD-SNF-TI-020	06/15/98	2	SNFP Recommended Rate Constants for Corrosion of N-Reactor Fuel, ECN 645097, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-TI-040	10/23/98	3	MCO Internal Gas Composition and Pressure During Interim Storage, ECN-645098, Duncan, D. R. and M. G. Plys, Duke Engineering and Services Hanford, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-TI-050	03/06/97	0	In-Cell Visual Examinations of K East Fuel Elements, EDT 620781, Duke Engineering and Services Hanford, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-SNF-TRP-020	03/12/97	0	Testing of Sludge Coating Adhesiveness on Fuel Elements in 105-K West Basin, EDT 620783, Duke Engineering and Services Hanford, Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SD-W441-CN-001	06/11/98	2	Spent Nuclear Fuel Inventory in Bulk MCO Water at the Cold Vacuum Drying Facility, D. L. Sherrell, ECN 645096, Numatec Hanford Corp., Richland, Washington.	all	NA	NA	NA	NA
SNFP	HNF-SP-1201/UC-2070	01/01/97	0	Analysis of Sludge from K-East Basin Canisters, DE&S Hanford, Inc., Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-12110-PCL93-069	07/01/93	0	Analyses of 105-K East Basin Sludge Samples, D. B. Bechtold and M. A. Meier, Westinghouse Hanford Co., Richland, Washington	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-ANAL-011	09/12/96	0	Comparison of Spent Fuel Databases for K-Basin, Schmittroth, F., EDT 616570, Westinghouse Hanford CO, Richland, WA.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-RPT-013	10/01/96	0	A Probabilistic Assessment of Fuel Particulate Contents of A Multi-Canister Overpack, EDT 616141, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-006	01/01/95	0	Summary Status of K Basins Sludge Characterization, R. B. Baker, Westinghouse Hanford Co., Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-012	02/01/95	0	KE Basin Underwater Fuel Survey, A. L. Pitner, Westinghouse Hanford Co., Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-021	01/14/97	1A	SNFP Detonation Phenomena of Hydrogen/Oxygen in Spent Fuel Containers, ECN 637154, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-023	11/21/97	2	Bounding Particulate Contents of a Multi-Canister Overpack, Pajunen, A. L., and R. G. Cowan, ECN 638913/645044, Duke Engineering & Services Hanford, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-025	06/13/96	0	Multi-Canister Overpack Pressurization Monitoring and Control Methodology for the Spent Nuclear Fuel Project, EDT 616110, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-026	09/30/96	1	SNFP Surface Area Estimates for N-Reactor Fuel in the K East Basin, ECN 638927, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-027	08/01/96	0	SNFP Photon Heat Deposition Calculations for Hydrogen Generation Within MCO, EDT 616632, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-028	08/01/96	0	SNFP Gas Generation From N-Fuel in the Multi-Canister Overpacks, EDT 616631, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TI-033	08/01/96	0	SNFP Estimate of Volatile Fission Products Release From Multi-Canister Overpacks, EDT 616633, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TP-001	07/25/95	1	KE & KW Underwater Video Examinations, R. C. Cecil, Westinghouse Hanford Co., Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-SNF-TRP-015	07/11/96	0	Sludge Adherence Summary Report, EDT 615488, Westinghouse Hanford Company, Richland, Washington.	all	NA	NA	NA	NA
SNFP	WHC-SD-WM-ANAL-037	10/01/94	0	Sludge Measurement Results for 105 K East Basin, T. A. Meling, Westinghouse Hanford Co., Richland, Washington	all	NA	NA	NA	NA
SAIC		04/01/95		Fuel Corrosion and Gas Evolution During Retrieval, Transportation and Wet-Fuel Staging, M. M. Beary, Science Applications International Corporation, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11341	01/01/96	0	Analysis of Oxygen Gettering in MCOs Containing N Reactor Fuel, Johnson, A. B., Jr., and R. G. Clemmer, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11806	05/01/98	0	Examination of the Surface Coatings Removed from K-East Basin Fuel Elements, Aberfah, Marschman and Jenson, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11807	05/01/98	0	System Design Description for the Whole Element Furnace Testing System, Ritter, Marschman, MacFarlan and King, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11628	05/01/98	0	Drying Behaviour of K-East Basin Canister Sludge, Aberfah, Marschman and Buchanan, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11818	01/01/98	0	Drying Results of K-Basin Spent Nuclear Fuel Element 3128W (Run 2), Marschman, S. C., J. Abrefah, and et. al, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11844	03/01/98	0	Oxidation Rate of K-Basin Spent Nuclear Fuel in Moist Air, Marschman, S. C., J. Abrefah, and et. al, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL	PNNL-11817	06/01/98	0	Drying Results of K-Basin Spent Nuclear Fuel Element 1990 (Run 1), Marschman, S. C., J. Abrefah, and et. al, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL		01/01/97		Highlight Report: Drying Behavior of K-East Canister Sludge, Abrefah, J., H. C. Buchanan, S. C. Marschman, and B. J. Makenas, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA

