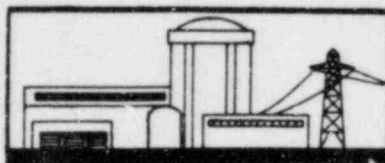


THE B&W OWNERS GROUP

Arkansas Power & Light Company
Duke Power Company
Florida Power Corporation
GPU Nuclear Corporation
Sacramento Municipal Utility District

ANO-1
Oconee 1, 2, 3
Crystal River 3
TMI-1
Rancho Seco



Toledo Edison Company
Tennessee Valley Authority
Washington Public Power Supply
System
Babcock & Wilcox Company

Davis Besse
Belleville 1, 2
WNP 1

Working Together to Economically Provide Reliable and Safe Electrical Power

March 18, 1985

Suite 220
7910 Woodmont Avenue
Bethesda, Maryland 20814
(301) 951-3344

Mr. J. F. Stolz
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: B&W Report BAW-1543 "Integrated Reactor Vessel Material Surveillance Program"

Attachment: BAW-1543 Revised Tables 3-11 and E-1

Dear Sir:

While preparing reactor vessel surveillance program capsules (RVSP) for shipment and installation in the Crystal River 3 reactor, it was discovered that a capsule (OCII-B), which was reported to have been inserted in CR-3 during the 1983 outage, was in the storage pool at B&W's Lynchburg Research Center. Following evaluation, it has been concluded that capsule OCI-B was inserted in CR-3 in lieu of OCII-B. This situation arose due to the difficulty in reading serial numbers etched into activated components.

As described in BAW-1543, neither OCI-B nor OCII-B contain significant material with respect to the Oconee units nor any other plant within the Integrated RVSP and are planned to be held as stand by capsules.

The attached revised BAW-1543 Tables 3-11 and E-1 reflect the detailed effect of this situation on the IRVSP for your approval. In addition, we have taken this opportunity to update Table E-1 to reference capsule analyses completed since the report was prepared in February 1984. These modifications will be incorporated in BAW-1543 Rev. 2A following your approval.

In order to minimize the possibility of this situation arising in the future, B&W will be taking the following actions:

1. Request utility and field personnel involved with RVSP capsule handling to obtain independent verification of serial numbers and report the actual shuffle performed in writing.
2. Maintain IRVSP capsule inventory control at the LRC's storage pool with updates performed following each movement.

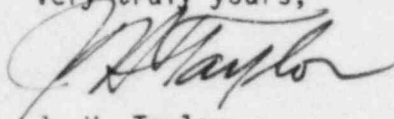
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Please approve this modification to BAW-1543 in conjunction with the review now in progress at the NRC.

Should you have any questions, please call our Mr. C. J. Hudson at (804) 385-2550.

Very truly yours,



J. H. Taylor
Manager, Licensing Services

JHT/mct

cc: B&WOG Materials Committee

D. F. Spond	- AP&L
P. F. Grill	- DPCo
M. A. Haghi	- DPCo
D. Fields	- FPC
R. A. Webb	- FPC
J. A. Janiszewski	- GPUN
S. W. Rutter	- SMUD
R. J. Gradomski	- TED

NRC

B. J. Elliot
R. Hernan
H. Nicholaras

B&W

R. B. Borsum
R. J. Finnin
C. J. Hudson

Table 3-11. Surveillance and Research Capsule
Insertion and Withdrawal Schedule
for Crystal River Unit 3

<u>Holder tube</u>	<u>Location in holder tube</u>	<u>Remove</u>	<u>Insert</u>
<u>Installed at Initial Fuel Load</u>			
XW	Top		CR3-B (WC)
XW	Bottom		CR3-D(WC)
<u>End of First Fuel Cycle (1A)</u>			
WZ	Top		CR3-LG1(WC)
WZ	Bottom		CR3-LG2(WC)
ZY	Top		CR3-C(W)
ZY	Bottom		CR3-A(W)
YZ	Top		OCII-A(W)
YZ	Bottom		OCI-A(W)
YX	Top		OCII-E(W)
YX	Bottom		OCIII-D(W)
XW	Top	CR3-B(WC)	CR3-E(W)
WX	Top		OCIII-B(W)
WX	Bottom		CR3-F(WC)
<u>End of Second Cycle</u>			
YZ	Top	OCII-A(W)	OCI-C(W)
WX	Top	OCIII-B(W)	TM11-C(W)
<u>End of Fourth Cycle</u>			
YZ	Bottom	OCI-A(W)	OCI-B OCI-B
WZ	Top	CR3-LG1(WC)	None
WZ	Bottom	CR3-LG2(WC) (WZ now empty)	None
<u>End of Fifth Cycle</u>			
WX	Top	TM11-C(W)	OCIII-C(W)
XW	Bottom	CR3-D(WC)	TM11-B
ZY	Top	CR3-C(W)	OCIII-F(W)
WZ	Top	None	OCI-B OCI-B
WZ	Bottom	None	CR3-LG2(WC)
(WZ no longer empty)			
<u>End of Sixth Cycle</u>			
WZ	Top	OCI-B(a)	OCIII-E(W)
YX	Top	OCII-E(W)	TM11-D
YX	Bottom	OCIII-D(W)	OCI-D
YZ	Bottom	OCI-B(a)	OCIII-E(W)

