

RELATED CORRESPONDENCE

(2)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
April 16 1984

'84 APR 19 P3:38

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD OF SECRETARY
ING & SERVICE
BRANCH

Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

In the Matter of

CAROLINA POWER AND LIGHT CO. et al.
(Shearon Harris Nuclear Power Plant,
Unit 1)

Docket 50-400 OL

ASLBP No. 82-468-01
OL

Motion to Compel Discovery on Eddleman Contention 65

Negotiations concerning the adequacy and completeness of Applicants' answers and responses to the second set of interrogatories having broken down April 10, on Eddleman 65, this motion is filed by Agreement with attorney Baxter approved by Judge Kelley by oral order.

Applicants have agreed to supply copies of the pour packages for other pours in the Harris base mat, containment walls and dome (all those previously not produced). I am having these copied sight unseen by CP&L, with the understanding that if there are any problems with the copies, I can get back to them for corrective action. I thank the Applicants for their cooperation in this matter.

Most of this Motion concerns the completeness of Applicants' answers and/or document production. Without this information, it is not practical for me and/or my consultant expert to review this plant's concrete placement record and see if it complies with all applicable procedures and in fact avoids voids, honeycombing etc.

Another problem surfaces in the answer to 65-13(1)(p.17) where only a business address is given. If I contact these folks there, I'm tipping off Daniel (and no doubt CP&L) who I'm talking to.

8404200117 840416
PDR ADDCK 05000400
PDR
G

DS02

Home addresses should be given for persons identified under these interrogatories so I can contact them without notifying Daniel and/or CP&L that it's been done. (People working for or with me may also be making such contacts -- but again, if the question or call or letter comes through Daniel's office, it informs them who we are asking questions of, and may identify the ~~w~~ ones asking the questions. This notification of Daniel would deter whistleblowers or potential whistleblowers from talking or making info available. Indeed it would damage intervenor's credibility with whistleblowers or potential whistleblowers to do a dumb thing ~~w~~ like contacting them at work, which means the info supplied is nearly useless.)

Applicants have clarified that the ~~ans~~ answers to 65-15(f)(i) and (ii) are both Yes.

In response to 65-176(b) (response at 21), Applicants produced only the latest version of the concrete specifications and QC C instructions. The interrogatory asks specifically for each procedure for batching process monitoring used in connection with concrete in each pour. A 1983 procedure that is version no 21 or no. 12 tells me and my expert(s) nothing about the procedure or specification in effect in 1978 when pour ICBSL 216001 and 002 were poured.

I believe Applicants have to have all the versions of each such procedure in their files, by NRC rules. I am willing to pay their expenses to get copies of them. Without them we can't check the pour packages versus the procedures applicable to each pour. With them, we can. The files should be all in one place, so they should be readily assemblable for copying. Without them, I and my expert(s) will be left guessing what the procedures and standards were in effect when the pours before 1981 were made, for 1981 is the earliest procedure/QC date on the items supplied. I asked for the specific procedures in effect for each pour. Since it might be

considered burdensome to find the procedures for each pour, I am willing to pay for copies of all the procedures and specifications, including each revision. Since Applicants are agreeing to supply all the pour packages for the Harris containment base mat, walls and dome, all these procedures will be useful for review. It's simpler to just produce copies of all the procedures & let me sort thru them.

On 65-16(h) (p.23) the cure log documents are identified, but they do not appear to have been produced. Applicants show no willingness to produce any more documents re this. At least the cure logs for the defective pour and 5% sample should be produced (those in Exhibits 1 and 2 to CP&L's past response to original interrogatories on Eddleman 65 in the first round).

on 65-16(v) ^{p.26 of 3/23/84 response} referring to Tech Procedure TP-15 and work procedure WP-05, again the latest versions were produced, but all the historic versions are needed to check the pour packages versus the procedure. Nonwithess expert "Eagle Eye" informs me that in effect at the time of the pour, without the current procedure, you can't figure out if the pour complied to applicable standards. If it didn't comply, the integrity of the containment is in question, and that would be a very serious matter. This is like the 65-16(b) question above. Again, the ^{and} history file of the procedures should be all in one place, I'm willing to pay for copies of all the versions and sort them out. The information is needed to assess compliance with applicable procedures. Daniel might think this is funny, but I don't.

The response to 65-17(b) ²⁸ asking for specific accept/reject criteria for rebars in specific pours and those in the 5% sample, is a dodge. The documents are not identified, the criteria are not in documents produced, and the only rebar drawings I have are some for the base mat. I understand Technical Procedure TP-22 specifies the criteria for rebar. I believe that among the "other approved design documents" referred to in this response to 65-17(b) include

~~XXXXXXXXXX~~ numerous field changes requests (FCRs), PWs, and so on. There is even one case in documents I already have, where it says "A DR will be written for 5 $\frac{1}{2}$ cy (Cubic yards) placed with a low air %", but no deficiency report appears to be in the package (ICBXW444001, Exh. 1 TP-15). Another part of this same package says concrete with a preliminary slump of 8 % (outside specs) would be ok'd per "FCR-C-3794" but that Field Change Request isn't in the package. Without things like this, neither I nor my expert can figure out what was, or was not, in compliance with applicable procedures or regulations.

I think it unreasonable to have Applicants produce ALL the FCRs and PWs identified in these documents, but they should be required to produce the common ones like PW-C-4004 and PW-C-4040 which, in ICBXW308001's package, are repeatedly referenced on Exhibit 8, TP-22 (rebar) for spacing violations which cover most of pages 6,7,8,9,10,11,12,13(PW-C-4207),14(ditto), 15,16,17,18, and 19. FCR-C-2937 is identified on page 14 of that exhibit, and FCR-C-2825 on p.18, both (as with the others) used to OK the rebar despite its spacing violations, apparently. Without the rebar blueprints and the applicable "other approved design documents" it would be almost impossible to make sense of this. Yet rebar spacing can be critical to the formation of voids, as even applicants have admitted. The criteria for, and approval of, spacing deviations or problems, and the corrections if any made to such spacing, are thus important to assessing voids, honeycombing, etc. in Harris containment concrete. I propose that the above-listed FCRs, PWs etc, and any others specifically identified by me and/or my expert(s) within a reasonable time (say, 60 days) be produced for inspection and copying, or be produced as copies for which I'd pay 7 cents a page, CP&L's standard rate.

