

Nuclear Fuel Services, Inc. P.O. Box 124 . West Valley, New York 14171

A Subsidiary of Getty Oil Company

(716) 942-3235

50-201

December 5, 1978 7-78-317

(NRC PUBLIC DOCUMENT ROOM)

Dr. A. T. Clark Fuel Reprocessing and Recycle Branch Division of Fuel Cycle & Material Safety US Nuclear Regulatory Commission Washington, D. C. 20555

Dear Dr. Clark:

7901050046

This is to acknowledge receipt of your letter dated November 20, 1978. NFS will provide a Senior Operator to assist in plant orientation for your examiners, and we will expect to hear from you at a later date regarding the specific scheduling of this testing in March.

Attached per your request is a list of plant operating procedures as of this date.

Very truly yours,

A. C. Pierce Operations Manager



FEE EXEMPT

11021

LLWT PLANT - 02

50P #	REV. #	SOP TITLE	DATE
02-1	8	Cold Chemical Makeup	November 1978
02-2	5	Ion Exchange Bed Operation	September 1978
02-3	6	Process Control Procedures for LLWT Plant	November 1978
02-4	4	Operation of the Anthracite Filter	April 1978
02-5	8	Centrifuge & Drumming Station Operations	November 1978
02-6	8	Operation of Flocculator-Clarifier	September 1978

FRS PLANT 1

SOP #	REV. #	SOP TITLE	DATE
1-8	7	Cask Unloading Crane	April 1978
1-9	• 5	Operation of the Fuel Pool Canister Crane	April 1978
1-10	6	Operation of Fuel Pool Service Bridge and Fuel Hoist	April 1978
1-12	10	Fuel Pool Water System	March 1978
1-13	4	Railroad Car Pullers	April 1978
1-14	8	FRS Accountability	April 1978
1-16	6	Operation of the Cask Unloading Pool Lift Rack	April 1978
1-34	3	Operation of High Pressure Pump and Diesel Engine for FRS Cask Decon Stall	April 1978
1-35	7	FRS Filter Medium and Resin Disposal and Replacement	April 1978
1-36	3	Operation of the FRS Pool Cooling System	November 1978
1-38	2	Operation of the FRS Ventilation System	March 1978
1-39	0	NFS-4 Cask Handling	May 1978

PMC-	GPC	PLA	ANT	2

SOP #	REV. #	SOP TITLE	DATE
2-4	7	General Purpose Cell Two-Ton Crane	June 1978
2-5	6 .	General Purpose Cell Power Manipulator	June 1978
2-6	6	Operation of the GPC Fire Protection System	March 1978
2-8	8	PMC Two-Ton Cranes	June 1978
2-12	5	Sc. ap Removal Crane Operation	May 1978
2-13	9	Scrap Removal Shielded Access Door Operation	November 1978
2-14	6	Scrap Removal - General Purpose Cell Hatch Operation	November 1978
2-20	6	PMC Crane Room Door	May 1978
2-27	6	PMC Fire Fighting Equipment	March 1978
2-36	4	GPC Crane Room Door and Hinged Rails	May 1978

June 1978

PLANT 3 - DISSOLUTION AND FEED PREPARATION

SOP #	REV. #	SOP TITLE	DATE
3-1	6	Chemical Processing Cell 16-Ton - 2-Ton Crane	June 1978
3-2	7	CPC Combo-Manipulator Crane	June 1978
3-11	4	CPC Crane Room Door	March 1978
3-13	1	EDR Crane Operation	April 1978

April 1978

PLANT 6

SOP #	REV. #	SOP TITLE	DATE
6-2	11	Vessel Off-Gas System	April 1978

PLANT 7 - LIQUID WASTE TREATMENT AND ACID RECOVERY

SOP #	REV. #	SOP TITLE	DATE
7-8	1	Process Building Liquid Waste Handling	March 1978

January 1978

PLANT 8 - LIQUID WASTE STORAGE AND DISPOSAL

SOP #	REV. #	SOP TITLE	DATE
8-1	10	Waste Tank Operation	January 1978

May 1978

PLANT 9 - SOLID WASTE HANDLING AND STORAGE

SOP #	REV. #	SOP TITLE	DATE
9-1	9	Scrap Removal and Burial	May 1978
9-2	7	Solid Radioactive Waste Disposal	February 1978

PLANT 14 - COLD CHEMICAL MAKEUP

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SOP #	Rev. #	SOP Title	Date		
14-1	7	Receipt and Distribution of Bulk Liquid Chemicals	January	1978	

