CUB

CITIZENS' UTILITY BOARD

• 16 N. Carroll St., Suite 300 • Madison, WI 53703 • (608) 251-3322 • FAX (608) 251-7609 •

FOIA/PA REQUEST
Case No: 98-188
Date Rec'd: 5-4-98
Action Off: Paul
Related Cases:

April 27, 1998

Mr. Russell Powell
FOIA/Privacy Act Officer
Nuclear Regulatory Commission
Washington, D.C.
20555

Re: Freedom of Information Act Request

Dear Mr. Powell:

Pursuant to the Freedom of Information Act, 5 U.S.C. 522, as amended and 10 C.F.R. Part 9.41, the Wisconsin Citizens' Utility Board (CUB) requests the following documents:

1. Please provide any and all documents that contain information on the results of the demonstration of examination techniques of VSC-24 lid welds, which began in April, 1998, at Palisades nuclear plant.

For purposes of this request, please consider "documents" to include reports, studies, test results, correspondence, memoranda, meeting notes, meeting minutes, working papers, graphs, charts, diagrams, notes and summaries of conversations and interviews, computer records, electronic mail and any other form of written communications including internal NRC memoranda.

Pursuant to and in compliance with 10 C.F.R. 9.41 of the agency's regulations and 5 U.S.C. 552 governing requests for waiver of fees, CUB puts forth the following information.

CUB was incorporated pursuant to Chapter 181, 1979, of the Wisconsin Statutues. CUB is exempt from Federal income tax under Section 501(c)(4) of the Internal Revenue Code. CUB is also exempt from Wisconsin franchise tax.

The restricted fund (public interest fund) is exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code. The fund is also exempt from Wisconsin income taxes. The public interest fund was established on February 1, 1981, and reorganized on April 28, 1986 to correspond to the new structure of the CUB. The fund engages in charitable, scientific, literary and educational activities on behalf of CUB.

CUB has 26,000 members who are residential ratepayers in Wisconsin. CUB represents the more than two million residential ratepayers in the state. CUB's purpose continues to be the statutory purpose set forth under sec. 199.02, Wis. Stats.:

> ...to promote the health, welfare and prosperity of all the citizens of this state by ensuring effective and democratic representation of individual farmers and other individual residential utility consumers before regulatory agencies, the legislature and other public bodies and by providing for consumer education on utility service costs and on benefits and methods of energy conservation.

CUB seeks the requested information to become informed of the results of the demonstration of examination techniques of VSC-24 lid welds at the Palisades nuclear plant. The examination techniques were being tested to determine their usefulness in identifying the acceptability of VSC-24 lid welds. Demonstration of examination techniques of VSC-24 lid welds were also conducted at the Arkansas Nuclear One plant during March, 1998. The results of those tests are the subject of FOIA/PA 98-164. A Wisconsin utility's plans for loading VSC-24 casks with high level radioactive waste will be affected by the results of the demonstrations. CUB intends to use the information to assist it in its participation in any proceedings before Wisconsin regulatory agencies, and as part of CUB's ongoing effort to educate the public on nuclear energy issues in Wisconsin.

The information sought, is not, to the best of our knowledge, in the public domain. The general public in Wisconsin has displayed great interest in nuclear energy issues and have a direct interest in information regarding the operational performance of the VSC-24 cask. A Wisconsin utility currently uses the VSC-24 cask to store spent nuclear fuel near the shore of Lake Michigan.

CUB has demonstrated its ability and commitment to inform the public on all important nuclear energy issues in Wisconsin. CUB provides this information free of charge through newsletters, educational pamphlets, and correspondence to its members, other residential ratepayers, legislators, and policy makers, and has neither a commercial nor a private interest in the agency records sought.

Under the amended fee waiver standard, CUB is clearly entitled to a full waiver of all search, review and duplication fees. This standard calls for such a waiver, "if disclosure of the information is in the public interest because it is likely to contribute significantly to the public understanding of the operation or activities of the government and is not primarily in the commercial interest of the requester." 5. U.S.C. 552(1)(4)(A)(iii).

In light of the foregoing, CUB meets this standard on its face. CUB has no commercial interest in this matter, but rather seeks this information to help the general public and state regulatory agencies better understand the role of the federal government in regulating the nuclear power industry.

For the reasons cited above, CUB's request falls squarely within the Congressional intent in enacting the Freedom of Information Act and the fee waiver provision. CUB, therefore, asks that the NRC grant a full fee waiver for this FOIA request.

Thank you for your anticipated cooperation. If you have any questions in regards to this request, please feel free to contact me at your earliest convenience. Please contact me before acquiring and sending the requested information if the fee waiver is not applied.