The "answer" to 65-17(c) on page 29 does not explain how the documents are combined into a "pour package". The procedures are required to see how it is done. 65-16(v) mentions these procedures, but not all versions of them are produced, so pour packages made under other procedures are in what I've got (and will get), but nothing to check their contents against, to see what should be in there according to procedures in effect when the pours were made.

The responses (pp30-31) to 65-18(c)(d)(e)(f) appear somewhat evasive. There may be records of those meetings or recommendations but none are produced or identified.

Applicants have declined to make available a legible version of the names of persons identified in the pour packages, despite their practice of saying "the requested information can be determined from the pour package", e.g. to 65-18(l), p.32, and similar response to 65-18(j), p.31.

I believe the answer to 65-18(h) is false or misleading. CP&L document 000564, pour package for ICBXW256004, Exhibit 1 TP-15 describes this as "a most difficult placement" (This may be Exh 2). A fuller answer is thus required.

The response to 65-18(o), pp 32-33, is evasive. The question is highly specific while the answer is very general and does not respond to any of the items (i) thru (v) in the question. This is extremely relevant as it regards the source of and cause of known voids/honeycombing in a pour in the Harris base mat.

Applicants have further clarified, re 65-20, that the pour in the base mat is the only one in the Harris base mat, containment walls or dome in which they identified voids or honeycombing. (p35)

Answers to 65-21 and -22 (pp 36-37, response Mar '84) refer to documents but identify none. There appear to be no drawings of,

or procedures for, concrete repairs in the pour packages I have received to date, though several note repairs being made.

Further, the documents referenced in the discrepancy reports (see response to 65-23(a), p.37) are not identified, though they are specifically requested in the question.

In response to 65-23(b) (pp37-38) the documents giving the procedure under which approval was given, are not identified, nor produced. Again, the documents asked for in these questions are most relevant, since CP&L claims it has fixed everything that needed repairing in Harris containment concrete. The procedures for, and procedures for approval of, the repairs or deviations left in place, are most relevant. I and/or my expert(s) must have them to examine and compare with the placement reports, to evaluate the compliance of the repairs with applicable procedures which Applicants so smugly cite about this contention. To do that you need the specific documents requested. I think they should all be produced for the 5% sample already produced, and for the defective pour that was repaired (so CP&L says).

Applicants clarify that another valid answer to 65-24(c) is Yes.

On 65-27(e) I have not made requests for most of them yet, and none have so far been produced. (see pp 40-41, Mar 23 response).

For the reasons stated above, I move the Board to order production of the information requested above so that I and my expert(s) can examine the concrete information I have received and will be getting under agreement with Applicants.

CERTIFICATE OF NEGOTIATIONS

I spoke with Applicants' counsel Baxter by phone at length 4-6-84, and in person 4-10-84. We were unable to resolve the matters on which the above motion seeks to compel discovery. We did resolve those matters noted herein and some other minor matters. Applicants and I disagree on what is required, thus the above motion was filed.

I affirm the above is true.

Wells Ed Lane

Wells Ed Lane
4-16-84

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

PLACEMENT CHECKLIST

PLACEMENT NO. 1CBW256004

LOCATION Cont. #1 Ext. Wall

Az. 315° to 16°, el. 251' to 256'

CHECKLIST	REMARKS	INITIALS
Free Fall Height	Sat.	RLB
Rate of Rise	Sat.	RLB
Hot Weather Conditions	Sat.	RLB
Cold Weather Conditions	N/A	RLB
Layer Thickness	Sat.	RLB
Use of Placing Equipment	Sat.	RLB
Consolidation	Sat. *	RLB
Embedded Items	Sat.	RLB
Forms	Sat.	RLB
Cleanup Maintained	Sat.	RLB
Mixing To Placing Intervals	Sat.	RLB
Shifted/Removed Rebar Replaced	Sat.	RLB
COMMENTS * Workers warned about vibration techniques; both under- and over-vibration. A most difficult placement.		

CONSTRUCTION INSPECTOR Russell S. Breckione DATE 8-11-81

CONSTRUCTION INSPECTION SUPERVISOR M.D. Sealsy DATE 8-11-81

FOR INFORMATION ONLY

12/81

CONCRETE
PLACEMENT
REPORT

000572

CP&L
SHNPPExhibit 1
WP-05

FILE

PLACEMENT NUMBER

1CBXW444001

LOCATION (INCLUDE ELEV. IF IN BLDG.)

CONTINEMENT #1 EL 444

SCHEDULED DATE:

12/21/82

TYPE PLACEMENT

DOMC

ESTIMATED QUANTITY

12 C.Y.

TEMP LIMIT

50°-90°

SLUMP LIMIT

7" *

SEISMIC CLASS I

YES NO

☒ YES ☐ NO

PROPOSED PLACEMENT METHODS (CHECK APPLICABLE SPACES)

* SEE FCR-3794

CURING

TRANSPORTING

PLACING

VIBRATION

FINISHING

FORMED SURF.

UNFORMED SURF.

BUGGY

☐

CHUTE

☐☒ INTERNAL☒ STEEL TROWEL☐ FORMS ALONE

WATER

BUCKET

☒

TREMIE

☒☐ FORM☒ WOOD FLOAT☐ TARPS☐ WET BURLAP

CONVEYOR

☐

DROP

☐☐☐ HAIR BRUSH☐ INSULATION☐ POLYETHYLENE

PUMP

☐☐☐☐ BROOM FINISH☐ FORMS & WATER☐ CURING COMPOUND

TRUCK

☐☐☐☐ RUBBER FLOAT☐ N/A☒ KUREZ☒ EXP. ADL. W. R. CONCRETE☒ NUTEC 10☐ QUAD CURE☐ GALLONS REQUIRED

ANTICIPATED WEATHER

CONDITIONS: COLD

PROTECTION

EXTENDED

CURE (DAYS)

7

COMMENT & CLARIFICATION TO PROPOSED METHODS

POUR FROM RAMPING 6' TO 14' AT BOTTOM

1445 PLATE (1' HIGH) SEE FCR-3794

FOR CONSTRUCTION METHOD 1095

PRIMARY MASONRY DWG. NO.