PLANT 15 - COMMON FACILITIES

SOP #	REV. #	SOP TITLE	DATE
15-1	18	Management of Plant Liquid Releases	November 1978
15-3	8	Operation of Process Building Supply	November 1978
15-4	12	Sampling "B" and "C" Type Sample Operations	September 1978
15-6	9	Jetting Sumps	May 1978
15-8	9	Operation of Ventilation Washer	March 1978
15-9	6	Process Building and FRS Exhaust Fans	March 1978
15-11	6	Sampling of Stack Gases	July 1978
15-12	10	Laundry Operations	September 1978
15-13	7	Interceptor Operation	July 1978
15-14	7	Work in Contamination Zone 4 and High Radiation Areas	December 1977
15-20	5	Operation of Head End Ventilation System	November 1978
15-21	6	Head End Ventilation Filter Change	November 1978
15-25	2	Absolute Filter Change in Alpha Lab	May 1978
15-26	1	Work in Contamination Zone 3	July 1978

June 1978

PLANT 30 - ELECTRICAL DISTRIBUTION FACILITIES

1 1 1

SOP #	REV. #	SOP TITLE	DATE
30-1	9	Emergency Power Generation	January 1978
PLANT 31	- UTILITY	ROOM	
31-1	7	Plant Utility and Instrument Air	January 1978
31-2	8	Steam Generation	January 1978
31-3	4	4K-1 Pulser Air Compressor	January 1978
31-4	2	Operation of Zeolite Water Softeners	June 1978
PLANT 32	- COOLING	AND SERVICE WATER EQUIPMENT	
32-1	9	Plant Water System	January 1978
32-2	8	Demineralized Water System	March 1978
	1. 1	D	10000

32-46Potable Water SystmJanuary 197832-58Fire Water SystemMarch 197832-68Cooling Water SystemJanuary 1978

OAK RIDGE NATIONAL LABORATORY

OPERATED BY UNION CARBIDE CORPORATION NUCLEAR DIVISION



POST OFFICE BOX X OAK RIDGE, TENNESSEE 37830 July 6, 1978

Dacker Number 50-368

Dosition 19 NRC PDR

Mr. Leo Beltracchi Electrical Instrumentation & Control Systems Branch Division of Systems Safety Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, DC 20555

Dear Mr. Beltracchi:

Subject: Audit of "CPC Dynamic Software Verification Field Test Procedure"

On June 28, 1978, a visit was made to the Systems Engineering Laboratories in Ft. Lauderdale, Florida, to witness a demonstration of the subject procedure. The procedure was dated June 23, 1978, (Rev. 0) and will be formally transmitted to NRC in the near future. A demonstration was conducted on Channel D to verify the results which have been previously obtained and formally logged by C.E. The logs were inspected and found to be consistent with the procedure except for one item. It was noted that step No. 7 requiring all disk numbers utilized during the test to be recorded in the test log had not been fully complied with. This was corrected by the test engineer as soon as it was pointed out that no entries were made for the DSVT program and DSVT input disk numbers.

An ad-hoc demonstration was conducted on Channel B with exact agreement with Channel D results on all five test cases.

It was explained that the DSVT program operates as an overlay in the region \$3000-\$3CBC and uses the area \$2000-\$2C80 as a data storage/buffer area. A check was made of the system check-sum values and it was noted that only the block 2 & 3 values were changed from the phase II audited system.

The values of the addressable constants in Channel B were requested and appear in table I on the following page. It was explained that only KCAL will vary from case to case.

7901050018

CONSTANTS FOR DSVT CASE 17 (Primary Depressurization)

Pt. I.D.	Valve
60	. 1.0
61 -	0
62	0
63	1.0
64	5.0
65	1.07
66	5.0
67	1.02
68	1.0
69	.99896 KCAL
70	0
71	1.0
72	1.0
73	1.0
74	1.0
75	1.0
76	1.0
77	1.0
78	6.574
79	-3.052
80	.535
81	-4.108
82	9.103
83	-4.108
84	.535
85	-3.052
86	6.574
87	1.1099 4
88	1.6384 x 10 4
89	0
90	0
91	0

In summary, the test was conducted in accordance with the procedure and the expected values shown in table III of the procedure were confirmed. The software and hardware environment was a duplicate of the ANO-2 CPC system. I have included the addressable constants for review by others since it is outside the scope of my review.

Yours truly

J. B. Bullock

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