Sincerely,

Dennis Dums

Dennis Dums
Research Director

From: Allen Howe, NMSS
To: WNP1.JOT, WNP1.GMT, Thomas, EDO
Date: 4/27/98 1:08pm
Subject: Update on the VSC-24 weld issues

The following is in response to your request for the status on the VSC-24 weld issues.

Update on the VSC-24 weld issues:

Last week, the VSC-24 Owners Group (Sierra Nuclear Corporation, Pt. Beach, Palisades, & ANO) successfully demonstrated a technique to ultrasonically examine the VSC-24 structural-lid closure weld using time-of-flight technology during an NRC inspection at Palisades. This was a major milestone in the process for resumption of fuel loading. Other milestones for the VSC-24 Owners Group and the individual licensees include training and qualification of personnel to perform the examinations, closure of the remaining RAIs, and completion of site specific safety evaluations, procedure changes, and training.

NRC remaining milestones include issuance of the inspection report for ultrasonic examination, review and issue documentation to close the Sierra Nuclear Corporation CAL issues related to fuel loading, and site specific inspections to verify implementation of corrective actions and commitments. The target for completion of items and resumption of fuel loading is June/July 1998.

CC: TWD2.TWP8.WFK, CJH, SFS, TJK1

PH1

50

Mail Envelope Info: (3544BB72.A46 : 17 : 42080)

Subject: Update on the VSC-24 weld issues
Creation Date: 4/27/98 1:08pm
From: Allen Howe

Created By: WND1.WNP7:AGH1

Recipients	Action	Date & Time
Post Office TWD2.TWP8		
WFK CC		
Post Office WND1.WNP1		
GMT (Glenn Tracy)		
JOT (John Thoma)		
Post Office WND1.WNP7		
CJH CC (Charles Haughney)		
SFS CC (Susan Shankman)		
TJK1 CC (Timothy Kobetz)		

Domain.Post Office	Delivered	Route
TWD2.TWP8	Pending	TWD2.TWP8
WND1.WNP1	Pending	WND1.WNP1
WND1.WNP7	Pending	WND1.WNP7

Files	Size	Date & Time
MESSAGE	1124	04/27/98 01:08pm
View	4109	04/27/98 09:08am

Options

Auto Delete:	No
Expiration Date:	None
Notify Recipients:	No
Priority:	Normal
Reply Requested:	No
Return Notification::	None
Concealed Subject:	No
Security:	Normal
To Be Delivered:	Immediate
Status Tracking:	All Information

TALKING POINTS FOR WFK MEETING April 27, 1998

UT INSPECTION

- Inspection at Palisades
- UT successfully demonstrated during "dry run" in both MTC and VCC
- Owners group guidance document submitted 5/1/98
- EPRI will administer qualification program

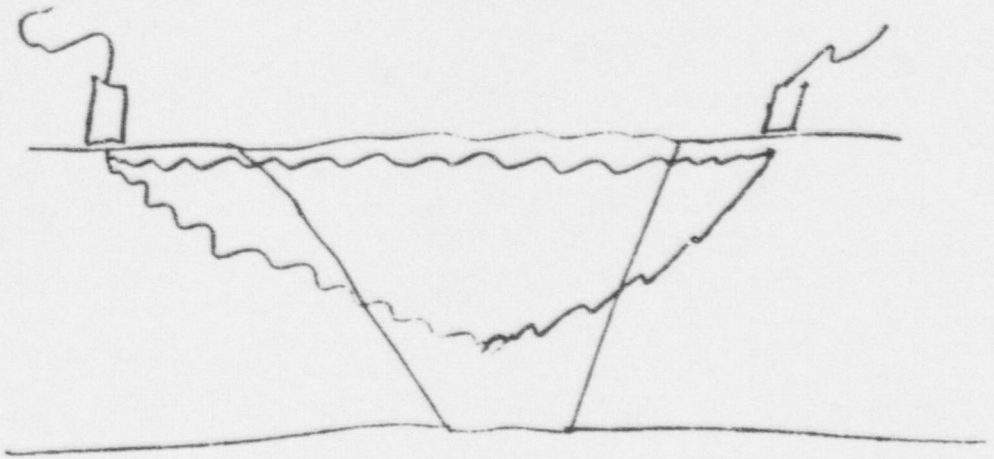
FUTURE ACTIONS FOR FUEL LOADING

- Issue UT Inspection Report (May 29, 1998)
- Owners Group submit list of future milestones (May 1, 1998)
- Owners Group respond to remaining outstanding RAIs (tentatively, May 22, 1998)
- Weld Team prepare SNC CAL Closeout (mid June 1998)
- CAL closeout inspection at Point Beach (mid June 1998)
- Owners Group schedule to inspect loaded casks