CMA 2676-06402-5

RATE OF RISE

2' / HR

DES. STRENGTH

50451

DESIGN MIX CODE

M-1917

NAME/TITLE, PERSON SUBMITTING ALL THE ABOVE

BY: David Boyette, D.E.

DATE: 12/21/82

PRE-PLACEMENT
CHECKOUT

CONSTRUCTOR

CONST. INSPECTION

QUALITY ASSURANCE

		REF. PROC.	CRAFT SUPT.	FIELD ENG.	DATE	INSPECTOR	H	Q.C. SIGNOFF	DATE	Q.A. SIGNOFF
1	CONTACT SURFACES	WP-05	D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	D. Hyatt
2	FORMS	WP-22	D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	D. Hyatt
3	REINFORCING STEEL	WP-11	D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	D. Hyatt
4	EMBEDS		D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	D. Hyatt
5	MECHANICAL		D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	D. Hyatt
	EMBEDS		D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	D. Hyatt
	PIPE	LP-102	I. Smith	12/21/82	1/1	E. Williams	1/1		12/21/82	Tommy
6	ELECTRICAL	WP-201	B. F. Smith	12/21/82	12/20	C. C. Smith	1/1		12/21/82	
7	CADWELDS	WP-01	D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	
8	BOP WELDING		D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	
9	CODE/SEISMIC WELDING		D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	
10	CLEAN-UP	WP-05	D. Hyatt	12/21/82	12/20	R. Brudlow	1/1		12/21/82	
11										
12										

CONSTRUCTOR SIGNOFF (AREA SUPT.)

TIME: 8:50

C.I. SIGNOFF

TIME: 10:20

DESIGN APPROVAL

DATE: 12-21-82

Russell H. Brudlow

DATE: 12-21-82

DATE: 12/21/82

TIME OF START

11:30 AM

DATE PLACED

12-21-82

YDS. CONCRETE

DELIVERED

1116

YDS PLACED IN

THIS PLACEMENT

14.0

YARDS WASTED

CONCRETE

2.5

YARDS GROUT

DELIVERED

12

CONCRETE

13.5

YARDS PLACED

CONCRETE

0

GROUT

0.5

ELSEWHERE

GROUT

0

ACCEPTANCE OF PLACEMENT METHODS & COMPLETENESS OF ABOVE INFORMATION

NAME

Russell H. Brudlow

TITLE: C.I.

DATE: 12-21-82

REMARKS (ATTACH RELEVANT REPORTS)

* 435 H-07 GROUT MIX PER FCR-C-3794

* Recheck prior to placement - Sat AM 12-21-82

FOR INFORMATION ONLY

PRECHECKOUT DATA BY PLACING ORGANIZATION

PRE-PLACEMENT CHECKOUT

POST PLACEMENT

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

PLACEMENT CHECKLIST

PLACEMENT NO. 1 CBXW444001

LOCATION Cont. #1 Ext. Wall

Az. 0° to 360°, el. 443' to 444'

CHECKLIST	REMARKS	INITIALS
Free Fall Height	Sat.	RLB
Rate of Placement	Sat.	RLB
Hot Weather Conditions	N/A	RLB
Cold Weather Conditions	Sat.	RLB
Layer Thickness	Sat.	RLB
Use of Placing Equipment	Sat.	RLB
Consolidation	Sat.	RLB
Embedded Items	Sat.	RLB
Forms	Sat.	RLB
Cleanup Maintained	Sat.	RLB
Mixing To Placing Intervals	Sat.	RLB
Shifted/Removed Rebar Replaced	N/A	RLB
COMMENTS <u>A smooth & satisfactory placement (if somewhat over-</u>		
<u>supervised), Form vibrators and head box arrangements</u>		
<u>worked well and produced good results.</u>		
<u>A D.R. will be written for 5 1/2 cy placed</u>		
<u>with a low air %.</u>		

CONSTRUCTION INSPECTOR

Russell J. Bruckner DATE 12-21-82

CONSTRUCTION INSPECTION SUPERVISOR

Thomas Smith DATE 12/28/82

Rev. 5
8/82

AROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

Exhibit 1
TP-22
Sheet 3 of 5

FIELD INSPECTION REPORT FOR REINFORCING STEEL -
REQUIRED DRAWINGS

Placement Number 1CBXW444001

Coordinates A2. 0° to 360°

Elevation 443' to 444'

Computer Printout Reviewed RLB 12-20-82
Daily Document Log Checked RLB 12-20-82
Document Control Contacted RLB 12-20-82

C.I. Review Russell J. Brudlow

Area Engineer Review David E. By

Drawings Required/Revision:

Affecting Documents

Masonry CAR-2167-G-0630(R8)
-0640(R5)

FCR-C-3218 (Extends Unconcreted Area) ✓
FCR-C-3793 (Add'l Const. Joint) ✓
FCR-C-3350 (Hub plate placing sequence) ^{Rev 12-20-82}
(Coldwelds whisker bars)

Reinforcing CAR-2167-G-0660(R4)
-0661(R4)
-0662(R5)

FCR-C-3794 (Hub plate placing sequence) ✓

Embeds

Penetrations CAR-2167-G-0662(R5)
& -2168-G-253505(R3)
LINEAR RATE -225(R11)

Dowels

Bar Bending CAR-2167-B-9004-10

FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
DOME REINFORCING STEEL

PLACEMENT NO./LOCATION 1CBXW444001

DRAWING NUMBER

DRAWING NUMBER
BAR BENDING SCHEDULE NO. CAR-2167-G-D660(R4); -D661(R4); -D662(R5)

INSPECTOR

Russell J. Brecklowe

DATE 12-20-82

FIELD ENGINEER

Michael J. Brown
DESIGN 0

DATE 12/20/82

DESIGN QUANTITIES PER SHEET

Verticals Layer 1, I.F., O.F.	HORIZONTALS I.F., O.F.	Verticals Layer 2, O.F.	DIAGONALS ROWS 5,6	ADD. PENETRATING STEEL VERT./HOR./DIAG.	SHEAR BARS	OTHER
123	1	0	0	0	62	0

INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED
			Layer 1 I.F. 0° to 360°			
CJ-4 ✓ 61	61		↓	Weldable Grade Reinforcing	None	N/A
CJ-5 ✓ 62	62		↓	↓	↓	↓
			I.F. Horizontals 0° to 360°			
CJ-124 ✓ 1(set)	1(set)		↓	None	None	N/A
CJ-289 ✓ 62	62		Shear Bars 0° to 360°	Partially embedded previously	None	N/A

FIELD INSPECTION REPORT FOR EMBEDDED PLATES, PENETRATION, AND ANCHOR BOLTS

R43 12-20-82

PLACEMENT NO. 1 CBXW 444001

PAGE 5 OF 65

DRAWING & REV. CAR-2167-G-0662 (25)

ITEM INSPECTED	LOCATION	DESCRIPTION TYPE - (10R LL, AB-4, PENETRATION) SIZE, DESIGN QTY., ETC.	DISCREPANCIES RELATED TO TYPE, SIZE, LOCATION, INSTALLATION, DESIGN QTY. VS ACTUAL QUANTITY, DIMENSIONS, ETC.	CORRECTIVE ACTION DR, PW, FCR, DCN ETC.	INSPECTOR
					INDIVIDUAL NOTIFIED
					DATE
EMBED PLATES					
PENE-TRATION	Q Az = Q Dome Axis Q El. = Q Dome Axis	(1) Det. "3" Pipe Sleeve (Radial) 24" ϕ	(1) Nelson Studs Cut to allow bottom plate to be set	To be welded back prior to next placement (1CBXW 444002) Welded back as of 12-20-82 <i>J. B.</i>	<i>R. Brudlow</i> D. Bryan 12-20-82
ANCHOR BOLTS					
OTHER	R = 65' 6 7/16 Sym. about Dome Axis	(1) Hub Plate Assembly Rad = 8' 11 3/8 5/8" Curved plate	1) Add'l Inspection holes drilled 2) 12 Nelson Studs Bent > 15° 3) 2 Nelson Studs Bent > 15° 4) 13 Nelson Studs Bent > 7° < 15° 5) Threaded Studs added 6) Form vibrator supports welded	1) FCR-C-3794 <i>J. B.</i> 2) Cut off & rewelded 3) Cut off & rewelded <i>J. B.</i> 4) Bent back to < 7° 5) FCR-C-3794 MS 12/29/82 6) FCR-C-3794 <i>J. B.</i>	<i>R. Brudlow</i> D. Bryan 12-20-82

Rev. 9
7/82

CAROLINA POWER & LIGHT COMPANY
SARON HARRIS NUCLEAR POWER PLANT
POST PLACEMENT CHECKLIST

Exhibit 2
TP-15

PLACEMENT NO. 1 CBXW 444001 LOCATION Cont. #1 Ext. Wall
PLACED 12-21-82 SURFACE AREA N/A
END OF CURE 12-28-82 CURE COMPOUND (AMOUNT) N/A
CURE/PROTECTION REQUIREMENTS Severe exp. / Extended Protection / 7 days moist cure

CHECKLIST	REMARKS	INITIALS
<u>FINISH</u>		
A. Steel Trowel	N/A	RUB
B. Wood Float	N/A	RUB
C. Broom	N/A	RUB
D. Hair Brush	N/A	RUB
E. Rubber Float	N/A	RUB
F. Keyways Installed	N/A	RUB
<u>FORMS</u>		
Form & Shoring Removal	N/A	RUB
<u>REPAIRS</u>		
Type of Repair Required	<input checked="" type="checkbox"/> Cosmetic <input type="checkbox"/> Structural <input type="checkbox"/> Forms Still In Place N/A RUB 1-5-83	RUB
<u>EMBED PLATES W/SCREW-IN-STUDS</u>		
Thread Engagement	N/A	RUB
<u>SEISMIC GAP</u>		
Proper Gap Maintained	N/A	RUB
<u>CURING/PROTECTION</u>		
EXTENSIONS		REMARKS
A. Water ✓	N/A	Sat - 7 days moist RUB
B. Curing Compound	N/A	N/A RUB
C. Ponding	N/A	N/A RUB
D. Burlap	N/A	N/A RUB
E. Wet Sand	N/A	N/A RUB
F. Polyethylene	N/A	N/A RUB
G. Temperature ✓	N/A	Sat - 7 days $\geq 50^{\circ}\text{F}$ RUB

COMMENTS:

CONSTRUCTION INSPECTOR Russell L. Brudlow DATE 1-5-83

CONSTRUCTION INSPECTION SUPERVISOR Herbert L. Taylor DATE 1-10-83

QA-24
2/81
Rev.0

CAROLINA POWER LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT
CONCRETE TEST REPORT
(Procedure CQC-13)

Page 1 c 1

PLACEMENT NO. 1CBXW444001 DATE 12-21-82

MODE OF PLACEMENT TRUCK DISCHARGE

LOCATION Containment Bldg.

WEATHER: (☒) CLEAR () OVERCAST () RAIN () OTHER
() HAZY () FOG () P. CLOUDY

TICKET NO.	TIME SAMPLED	ACCU YARDS PLACED	SLUMP (IN)	TEMP. (°F)	THERM. NO.	AIR (%)	AIR METER NO.	UNIT WT.	UNIT WT. BUCKET	SCALE NO.	TEST CYLINDERS				SET NO.	LAB #	REMARKS
											RESULTS						
											DAY 7	DAY 28	DAY 28	DAY			
93165	11:55AM	8	6 1/4 *	68	CP4L 5117B	6.4	CP4L 4854	139.7	CP4L 4854	CP4L 5054B	4000	6370	6580	1	9965	Preliminary slump of 6"	
	: PM																
93168	: AM	8 1/6	7 *	67	CP4L 5117B	4.5	CP4L 4854	139.6	CP4L 4854	CP4L 5054B	3960	5660	5840	2	9966	Preliminary slump of 8 1/4	
	12:30PM																
	: AM	1 hr 12-21-62														*D.R.C-1751 ISSUED	
	: PM																
	: AM																
	: PM																
	: AM																
	: PM																
	: AM																
	: PM																
	: AM																
	: PM																
	: AM																
	: PM																
	: AM																
	: PM																
	: AM																
	: PM																

SLUMP REQUIRED 0-7 max in.