Table 3-11. (Cont'd)

<u>Holder tube</u>	<u>Location in holder tube</u>	<u>Remove</u>	<u>Insert</u>
<u>End of Seventh Cycle</u>			
XW	Bottom	TM11-B(a)	OC11-D
WX	Bottom	CR3-F(WC)	TM11-F
YZ	Top	OC1-C(W)	Dummy OC11-F
YZ	Bottom	OC11-B(a)	OC11-F
<u>End of Eighth Cycle</u>			
WX	Top	OC111-C(W)(a)	OC111-E from WZ top Dummy
WZ	Top	OC11-B(a) OC111-E to WX top	None
WZ	Bottom	CR3-LG2(WC) (WZ now empty)	None
<u>End of Ninth Cycle</u>			
XW	Top	CR3-E(W)(b)	OC111-F from ZY top
ZY	Top	OC111-F to XW top	None
ZY	Bottom	CR3-A(W)(a) (ZY now empty)	None
<u>End of Eleventh Cycle</u>			
WX	Top	OC111-E(W)(a) Dummy	None
WX	Bottom	TM11-F to YZ top	None
YX	Top	TM11-D bottom	None
YX	Bottom	OC1-D(a)	None
YZ	Top Bottom	Dummy OC111-E(W)(a) (WX and YX now empty)	YZ TM11-F from WX bottom
<u>End of Twelfth Cycle</u>			
XW	Top	OC111-F(W)(a)	Dummy
YZ	Top Bottom	TM11-F(a)	None
YZ	Bottom Top	OC11-F(a) (YZ now empty)	None
<u>End of Fourteenth Cycle</u>			
XW	Top	Dummy	None
XW	Bottom	OC11-D(a) (XW now empty)	None

Table E-1. Summary Status of Surveillance Capsules

Capsule ID	Weld metal/ compacts	Current location	Desired	Expected/ received	Time of removal	Comments
OCI-F	No/No	Tested	--	5.7E17	--	Reported in BAW-1421
OCI-E	Yes/No	Tested	--	1.5E18	--	Reported in BAW-1436
OCI-B	No/No	CR3-YZ Holding	4.4E18	6.5 3.8E18	CR3-cycle 6	--
OCI-A	Yes/No	Tested Removed	7.2E18	8.95 8.4E18	Removed --	To be tested and reported
OCI-C	Yes/No	CR3-YZ	1.3E19	1.3E19	CR3-cycle 7	Reported in BAW-1837
OCI-D	No/No	Holding	1.3E19	1.3E19	CR3-cycle 11	--
OCII-C	Yes/No	Tested	--	9.43E17	--	Reported in BAW-1437
OCII-A	Yes/No	Tested	--	3.37E18	--	Reported in BAW-1699
OCII-B	No/No	Holding CR3-YZ	6.7E18	7.9 8.2E18	CR3-cycle 8	--
OCII-E	Yes/No	CR3-YX	1.2E19	1.3E19	CR3-cycle 6	--
OCII-D	No/No	Holding	1.2E19	1.3E19	CR3-cycle 14	--
OCII-F	No/No	Holding	1.2E19	1.2E19	CR3-cycle 12	--
OCIII-A	Yes/No	Tested	--	7.39E17	--	Reported in BAW-1438
OCIII-B	Yes/No	Tested	--	3.12E18	--	Reported in BAW-1697
OCIII-C	Yes/No	Holding	7.2E18	7.6E18	CR3-cycle 8	--
OCIII-D	Yes/No	CR3-YX	1.3E19	1.3E19	CR3-cycle 6	--
OCIII-E	Yes/No	Holding	1.3E19	1.2E19	CR3-cycle 11	--
OCIII-F	Yes/No	Holding	1.3E19	1.2E19	CR3-cycle 12	--
TM11-E	Yes/No	Tested	--	1.07E18	--	Reported in BAW-1439
TM11-B	No/No	Holding	4.1/5.2E18	4.4E18	CR3-cycle 7	--
TM11-C	Yes/No	CR3-WX	7.2/9.4E18	8.1E18	CR3-cycle 5	--
TM11-A	Yes/No	TM12-ZY	1.3/1.7E19	STATUS IN DOUBT	CR3-cycle 11	--
TM11-D	No/No	Holding	1.3/1.7E19	1.3E19	CR3-cycle 11	--
TM11-F	No/No	Holding	1.3/1.7E19	1.3E19	CR3-cycle 12	--
CR3-B	Yes/Yes	Tested	--	1.07E18	--	Reported in BAW-1679
CR3-C	Yes/No	CR3-ZY	4.1E18	6.9E18	CR3-cycle 5	--
CR3-D	Yes/Yes	CR3-XW	7.2E18	7.9E18	CR3-cycle 5	--
CR3-F	Yes/Yes	CR3-WX	1.3E19	1.4E19	CR3-cycle 7	--
CR3-A	Yes/No	CR3-ZY	1.3E19	1.4E19	CR3-cycle 9	--
CR3-E	Yes/No	CR3-XW	1.3E19	1.4E19	CR3-cycle 9	--