POTENTIAL OBSTACLES

- Owners Group submittals for closure of SNC CAL
- Resources for SNC CAL closeout and utility CAL closeout inspection
- Weld team agreement on technical issues involving allowable flaw size calculation

A/2



From: Timothy Kobetz, NMSS
To: CJH, EJL, PLE, FCS, TWD2.TWP8.WFK C Haughney, NMSS
Date: 4/24/98 6:36am
Subject: VSC-24 UT Inspection Update

The inspection team is on a tight schedule this morning and requested not to have a call with us this morning unless absolutely necessary. However, they provided me with the following update

The Time-of-Flight UT method is a workable method to UT the both casks loaded in the future and those already loaded and in service.

The data scatter is within an acceptable range to be covered by the proposed acceptance criteria.

The inspection will continue in-office for one more week to allow the VSC-24 Owners Group to submit its UT Guideline Document. The document will contain generic information to be included in the loading procedures for each utility and the procedure for UTing previously loaded casks.

The utilities are building a new mock-up which will be used in the future to certify new UT analysts. The mock-up will be controlled such that the location of the flaws will not be known to those individuals being certified.

Overall, things look favorable for the utilities to implement the Time-of-Flight UT method.

Please call me with any questions.

Tim

CC: HWL, RWP, CGI, TWD2.TWP0.EMH1, TWD2.TWP0.MGV, AGH1...

P 1/3

9807080043 2pp.

Mail Envelope Info: (35407943.AF5 : 14 : 44888)

Subject: VSC-24 UT Inspection Update
Creation Date: 4/24/98 6:36am
From: Timothy Kobetz

Created By: WND1.WNP7:TJK1

Recipients
Post Office TWD2.TWP0
EMH1 CC (Edwin Hackett)
MGV CC (Michael Vassilaros)

Post Office TWD2.TWP8
WFK

Post Office WND1.WNP7
AGH1 CC (Allen Howe)
CGI CC (Charles Interrante)
CJH (Charles Haughney)
EJL (Eric Leeds)
FCS (Frederick Sturz)
HWL CC (Henry Lee)
PLE (Patricia Eng)
RWP CC (Ronald Parkhill)

Post Office WND2.WNP3
LLG CC (Linda Gundrum)
RGS CC (Robert Schaaf)
WDR CC (William Reckley)

Domain.Post Office	Route
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WND1.WNP7	WND1.WNP7
WND2.WNP3	WND2.WNP3

Files	Size	Date & Time
MESSAGE	1072	04/24/98 06:36am
View	4109	04/24/98 02:36am

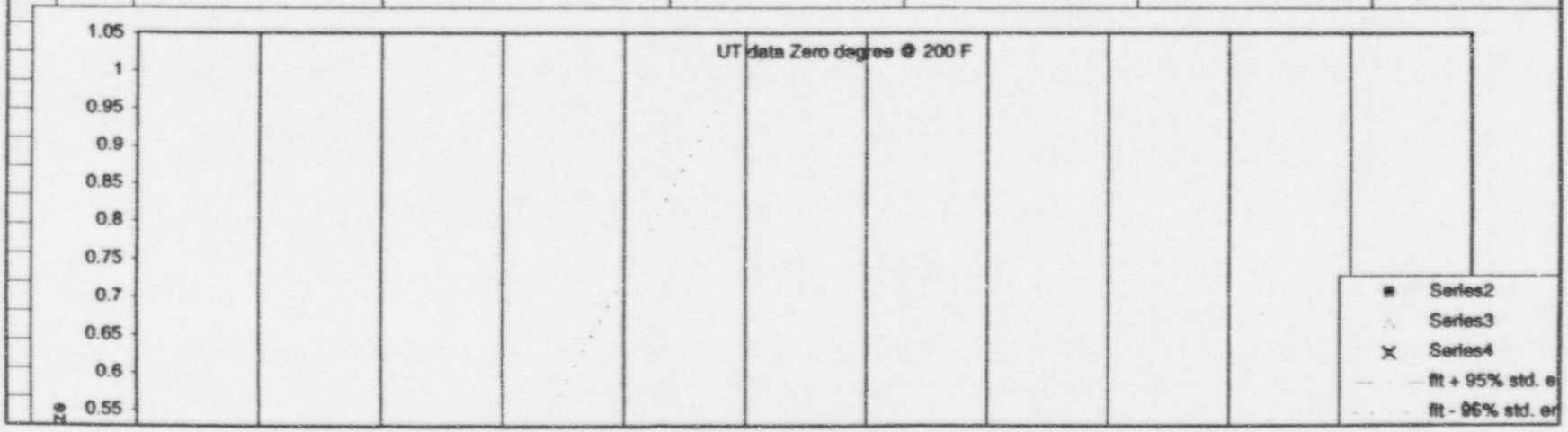
Options
Expiration Date: None
Priority: Normal
Reply Requested: No
Return Notification:: None