DESIGN MIX # USED M-97

FIELD QA/QC INSPECTOR Terry Wayne Rogers DATE 12-21-82

AIR REQUIRED 5-9 %

DESIGN STRENGTH 5000 PSI
FOR PLACEMENT

LAB QA/QC INSPECTOR Wendy J. Wotz DATE 1-18-83

per FCR-C-3794

QA/QC SPECIALIST Eugene Kelly DATE 1-18-83

CONCRETE
PLACEMENT
REPORT

CP&L

SHNPP

000567

EXHIBIT I

WP-06

FILE

PLACEMENT NUMBER

11C181W3018001

LOCATION (INCLUDE ELEV. IF IN BLDG.)

CONTAINMENT #1 60308.25

SCHEDULED DATE:

8/25/83

TYPE PLACEMENT

EXT. WALL

ESTIMATED QUANTITY

60 CY

TEMP LIMIT

90°

SLUMP LIMIT

8"

SEISMIC CLASS I

YES NO

☒ YES ☐ NO

PROPOSED PLACEMENT METHODS (CHECK APPLICABLE SPACES)

CURING

UNFORMED SURF

TRANSPORTING

PLACING

VIBRATION

FINISHING

FORMED SURF.

WATER

BUGGY

☐

CHUTE

☐

INTERNAL

☒ STEEL TROWEL☐ FORMS ALONE☒ WET BURLAP

BUCKET

☐

TREMIE

☒

FORM

☒ WOOD FLOAT☐ TARPS☐ POLYETHYLENE

CONVEYOR

☐

DROP

☐

POUR

☒ HAIR BRUSH☐ INSULATION☐ CURING COMPOUND:

PUMP

☒

DROP

☐

POUR

BROOM FINISH

☐ FORMS & WATER☐ KUREZ

TRUCK

☐

DROP

☐

POUR

RUBBER FLOAT

☐☐ NUTEC 10

EPA 100.500

☒☐ QUAD CURE

GALLONS REQUIRED

ANTICIPATED WEATHER
CONDITIONS:

HOT

PROTECTION

EXTEND CO

CURE (DAYS)

7

COMMENT & CLARIFICATION TO PROPOSED METHODS

EQUIP. WATER PUMP FROM 110305 TO 16°

PRIMARY MASONRY DWG. NO.

21676-063128

RATE OF RISE

2' / HR

MO. EL. 303.25 TO 308.25

* 45° 11-12 PUMP LINE LUBRICATED COLORED

DES. STRENGTH

5.0 KSI

DESIGN MIX CODE

14-180-1

NAME / TITLE PERSON SUBMITTING ALL THE ABOVE

BY: [Signature] TITLE: A.E.

DATE: 8/17/83

PRE-PLACEMENT
CHECKOUT

CONSTRUCTOR

CONST. INSPECTION

QUALITY CONTROL

REF. PROC.

CRAFT
SUPT.FIELD
ENG.

DATE

INSPECTOR

Q.C. SIGNOFF

DATE

1 CONTACT SURFACES

WP-05

O. [Signature]

M. [Signature]

8-25

R. [Signature]

2 FORMS

WP-22

J. [Signature]

M. [Signature]

8-25

R. [Signature]

3 REINFORCING STEEL

WP-11

J. [Signature]

M. [Signature]

8-25

R. [Signature]

4 EMBEDS

WP-11

J. [Signature]

M. [Signature]

8-25

R. [Signature]

5 MECHANICAL

EMBEDS

WP-10.2

J. [Signature]

M. [Signature]

8-25

R. [Signature]

6 ELECTRICAL

WP-201

B. [Signature]

M. [Signature]

8-25

R. [Signature]

7 CADWELDS

WP-01

J. [Signature]

M. [Signature]

8-25

R. [Signature]

8 BOP WELDING

WP-01

J. [Signature]

M. [Signature]

8-25

R. [Signature]

9 CODE WELDING

WP-01

J. [Signature]

M. [Signature]

8-25

R. [Signature]

10 SEISMIC WELDING

WP-01

J. [Signature]

M. [Signature]

8-25

R. [Signature]

11 CLEAN-UP

WP-05

J. [Signature]

M. [Signature]

8-25

R. [Signature]

CONSTRUCTOR SIGNOFF (AREA SUPT)

TIME: 8:40

C. SIGNOFF

TIME: 8:43 AM

[Signature]

DATE: 8-29-83

[Signature]

DATE: 8-29-83

DESIGN APPROVAL

[Signature]

DATE: 8/25/83

TIME OF START

9:50 AM

DATE PLACED

08 29 83

YDS. CONCRETE

DELIVERED

11613

YDS PLACED IN

THIS PLACEMENT

56 1/2

YARDS WASTED

CONCRETE 0 0 7

GROUT 0 1 1/2

YDS. GROUT

DELIVERED

012

CONCRETE

56

YDS PLACED

CONCRETE 0 0 0

GROUT

0 0 1/2

ELSEWHERE

GROUT 0 0 0

ACCEPTANCE OF PLACEMENT METHODS & COMPLETENESS OF ABOVE INFORMATION

NAME:

[Signature]

TITLE: C.I.

DATE: 8/29/83

REMARKS (ATTACH RELEVANT REPORTS)

PRECHECKOUT DATA BY PLACING ORGANIZATION

PRE-PLACEMENT CHECKOUT

POST PLACEMENT

Rev. 7
7/81

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

Exhibit 1
TP-15

Sh. 2 of 30

PLACEMENT CHECKLIST

PLACEMENT NO. 1CBXW308001

LOCATION Cont. #1 Ext. Wall

A2 315° to 16°, el. 303.25' to 308.25'

CHECKLIST	REMARKS	INITIALS
Free Fall Height	Sat.	RUB
Rate of Placement	Sat.	RUB
Hot Weather Conditions	Sat.	RUB
Cold Weather Conditions	^{RUB 8-24-83} Sat. N/A	RUB
Layer Thickness	Sat.	RUB
Use of Placing Equipment	Sat.	RUB
Consolidation	Sat.	RUB
Embedded Items	Sat.	RUB
Forms	Sat.	RUB
Cleanup Maintained	Sat.	RUB
Mixing To Placing Intervals	Sat.	RUB
Shifted/Removed Rebar Replaced	N/A	RUB
COMMENTS <u>A smooth & satisfactory placement</u>		