Rev. 0: 2/4/99		Document		Date	Rev. #	Document Title	System Affected	Safety Class Reqmnts(a)	Performance Category(b)	Review Type(c)	Calc Type (d)
PNNL				01/01/97		Highlight Report: Second Report on Drying Behavior of K-East Canister Sludge, Abrefah, J., H. C. Buchanan, S. C. Marschman, and B. J. Makenas, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL				01/06/97		Spent Nuclear Fuel Characterization Project Highlight Report - First Look at Film-Coating on K-East Fuel Elements, letter to Distribution Marschman, S. C., J. Abrefah, and E. D. Jensen, Pacific Northwest National Laboratory, Richland, Washington.	all	NA	NA	NA	NA
PNNL				08/29/96		Spent Nuclear Fuel Characterization Project Highlight Report - Oxide Particulates Collected or Generated from Metallic Uranium Spent Fuel, letter to Distribution Marschman, S. C., and J. Abrefah, Pacific Northwest National Lab, Richland, Washington.	all	NA	NA	NA	NA
FAUSKE	FAI/96-87			09/26/96		Hydrated Oxide Decomposition Rate Law Approach, Fauske & Associates report, M. G. Plys and M. Epstein, submitted to J.Wiborg, Westinghouse Hanford Corporation.	all	NA	NA	NA	NA
FAUSKE	FAI/97-113			10/01/97		Scrap Reactive Surface Area Estimates, M.G.Plys and B. Malinovic.	all	NA	NA	NA	NA
FAUSKE	FAI/97-32			04/09/97		Feasibility of Direct Reactivity Measurement in MCOs at the Cold Vacuum Drying Facility (CVDF), Fauske & Associates report, R.J.Hammersley.	all	NA	NA	NA	NA
FAUSKE	FAI/97-41			04/08/97		Fuel Surface Area Independent Review and Estimates, M. G. Plys, Fauske and Assoc., Burr Ridge, Illinois	all	NA	NA	NA	NA
FAUSKE	FAI/97-62			06/10/97		K-Basins Spent Fuel Sludge Water Contents Estimates, M. G. Plys, Fauske and Assoc., Burr Ridge, Illinois	all	NA	NA	NA	NA
FAUSKE	FAI/98-67			06/01/98		Double Scrap Basket Analysis for Selected Cold Vacuum Drying Scenarios, M.G.Plys and S. J. Lee, Fauske & Associates.	all	NA	NA	NA	NA
FAUSKE				05/17/96		Hydrate Decomposition, Letter, M. G. Plys, Fauske and Assoc., Burr Ridge, Illinois, to J. Wiborg, Westinghouse Hanford Co., Richland, Washington.	all	NA	NA	NA	NA
FAUSKE				06/05/96		Porous Media Model of Particulate Bed Decomposition, Letter, M. G. Plys Fauske and Assoc., Burr Ridge, Illinois, to J. Wiborg, Westinghouse Hanford Co., Richland, Washington.	all	NA	NA	NA	NA
FAUSKE				12/12/96		Fuel Oxide Hydrate Decomposition Developments, Letter, M. G. Plys, Fauske and Assoc., Burr Ridge, Illinois, to P. Leroy, Duke Engineering & Services Hanford Co., Richland, Washington.	all	NA	NA	NA	NA
FAUSKE				02/03/97		Bounding Estimate of Fuel Oxide Water Content, Letter, M. G. Plys (Fauske and Assoc., Burr Ridge, Illinois) to J. Swenson (Duke Engineering & Services Hanford, Richland, Washington).	all	NA	NA	NA	NA
FAUSKE				06/07/96		Dehydration Parameter Determination, Fauske & Associates letter, M G Plys to Jim Wiborg, Ron Omberg, and Paul Scott.	all	NA	NA	NA	NA
FAUSKE				11/12/96		Dehydration Issues, Fauske & Associates letter, M G Plys to Peter Leroy, Duke Engineering & Services Hanford.	all	NA	NA	NA	NA
FAUSKE				01/07/97		Fuel Oxide Hydrate Decomposition - Second Model, Fauske & Associates letter, MG Plys to Ron Omberg, Duke Engineering & Services Hanford.	all	NA	NA	NA	NA
FAUSKE				04/01/97		Brief Review of Oxidation Data for N-Reactor Spent Nuclear Fuel, Fauske & Associates letter, M. Epstein to M. G. Plys.	all	NA	NA	NA	NA
FAUSKE				06/17/97		Single-Step Rate Law Implications, Fauske & Associates letter, M.Plys to D.Duncan et al.	all	NA	NA	NA	NA
FAUSKE				11/25/97		Calculation Note for Probabilistic Evaluation of MCO Particulate Water Content, M.G.Plys and B. Malinovic, Fauske & Associates.	all	NA	NA	NA	NA
FAUSKE				04/23/98		Under Water Fuel Flash Incidents and K-Basins Fuel Application, M.G.Plys and M. Epstein, Fauske & Associates.	all	NA	NA	NA	NA

(a) Safety Class Requirement: SC, SS, GS
 (b) Performance Category: PC-0, -1, -2, -3, -4
 (c) Review Type: CK (Checked); IR (Independent Review); ALT (Alternate Calculation); GE (General Calculations)
 (d) Calculation Type: C= Computer Generated, M= Manual

DISTRIBUTION SHEET

To	From		Page 1 of 1		
Distribution			Date 10/14/98		
Project Title/Work Order			EDT No. 625782		
Cold Vacuum Drying Facility Supporting Data and Calculation Database			ECN No.		
Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
W. C. Alaconis	R3-86	x			
K. A. Boes	R3-86	x (3)			
J. R. Brehm	R3-26	x			
J. J. Irwin	R3-86	x			
C. R. Miska	R3-86	x			
S. L. Mischke	R3-86	x			
C. C. Pitkoff	R3-86	x			
J. E. Turnbaugh	X3-79	x			
R. Whitehurst	R3-86	x			
Project Files	R3-11	x			
CVD Files (BM Brown)	R3-86	x (4)			