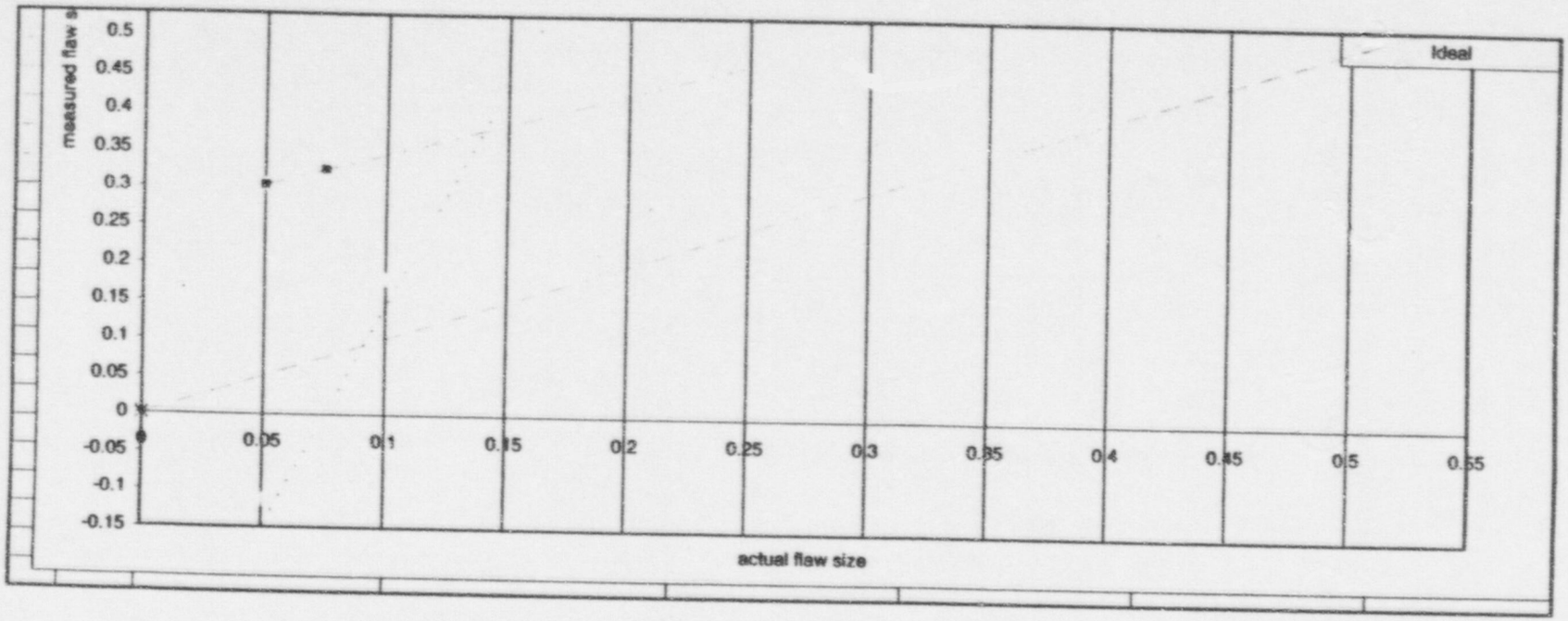
Concealed Subject: No
Security: Normal

DRY RUN 1 (BARE METAL)							
n	flaw #	actual value TWD (X*i*)	measured value TWD (Yi)	Calc y for upper limit	Calc y for lower limit	calc y for X*i*	((y-mX*i*-b)**2)/(n-
1	1	0.05	0.178	0.302395659	-0.114125659	0.094135	0.007033338
2	2	0.075	0.276			0.1146525	0.026033016
3	3	0.1	0.283			0.13517	0.021853709
4	4	0.15	0.236			0.176205	0.003575442
5	5	0.2	0.323			0.21724	0.011185178
6	6	0.25	0.354			0.258275	0.009163276
7	7	0.1	0.089			0.13517	0.002131669
8	8	0.05	0.228			0.094135	0.017919838
9	9	0.075	0.276			0.1146525	0.026033016
10	10	0.1	0.238			0.13517	0.010574009
11	11	0.15	0.11			0.176205	0.004383102
12	12	0.2	0.386			0.21724	0.028479938
13	13	0.25	0.438			0.258275	0.032301076
14	14	0.05	0.075			0.094135	0.000366148
15	15	0.075	0.095			0.1146525	0.000386221
16	16	0.1	0.145			0.13517	9.66289E-05
17	17	0.15	0.145			0.176205	0.000973752
18	18	0.2	0.217			0.21724	5.76E-08