CONSTRUCTION INSPECTOR

Russell J. Bredlowe

DATE 8-29-83

CONSTRUCTION INSPECTION SUPERVISOR

Thomas Smith

DATE 9-1-83

FOR INFORMATION ONLY

Rev. 5
8/82

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

Exhibit 1
IP-22
Sheet 3 of 30

FIELD INSPECTION REPORT FOR REINFORCING STEEL -
REQUIRED DRAWINGS

Placement Number 1CBXW308001

Coordinates A2 315° to 16°

Elevation 248.230325 to 308.25'
R/B 8-24-83

C.I. Review Russell J. Breedlove

Computer Printout Reviewed 8-28-83

Daily Document Log Checked 8-28-83

Document Control Contacted 8-28-83

Area Engineer Review [Signature]

Drawings Required/Revision:

Affecting Documents

Masonry CAR-2167-G-0630(R8)
-0631(R8)

Reinforcing CAR-2167-G-0637(R3)
-0636(R3)
-0633(R4)
-0632(R4)
-0638(R4)
-0639(R4)
-0650(R3)
-0651(R3)

Embeds
R/B 8-24-83

Penetrations
R/B 8-24-83

LINER PLATE
DOWELS
R/B 8-24-83

Bar Bending CAR-2167-B-9005-
3,5,6,7,8,9

DCN-550-1067(R1) (Adds Strain Gages)
FCR-C-4097 ("Half-nuts" on shear bolts)
PW-C-4040 (Spacing - Rows 1,2,3,4)
PW-C-4004 (Spacing - Rows 5 & 6)
PW-C-4207 (Spacing - Rows 7,8,9,10, Add'l)
FCR-C-2958 ("Dead-men" Assemblies)
FCR-C-2937 (Lapping of Shear Bars)
FCR-C-2825 (Spacing - 8th Row @ 16")
FCR-C-4228 (Sh. As shear bolts)
PW-C-2333 (Form & Probe Vibrators)
FCR-C-1427 (Add'l Steel in 18" gaps)
PW-C-1958 ("Deadmen" requirements)
FCR-C-716 (Liner plate tolerance)
FCR-C-4298 (Const. Joint changes)
FCR-C-4264 (Liner plate out-of-tolerance)
FCR-C-4332 (Inoperative Strain Gages)
PW-C-4299 (Bent Studs - S-150)
PW-AS-1283 (Omitted Reqlt)
FCR-C-4426 (Excess Cover)
FCR-C-4427 (Time interval between placements)

R/B 8-31-83

Rev. 5
8/82

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

Exhibit 1
TP-22
Sheet 4 of 30

FIELD INSPECTION REPORT FOR REINFORCING STEEL -
REQUIRED DRAWINGS

Placement Number 1CBXW308001

Coordinates A2.315° to 16°

Elevation 303.25' to 308.25'

Computer Printout Reviewed 8-28-83

Daily Document Log Checked 8-28-83

Document Control Contacted 8-28-83

C.I. Review

Russell J. Brecklen

Area Engineer Review

David P. [Signature]

Drawings Required/Revision:

Affecting Documents

~~Masonry~~
RLB B-24-83

Bethlehem Steel Corp. (Rein.)

8099-41(R2)

-58(R1)

-37(R1)

Reinforcing

-46(R1)

-38(R3)

-1(R2)

-42(R2)

-51(R0)

-39(R0)

-2(R4)

-59(R1)

~~Embeds~~
RLB B-24-83

-62(R2)

-63(R2) ^{RLB} ₈₋₂₅₋₈₃

-66(R1)

-68(R0)

~~Penetrations~~
RLB B-24-83

-69(R0)

-67(R1)

-64(R1)

-64A(R1)

~~Rebars~~
RLB B-24-83

-64B(R1)

-64C(R1)

-64D(R1)

~~Bar Bending~~
RLB B-24-83

-64E(R1)

CONTAINMENT EXTERIOR WALL INSPECTION SUMMARY SHEET

PLACEMENT NO. 1 CBXW308001

5 of 30

INSPECTOR Russell F. Brecklowe DATE 8-24-83FIELD ENGINEER Mike Byrd DATE 8/25/83

see individual sheets

LOCATION	INSPECTED ITEM	DESIGN QUANTITY	ACTUAL QUANTITY	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED
A2. 3130 to 160 El. 303.25' to 308.25'	VERTICALS					
	ROW 1	69	69			
	ROW 2	1	1			
	ROW 7	59	59			
	ROW 8	61	61			
	HORIZONTALS					
	ROW 3	5	5			
	ROW 4	5	5			
	ROW 9	5	5			
	ROW 10	5	5			
	ADDITIONAL PER DWG.					
	HORIZONTAL	20	20			
	VERTICAL					
	DIAGONAL					
	ROW 5	15	15			
	ROW 6	115 15	15			
	ADD. PENETRATION	115 15				
	STEEL / VERTICAL	4	4	As per -0651		
	HORIZONTAL					
	DIAGONAL	2	2	As per PW-C-4004	None	D. Bryan
	FACE BARS	✓	✓			
	RADIAL BARS					
	INNER			See sh of		
	OUTER			See sh. thru of		
	RING BARS			See sh. thru of		
	SHEAR BOLT ASSEMBLY	94	94			
	OTHER					
	Shear Bolts (CC-904's)	109	112	3 extra bars	None	D. Bryan
	Bars in 18" + gaps	✓	✓	As per -0651		
	Face mat over blister	✓	✓	As per -0760		
	Face mat - excess count	✓	✓	As per FOR-C-4426	FOR-C-4426	D. Bryan

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FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

Exhibit 8
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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0637(R5); -0636(R5)

Bethlehem Print 8099-41(R2)

INSPECTOR

Russell J. Breidlow

DATE 8-23-83

FIELD ENGINEER

Michael J. Fisher

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
20									
INSPECTED ITEM (BAP MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Bethlehem Bars: 2"			1st Row Verticals 3190 to 2 5-150						
CC-250	5	5		Spacing Violations	PW-C-4040	D. Bryan			
CC-251	2	2							
CC-259	1	1							
CC-269	1	1							
CC-270	1	1							
CC-272	1	1							
CC-273	2	2							
B-313	1	1							
B-293	1	1							
B-292	1	1							
B-291	1	1							
B-290	1	1							
B-289	1	1							
B-288	1	1							

