## REGULEDRY INFORMATION DISTRIBUTI SYSTEM (RIDS)

ACCESSION NBR: 8607080064 DDC. DATE: 86/07/02 NOTARIZED: NO DOCKET # FACIL: 50-220 Nine Mile Point Nuclear Station, Unit 1, Niagara Powe 05000220 AUTH. NAME AUTHOR AFFILIATION MANGAN, C. V. Niagara Mohawk Power Corp. RECIP. NAME RECIPIENT AFFILIATION ZWOLINSKI, J. A. BWR Project Directorate 1

SUBJECT: Forwards addl info re surveillance capsule program submitted on 851216, per NRC request.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR L ENCL L SIZE: 3 TITLE: OR Submittal: General Distribution

## NOTES:

.

	RECIPIENT ID CODE/NA BWR EB BWR FOB BWR FOB BWR PD1 PD	ME 01	COPII LTTR 1 5	ES ENCL 1 5	RECIPIEN ID CODE/N/ BWR EICSB BWR PD1 LA KELLY,J	T AME	COPI LTTR 2 1 1	ES ENCL 2 0 1
INTERNAL:	ADM/LFMB NRR/ORAS RGN1		1 1 1	0 0 1	ELD/HDS3	04	1 1	0 1
EXTERNAL:	EG&G BRUSKE, NRC PDR	S 02	1 1	1 1	LPDR NSIC	03 05	1 1	1 1

ACCERCICAN NBR: SLOTOBOOGA DAG DATE: BLOTO DISTRIBUTIO JYEALM (RJDB) ACCERCICAN NBR: SLOTOBOOGA DAG DATE: BLOTYCE ANTARIY D: NO FALLE: DO BRO MAR NALLE POINT NUCLOAT STOTION LATE IN MARGATER FOUR OF000220 ACTH. MANE ACTIVER AND IN INCLOAT STOTION LATE IN MARGATER FOUR OF000220 MANCAM, C. V. Mingare Highew's rower Cort

Reciption Recipite States Contraction Recipited Recipited Structure Contractor 1 2021-2023-20 A BUR Project Directorator 1

SURJECT: Formory addi fuso re Curvelllanco cepsule praarom submitted an FULDes o ARC requess.

DINTRIMUM (34 CODA: ADOID COPIES RECEIVED.LAR \_\_\_\_\_ ENG \_\_\_\_\_ SIZE: \_\_\_\_\_\_ TITLE: OR Submittal: General Distribution

NOTE: G.

•

233	1400	T	/BI9I03%	ମ:	COPIC	I	14-15-41-5-381	
30/13	21111	-114:41	IV CODE/A	JOM3	91118	714/	ANTIGUD QI	
<b>(</b> )	1		BUR EICSB	1	t		AT SIM	
Ø	t		BWR PD1 LA	1	R		acht sing	
t	l		KELLY, J	S	15	\$ Q	AN LON HUR	
2.	Ĵ.		asa ama	ţ	L		<b>MGA 201</b>	
Ø	Ł		ELD/HNS3	C	L		APAKERA	LIANS THE
ĩ	L	80	BLIT SER	0	8		SAMONSIM	-
			- star-	1	Ł		114-03	
2	Ł	Fixt	สนา	t	L	8	AND BELLEN	P-STERNAL.
6	t,	1.413	DISN	1	L,	1303	SIG9 13911	

NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

July 2, 1986 . NMP1L 0074

Director of Nuclear Reactor Regulation Attention: Mr. John A. Zwolinski, Project Director BWR Project Directorate Number 1 Division of BWR Licensing U.S. Nuclear Regulatory Commission Washington, D.C. 20555

> Re: Nine Mile Point Unit 1 Docket No. 50-220 DPR-63

Dear Mr. Zwolinski:

n v Niaga N M Moha

By letter dated December 16, 1985, Niagara Mohawk submitted the Surveillance Capsule Program we plan to implement at Nine Mile Point Unit 1. During the review of this program, members of your staff requested additional information. The attached provides the requested information.

Sincerely,

NIAGARA MOHAWK POWER CORPORATION

C. V. Mangah Senior Vice President

PEF:bd Attachment

8607080064

•

•

\* \* \* \*

## RESPONSE TO QUESTIONS RAISED BY THE NUCLEAR REGULATORY COMMISSION REGARDING SURVEILLANCE CAPSULE PROGRAM AT NINE MILE POINT UNIT 1

Niagara Mohawk has tested reactor vessel surveillance specimens from two capsules removed from Nine Mile Point Unit 1. These specimens have been recently reconstituted, re-encapsulated and returned to the reactor. The Surveillance Capsule Program planned for implementation at Nine Mile Point Unit 1 was submitted to the Nuclear Regulatory Commission on December 16, 1985. Questions were recently raised by the Nuclear Regulatory Commission staff regarding the re-encapsulated effort. Niagara Mohawk's response to those questions is as follows:

```
Question: Will dosimetry be put into the re-encapsulated capsules? If .
yes, is it the same as the original?
```

- Answer: The original iron, nickel and copper dosimetry wires were returned to the capsules. Additionally, dosimetry was also installed which includes the following:
  - 1. Fissionable radiometric monitors  $(Np^{237}, U^{238});$
  - 2. Non-fissionable radiometric monitors (Ti, Co/Al and Nb);
  - 3. Solid state track recorders  $(U^{235}, Np^{237})$ ; and
  - Helium accumulation fluence monitors (Be, Al as well as Fe, Cu and Co/Al wires with known boron content).

Gadolinium covers were extensively used to adjust the neutron flux energy response of the dosimetry over the range from 0.5 to 11.9 MeV. 

## د ' k

• • • •

• •

Question: How were the Charpy specimens reconstituted?

Answer: The halves of broken full size Charpy specimens were reconstituted at Battelle Columbus Laboratories using a stud welding method documented in EPRI Report NP-2759, dated December, 1982.

Question: How will reconstitution affect the Charpy test?

- Answer: No effects on Charpy test results due to the reconstitution are expected. This conclusion is based on the extensive testing that is documented in EPRI NP-2759.
- Question: During the reconstitution process, what was the estimated peak temperature at the root of the V-notch?
- Answer: As documented in EPRI NP-2759, the peak temperture at the notch during stud welding was measured to be 130<sup>0</sup>F.
- Question: When are the reconstituted capsules to be re-inserted in Nine Mile Point Unit 1?
- Answer: They were re-installed during the recently completed Spring, 1986 refueling outage.
- Question: What was the estimated effective full power years on the reactor vessel at the time of capsule re-insertion?

Answer: 10.3 effective full power years.

• • • • • • • • • • •

•

.