19	19	0.25	0.226			0.258275	0.001041676
20	20	0.05	0.05			0.094135	0.001947898
21	21	0.075	0.11	0.322913159	-0.073090659	0.1146525	2.16458E-05
22	22	0.1	0.088			0.13517	0.002225009
23	23	0.15	0.138				0.001459622
24	24	0.2	0.212				2.74576E-05
25	25	0.25	0.278				0.000389076
26	26	0.1	0.092				0.001863649
27	27	0.1	0.3				0.027168929
28	28	0.3	0.365				0.004315176
29	29	0.4	0.44				0.003436304
30	30	0.5	0.491				0.000759003
31	31	0.1	0.071				0.004117789
32	32	0.2	0.112				0.011075458
33	33	0.3	0.049				0.062655096

tof-pall.xls 4/22/98

						sum =
						0.010483652
	standard error of the estimate Se =		0.102389705			
	for a 95% confidence level, we multiply Se by a z factor of 2.034 =			0.208260659		
					Ideal Line Data	
					x	y
					0	0
					0.55	0.55

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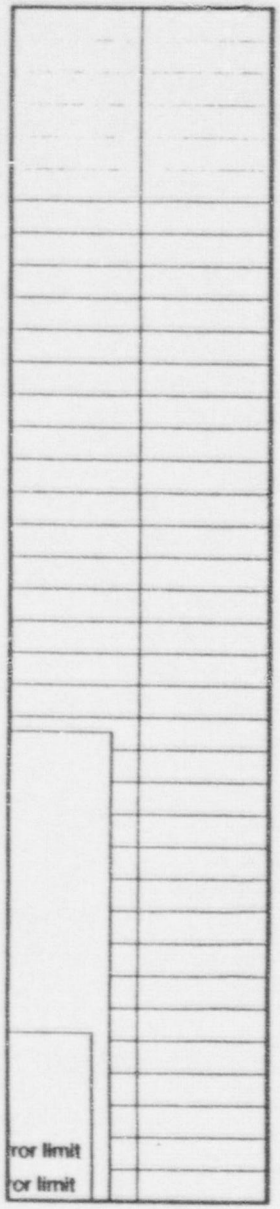
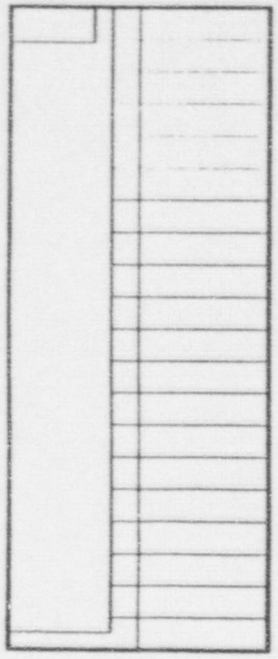
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.5
0.55
Ideal
actual flaw size