E-2

Table E-1. (Cont'd)

Capsule ID	Weld metal/ compacts	Current location	Desired	Expected/ received	Time of removal	Comments
AN1-E	Yes/No	Tested	--	7.27E17	--	Reported in BAW-1440
AN1-B	No/No	Tested	--	4.28E18	--	Reported in BAW-1698
AN1-A	Yes/No	Tested Removed	7.2E18	8.7E18 1.03E19	DB1-cycle 3	Reported in BAW-1836
AN1-C	Yes/No	DB1-YZ	1.3E19	1.4E19	DB1-cycle 5	--
AN1-D	No/No	Holding	1.3E19	1.4E19	DB1-cycle 8	--
AN1-F	No/No	Holding	1.3E19	1.4E19	DB1-cycle 9	--
RS1-B	Yes/Yes	Tested	--	3.99E18	--	Reported in BAW-1702
RS1-A	Yes/No	DB1-YX	5.3E18	5.7E18	DB1-cycle 4	--
RS1-D	Yes/Yes	Tested	7.2E18	6.6E18	--	Reported in BAW-1792
RS1-F	Yes/Yes	DB1-WX	1.3E19	1.4E19	DB1-cycle 5	--
RS1-C	Yes/No	DB1-XW	1.3E19	1.4E19	DB1-cycle 7	--
RS1-E	Yes/No	DB1-WZ	1.3E19	1.4E19	DB1-cycle 6	--
TE1-F	Yes/Yes	Tested	--	1.96E18	--	Reported in BAW-1701
TE1-B	Yes/Yes	Tested Removed	5.1E18	5.92E18	--	Reported in BAW-1834
TE1-A	Yes/No	DB1-WX	8.3E18	1.1E19	DB1-cycle 4	--
TE1-D	Yes/Yes	DB1-XW	1.5E19	1.5E19	DB1-cycle 8	--
TE1-C	Yes/No	DB1-YX	1.5E19	1.6E19	DB1-cycle 6	--
TE1-E	Yes/No	DB1-ZY	1.5E19	1.5E19	DB1-cycle 11	--
TMI2-A	Yes/No	TMI2-XW	4.7E17	5.1E17	TMI2 head rem.	Status in doubt
TMI2-B	Yes/Yes	TMI2-WX	--	7.1E17	TMI2 head rem.	Status in doubt
TMI2-C	Yes/No	Storage	--	--	--	--
TMI2-D	Yes/Yes	TMI2-XW	--	5.1E17	TMI2 head rem.	Status in doubt
TMI2-E	Yes/No	Storage	--	--	--	--
TMI2-F	Yes/Yes	Storage	--	--	--	--
CR3-LG1	--	Removed	7.8E18	6.9E18	--	To be tested and reported
CR3-LG2	--	Removed	1.4E19	1.4E19	CR3-cycle 8	To be reinserted after cycle 5
DB1-LG1	--	DB1-WZ	7.8E18	7.7E18	DB1-cycle 4	--
DB1-LG2	--	DB1-ZY	1.4E19	1.5E19	DB1-cycle 9	--
TMI2-LG1	--	TMI2-WX	--	7.1E17	TMI2 head rem.	Status in doubt
TMI2-LG2	--	TMI2-ZY	--	5.1E17	TMI2 head rem.	Status in doubt

E-3