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FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
PENETRATION STEEL

Exhibit 8
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7 of 30

PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-(637/RS) ; -0634/RS

Bethlehem Print 8049-41 (R2)

INSPECTOR

Russell V. Breidlow

DATE 8-23-83

FIELD ENGINEER

[Signature]

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
15									
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
B-287	1	1	1st Row Verticals 3150 to RS-1500 (cont.)	Spacing Violations	DW-C-4040	D. Bryan			
B-286	1	1							
B-285	1	1							
B-284	1	1							
B-283	1	1							
B-282	1	1							
B-281	1	1							
B-280	1	1							
B-279	1	1							
B-278	1	1							
B-277	1	1							
B-276	1	1							
B-275	1	1							
B-274	1	1							
B-273	1	1							

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FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
PENETRATION STEEL

Exhibit 8
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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0637(R5) ; -0636(R3)

Bethlehem Print 8099-41(R2)

INSPECTOR

Russell A. Brudlow

DATE

8-23-83

FIELD ENGINEER

Mike [Signature]

DATE

8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,3,4,5,6,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
15									
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Bethlehem Bars - "B"									
B-255	✓ 1	1	1st Row Verticals E 5-150 to 160	Spacing Violations	PW-C-4040	D. Bryan			
B-256	✓ 1	1							
B-257	✓ 1	1							
B-258	✓ 1	1							
B-259	✓ 1	1							
B-260	✓ 1	1							
B-261	✓ 1	1							
B-262	✓ 1	1							
B-263	✓ 1	1							
B-264	✓ 1	1							
B-265	✓ 1	1							
B-266	✓ 1	1							
B-267	✓ 1	1							
B-268	✓ 1	1							
B-269	✓ 1	1							

FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

Exhibit 8
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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-Ct-0637(R4); -0636(R4)

Bethlehem Print 8099-41(R2)

INSPECTOR

Russell L. Breckelme

DATE 8-23-83

FIELD ENGINEER

Mike L. L...

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE RADIAL BARS BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
19/1								
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED		
Bethlehem Bars - "B"								
B-270	1	1	1st Row Verticals 315° to 16° (cont.)	Spacing Violations	PW-C-4040	D. Bryan		
B-271	1	1						
B-272	1	1						
B-294	1	1						
B-312	1	1						
B-311	1	1						
CC-250	13	13						
CC-379	1	1	2nd Row Verticals 315° to 16°	Spacing Violations Also RW3 8-25-83	PW-C-4040	D. Bryan		

FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0633(R4); -0632(R4)

Bethlehem Print 8099-58(R1)

INSPECTOR

Russell J. Breedlove

DATE 8-23-83

FIELD ENGINEER

[Signature]

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 12, 7, 8	HORIZONTALS ROW 3, 4, 9, 10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5, 6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
	5 5								
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Bethlehem Bars = 8" (sets) RF 2383			3rd Row Horizontals 315° to 160°						
CC-7, B-344 CC-1, B-332	1	1		Spacing Violations	DWC-4040	D. Bryan			
CC-7, B-316 CC-1,	1	1							
CC-7, B-317 CC-1,	1	1							
CC-7 B-318 CC-1	1	1							
CC-7 B-319 CC-1	1	1							
CC-8, B-344 CC-2, B-332	1	1	4th Row Horizontals 315° to 160°	Spacing Violations	DWC-4040	D. Bryan			
CC-8, B-316 CC-2,	1	1							
CC-8, B-317 CC-2,	1	1							
CC-8, B-318 CC-2,	1	1							
CC-8, B-319 CC-2,	1	1							

FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0638(R5); -0639(R4)

Belknap Prints 8099-37(R1); -46(R1); -038(R5); -1(R2)

INSPECTOR

Russell J. Brudlow

DATE 8-24-83

FIELD ENGINEER

Mike Blachman

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
			15						
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Belknap Bars			5th Row Diagonals 315° to 2 S-150						
566	1	1		Spacing Violations	PWC-4004	D. Bryon			
36 CD to 563	1	1							
7 CD to 586	1	1							
6	1	1							
5	1	1							
56	1	1							
3B CD to 3A	1	1							
2B CD to 2A	1	1							
1B CD to 1A	1	1							
45	1	1	2 S-150 to 160						
9	1	1							
10	1	1							
11 CD to 620	1	1							
12 CD to 535	1	1							
536	1	1							

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FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
PENETRATION STEEL

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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. PAR-2167-G-0638(R3); -0639(R3)

Bethlehem Print 8099-42(R2); -51(R0); -039(R0); -2(R4)

INSPECTOR Russell J. Breedlove

DATE 8-24-83

FIELD ENGINEER M. J. [Signature]

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE RADIAL BARS BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
			17					
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED		
Bethlehem Bars - "8"								
640	1	1	6th Row Diagonals 315° to 45-150	Spacing Violations	PW-C-4004	D. Bryan		
641 CD to 94	1	1		-				
733 CD to 95	1	1						
94	1	1						
139	1	1						
138	1	1						
91A CD to 91B	1	1	45-150 to 16°					
92A CD to 92B	1	1						
93A CD to 93B	1	1						
104	1	1						
105	1	1						
106	1	1						
107	1	1						
108 CD to 512	1	1						
129 CD to 513	1	1						
#11	2	2	Add'l Diagonals	As per PW-C-4004	PW-C-4004	D. Bryan		

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FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

Exhibit 8
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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0651(R4)

INSPECTOR
FIELD ENGINEER

Russell J. Breckling

DATE 8-24-83

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
				14					
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
			Add'l Horizontals Req. = 68'0 1/2						
CC-924 CC-919	✓ 1	1	El. 303'6 315° to & S-150	Spacing Violations	PW-C-4207	D. Bryan			
CC-919	✓ 1	1	El. 304'0						
CC-924 CC-920	✓ 1	1	El. 304'6						
CC-928	✓ 1	1	El. 305'0						
CC-924 CC-921	✓ 1	1	El. 305'6						
CC-928	✓ 1	1	El. 306'0						
CC-924 CC-920	✓ 1	1	El. 306'6						
CC-928	✓ 1	1	El. 307'0						
CC-924 CC-921	✓ 1	1	El. 307'6						
CC-928	✓ 1	1	El. 308'0						
CC-911 CC-916	✓ 1	1	El. 303'6 & S-150 to 16°						
CC-913	✓ 1	1	El. 304'0						
CC-911 CC-922	✓ 1	1	El. 304'6						
CC-926	✓ 1	1	El. 305'0						

FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

14 of 30

PLACEMENT NO./LOCATION ICBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0651(25)

INSPECTOR

Russell S. Brudette

DATE 8-24-83

FIELD ENGINEER

Mike Blackburn

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 12,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
				6					
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
CC-911 CC-923	✓ 1	1	Add'l Horizontals(cont) El. 305'6	Spacing Violations	PWC-4207	D. Bryan			
CC-926	✓ 1	1	El. 306'0						
CC-911 CC-922	✓ 1	1	El. 306'6						
CC-926	✓ 1	1	El. 307'0						
CC-911 CC-923	✓ 1	1	El. 307'6						
CC-926	✓ 1	1	El. 308'0						
CC-904	109	112	Shear Bars	Some top spliced 3 extra bars	FCR-C-2937	D. Bryan			
				OK					
CC-929	4	4	Vertical Crack Control in 18" + gaps	None	None	N/A			

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FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
PENETRATION STEEL

Exhibit 8
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PLACEMENT NO./LOCATION LCBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-065C(R5); -0641(R5); -0631(R5)

INSPECTOR

Russell J. Brecklage

DATE 8-24-83

FIELD ENGINEER

Mike [Signature]

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
59									
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
			7th Row Verticals 315° to 45-180						
CC-759	1	1		Spacing Violations	PWC-4207	D. Bryan			
CC-909	11	11			D. Bryan				
CC-907	10	10							
CC-379	2	2							
CC-910	2	2	✓						
CC-395	3	3	45-150 to 76°						
CC-907	10	10							
CC-909	13	13							
CC-931	7	7	✓	These bars shifted one bar spacing	PWC-4207	D. Bryan			
					D. Bryan				

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Exhibit 8
TP-22

FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

160P30

PLACEMENT NO./LOCATION 1CBXW 308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0650(RS); -0641(RS)

Bethlehem Print 8099-59(R1)

INSPECTOR Russell V. Buccellone

DATE 8-24-83

FIELD ENGINEER Mike Hudson

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
24									
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Bethlehem Bars="B"									
CC-767	3	3	5th Row Verticals 3150 to 25-180	Spacing Violations	P10-C-4207	D. Bryen			
CC-758	4	4							
CC-757	3	3							
CC-759	2	2							
P10 8-24-83 CC-B-256	2	2							
B-255	1	1							
B-237	1	1							
B-236	1	1							
B-235	1	1							
B-234	1	1							
B-233	1	1							
B-232	1	1							
B-231	1	1							
B-230	1	1							
B-229	1	1							

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Exhibit 8
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FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
PENETRATION STEEL

17 of 30

PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0650(R3); -0641(R3)

Bethlehem Print 8099-59(R1)

INSPECTOR

Russell P. Brecklowe

DATE 8-24-83

FIELD ENGINEER

Mike Blaforn

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
15									
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Bethlehem Bars 2" B"									
B-228	1	1	8th Row Verticals 31° to 40° & 5-140 (cont)	Spacing Violations	PW-C-4207	D. Bryen			
B-227	1	1							
B-226	1	1							
B-225	1	1							
B-224	1	1							
B-223	1	1							
B-222	1	1							
B-211	1	1	Q5-150 to 16°						
B-212	1	1							
B-213	1	1							
B-214	1	1							
B-215	1	1							
B-216	1	1							
B-217	1	1							
B-218	1	1							

FIELD INSPECTION REPORT FOR
CONTAINMENT EXTERIOR WALL
PENETRATION STEEL

18 of 30

PLACEMENT NO./LOCATION 1CBxW308001

DRAWING NUMBER

DRAWING NUMBER
BAR BENDING SCHEDULE NO. PAR-2167-G-0650(RS); -0641(RS)

Bethlehem Print 9099-59/(21)

INSPECTOR

FIELD ENGINEER

DATE 8-24-83

DATE 8/25/03

DESIGN QUANTITIES PER SHEET

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FIELD INSPECTION REPORT FOR CONTAINMENT EXTERIOR WALL PENETRATION STEEL

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PLACEMENT NO./LOCATION 1CBXW308001

DRAWING NUMBER

BAR BENDING SCHEDULE NO. CAR-2167-G-0633(R4); 0632(R4); 0634(R4); 0635(R4)

Bethlehem Print 8099-58(R1)

INSPECTOR Russell F. Breckle

DATE 8-23-83

FIELD ENGINEER Mike Gledhill

DATE 8/25/83

DESIGN QUANTITIES PER SHEET

VERTICALS ROW 1,2,7,8	HORIZONTALS ROW 3,4,9,10	ADD. PER DWG. HOR./VERT.	DIAGONALS ROW 5,6	ADD. PENETRATION STEEL HOR./VERT./DIAG.	FACE BARS	RADIAL BARS INNER/OUTER	RING BARS	SHEAR BOLT ASSEMBLIES	OTHER
	5/5								
INSPECTED ITEM (BAR MARKS)	DESIGN QUANTITY	ACTUAL QUANTITY	DESCRIPTION	DISCREPANCIES	CORRECTIVE ACTION	INDIVIDUAL NOTIFIED			
Bethlehem Bars = "B"	(sets)		9th Row Horizontals 315° to 16°						
CC-496, B-344 CC-400, B-332	1	1		Spacing Violations	PW-C-4207	D. Bryan			
CC-496, B-359 CC-400, B-340	1	1							
CC-496, B-359 CC-400, B-340	1	1							
CC-496, B-377 CC-400, B-377	1	1							
CC-496, B-318 CC-400, B-318	1	1							
CC-496, B-319 CC-400, B-319	1	1							
CC-455, B-344 CC-401, B-332	1	1	10th Row Horizontals 315° to 16°	Spacing Violations	PW-C-4207	D. Bryan			
CC-455, B-359 CC-401, B-340	1	1							
CC-455, B-317 CC-401, B-317	1	1							
CC-455, B-318 CC-401, B-318	1	1							
CC-455, B-319 CC-401, B-319	1	1							