2)	
slope=	0.8207
intercept=	0.0531


ror limit
or limit



DRY RUN 1 (BARE METAL)				
n	flaw #	actual value Length	actual value TWD (X*i*)	measured value Length
1	1	0.5	0.05	0.7
2	2	0.5	0.075	0.4
3	3	0.75	0.1	0.7
4	4	0.5	0.15	0.75
5	5	0.5	0.2	0.4
6	6	1.5	0.25	1.35
7	7	0.5	0.1	0.6
8	8	0.5	0.05	0.55
9	9	0.5	0.075	0.25
10	10	0.75	0.1	0.8
11	11	0.5	0.15	0.45
12	12	0.5	0.2	0.45
13	13	1.5	0.25	1.4
14	14	0.5	0.05	0.55
15	15	0.5	0.075	0.75
16	16	0.75	0.1	0.5
17	17	0.5	0.15	0.5
18	18	0.5	0.2	0.6
19	19	1.5	0.25	1.3
20	20	0.5	0.05	0.55
21	21	0.5	0.075	0.4
22	22	0.75	0.1	0.7
23	23	0.5	0.15	0.4
24	24	0.5	0.2	0.4
25	25	1.5	0.25	1.65
26	26	0.5	0.1	0.3
27	27	0.5	0.1	0.65
28	28	0.5	0.3	0.7
29	29	0.5	0.4	0.6
30	30	0.5	0.5	1
31	31	0.375	0.1	0.25
32	32	0.375	0.2	0.25
33	33	0.375	0.3	0.8
DRY RUN 1 (PAINTED)				
n	flaw #	actual value Length	actual value TWD (X*i*)	measured value Length
1	1	0.5	0.05	0.6
2	2	0.5	0.075	0.45
3	3	0.75	0.1	0.6
4	4	0.5	0.15	0.5
5	5	0.5	0.2	0.4
6	6	1.5	0.25	1.25
7	7	0.5	0.1	0.6
8	8	0.5	0.05	0.5
9	9	0.5	0.075	0.55
10	10	0.75	0.1	0.65
11	11	0.5	0.15	0.4
12	12	0.5	0.2	0.5

13	13	1.5	0.25	1.9
14	14	0.5	0.05	0.7
15	15	0.5	0.075	0.65
16	16	0.75	0.1	0.8
17	17	0.5	0.15	0.7
18	18	0.5	0.2	0.65
19	19	1.5	0.25	1.85
20	20	0.5	0.05	0.65
21	21	0.5	0.075	0.25
22	22	0.75	0.1	0.55
23	23	0.5	0.15	0.55
24	24	0.5	0.2	0.6
25	25	1.5	0.25	2.1
26	26	0.5	0.1	0.4
27	27	0.5	0.1	0.5
28	28	0.5	0.3	0.7
29	29	0.5	0.4	0.6
30	30	0.5	0.5	0.5
31	31	0.375	0.1	0.25
32	32	0.375	0.2	0.2
33	33	0.375	0.3	0.6

measured value TWD (Yi)	
0.178	1
0.276	2
0.283	3
0.236	4
0.323	5
0.354	6
0.089	7
0.228	8
0.276	9
0.238	10
0.11	11
0.386	12
0.438	13
0.075	14
0.095	15
0.145	16
0.145	17
0.217	18
0.226	19
0.05	20
0.11	21
0.088	22
0.138	23
0.212	24
0.278	25
0.092	26
0.3	27
0.365	28
0.44	29
0.491	30
0.071	31
0.112	32
0.049	33
measured valueTWD (Yi)	
0.212	1
0.175	2
0.236	3
0.246	4
0.31	5
0.316	6
0.1	7
0.162	8
0.26	9
0.204	10
0.112	11
0.336	12

0.404	13
0.093	14
0.112	15
0.117	16
0.193	17
0.182	18
0.27	19
0.053	20
0.112	21
0.086	22
0.13	23
0.198	24
0.213	25
0.1	26
0.127	27
0.318	28
0.421	29
0.51	30
0.04	31
0.07	32
0.111	33

SNC UT Inspection Plan **April 17, 1998**

Purpose/Scope: To review SNC and the VSC-24 Owners Group (the VSCOG includes ANO, Pt. Beach, Palisades, and SNC) demonstration of ultrasonic testing of the structural-lid closure weld on the MSB mock-up.

Dates: March 16-20, 1998 and April 20-24, 1998
Report No. 72-1007/98-202
Certificate Holder: Sierra Nuclear Corporation
Location: Arkansas Nuclear One Site, Russellville Arkansas, Palisades Plant , Covert Michigan

Inspection Procedure(s): 60851 - Design Control of ISFI Components
(Reference IP - 57080, NDE/UT Review/Work Observation/Record Review)

Inspectors: Allen Howe, SFPO (Lead)
C. Ken Battige, SFPO
Mike Anderson, INEEL
Steven Doctor, PNNL
Debbie Jackson, RES (Observer)

VSCOG Contact: (ANO)	Ray Keller	501-858-4688
		Pager 501-964-1678
	John Dosa	501-358-4621
		Pager: 501-964-3991
		FAX 501-858-4685
(PAL)	Emil Zumick	616-764-2917
	John Brischak	616-764-2650

Key inspection areas:

- Perform a detailed review of the UT methodology employed to examine the structural lid closure weld. This includes actual demonstration of the UT equipment, operation, selection of the proper signals, data acquisition, data analysis, and data interpretation. The UT technology will be demonstrated, on a full diameter mock-up, under simulated field conditions including restrictions on access to the weld volume, elevated temperatures, etc. Evaluate differences between the mock-up and field conditions.

- Review tabulated data on UT scans to determine error band on UT method. Data includes detection, sizing, type of flaw, location and orientation. Has the VSCOG determined an error band? If so evaluate the adequacy of the error band and the method for determining it.

- Review UT examination procedures. Verify that there are adequate controls described in the procedures to ensure that personnel are qualified (to take data and/or interpret data), the essential variables are controlled, and that the procedure is sufficiently detailed to produce reliable and repeatable results. An examination strategy with a logic tree format is expected. Evaluate the various branches of the logic tree.

- Evaluate UT issues

  P-Scan Issue 1 - UT "near field" effects. What measures will be taken to address UT examination in the near-field regime to assure reliable and repeatable examination results?

P-Scan Issue 2 - Transducer size. For flaw sizing, it is generally better to use transducers that produce the smallest practicable sound beam cross section at the flaw location. The transducer described by the VSCOG produces a sound beam cross sectional area much larger than most of the flaws that are being sized. What measures is the VSCOG taking to ensure accurate flaw sizing with the transducer proposed for this UT examination technique? May provide a test block for examination by VSCOG.

- Evaluate method(s) to access MSB. Design of jacking device, set-up, operation, travel limits, etc.

- Review the ALARA planning and evaluation.
  finger rings for setup/removal
  neutron and gamma surveys
  temporary shielding
  low dose waiting/observation areas
  significant ALARA planning should be evident wrt job sequence, practice runs, communication between ALARA and job coordinators

- Review flaw insertion documentation **(DONE)**

- Review mock-up baseline UT data **(DONE)**

- Review 72.48 information to determine what 72.48 evaluations will be needed.

- Miscellaneous issues:
  contingencies for retrieval of lost parts, lanyards, etc.
  QA/QC of demonstration

Inspection Objectives

To observe and evaluate the

1) Proposed UT method, capabilities, limitations, and reliability

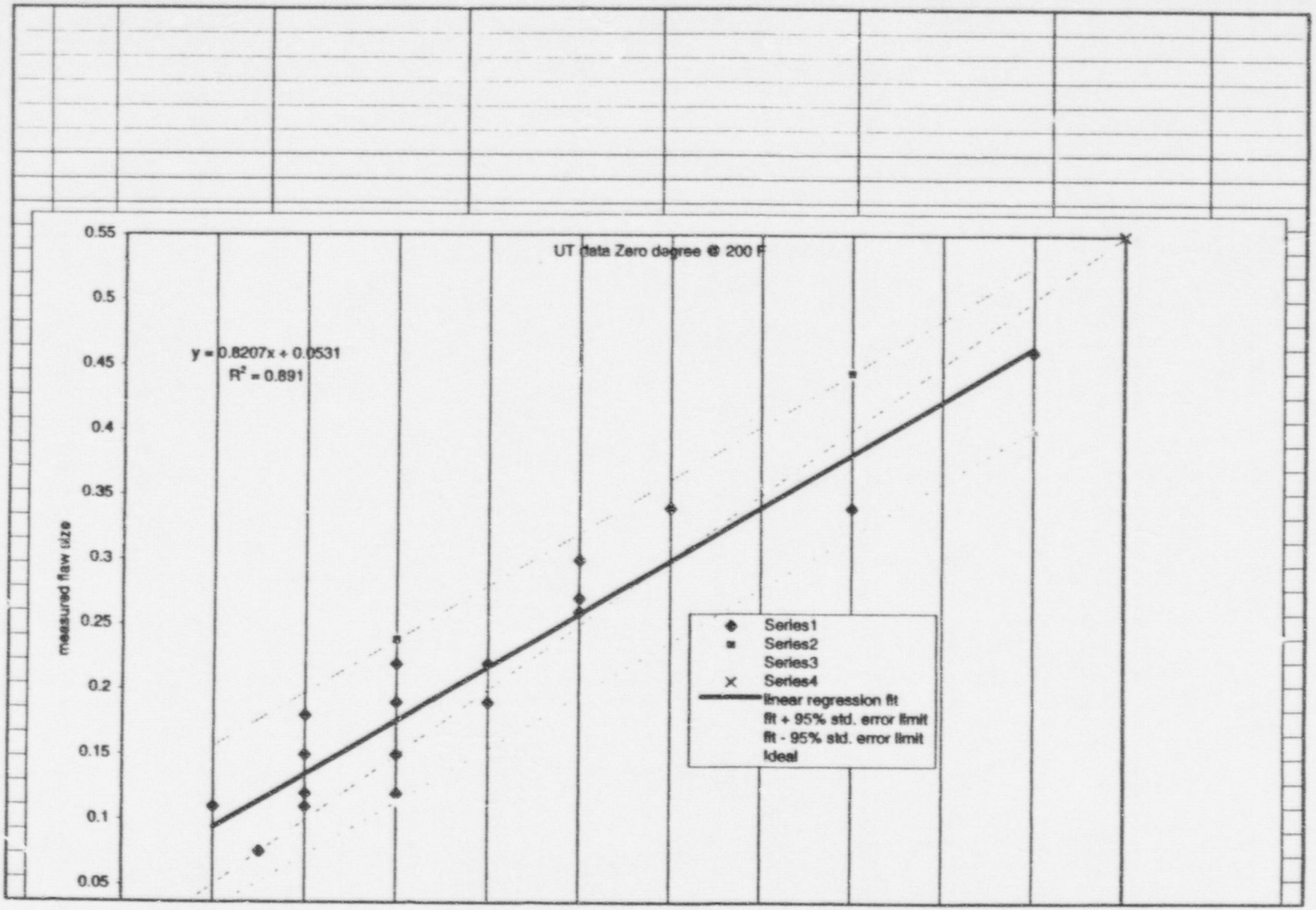
2) The overall process for feasability, safey, ALARA, etc.

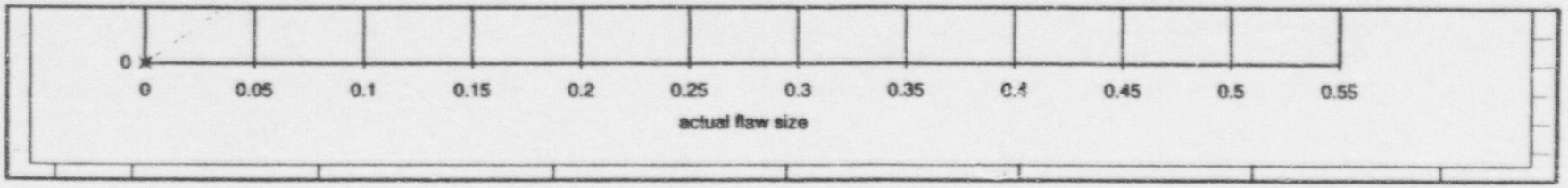
3) UT procedure guidance and VSC-24 OG control

4) 72.48 impacts

n	flaw #	actual value (X*i*)	measured value (Yi)	Calc y for upper limit	Calc y for lower limit	calc y for X*i*	((y-mX*i*-b)**2)/(n-2)
1	4	0.15	0.19	0.238690629	0.113719371	0.176205	0.000190302
2	5	0.2	0.19			0.21724	0.000742018
3	6	0.25	0.3			0.258275	0.001740976
4	10	0.1	0.12			0.13517	0.000230129
5	11	0.15	0.12			0.176205	0.003159002
6	12	0.2	0.22			0.21724	7.6176E-06
7	13	0.25	0.26			0.258275	2.97563E-06
8	14	0.05	0.11			0.094135	0.000251698
9	15	0.075	0.075			0.1146525	0.001572321
10	16	0.1	0.11			0.13517	0.000633529
11	17	0.15	0.22			0.176205	0.001918002
12	18	0.2	0.19			0.21724	0.000742018
13	19	0.25	0.27			0.258275	0.000137476
14	22	0.1	0.15			0.13517	0.000219929
15	23	0.15	0.15			0.176205	0.000686702
16	24	0.2	0.19			0.21724	0.000742018
17	25	0.25	0.3			0.258275	0.001740976
18	26	0.1	0.15			0.13517	0.000219929
19	27	0.1	0.18			0.13517	0.002009729
20	28	0.3	0.34			0.29931	0.001655676
21	29	0.4	0.34	0.443865629		0.38138	0.001712304
22	30	0.5	0.46		0.400964371	0.46345	1.19025E-05
							sum =
							0.001016361
		standard error of the estimate Se =		0.031880423			
		for a 95% confidence level, we multiply Se by a z factor of 1.96			0.062485629		
						Ideal Line Data	
						x	y
						0	0
						0.55	0.55
		slope=	0.8207				
		intercept=	0.0531				

UT-TFM-2, XLS 4/16/98


UT data Zero degree @ 200 F
y = 0.8207x + 0.0531
R² = 0.891
measured flaw size
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
Series1
Series2
Series3
Series4
linear regression fit
fit + 95% std. error limit
fit - 95% std. error limit
Ideal


0
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.5
0.55
actual flaw size