



Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

October 3, 2014

John A. Dent, Jr.  
Site Vice President

Attachments 7 through 11 contain proprietary information to be withheld from public disclosure under 10 CFR 2.390. When separated, this letter can be made public.

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

SUBJECT: Entergy Response to NRC Request for Additional Information (RAI),  
Regarding the Heavy Loads License Amendment Request (TAC NO.  
MF3237)

Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
Docket No. 50-293  
License No. DPR-35

- REFERENCES:
1. NRC Letter to Entergy, Request for Additional Information Regarding the Heavy Loads License Amendment Request (TAC NO. MF3237), dated September 26, 2014 (1.14.064)
  2. Entergy Letter to NRC, Supplement to Proposed License Amendment Request to Modify Technical Specification 4.3.4, "Heavy Loads" to Facilitate Dry Storage Handling Operations, dated September 11, 2014 (2.14.065)

LETTER NO: 2.14.069

Dear Sir or Madam:

The attachments to this letter provide Entergy's responses to the NRC Request for Additional Information (Reference 1) concerning Entergy's proposed license amendment to modify Pilgrim Technical Specification 4.3.4, "Heavy Loads" (Reference 2).

The attached responses do not alter the no significant hazards consideration determination provided in Reference 2.

This letter does not contain any new regulatory commitments.

If you have any questions regarding the subject matter, please contact Everett P. Perkins at (508) 830-8323.

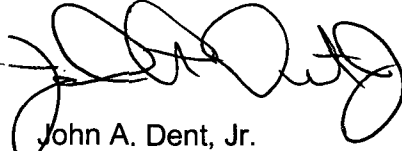
A001  
MRK 

Attachments 7 through 11 contain proprietary information to be withheld from public disclosure under 10 CFR 2.390. When separated, this letter can be made public.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 3<sup>rd</sup> day of October, 2014.

Sincerely,



John A. Dent, Jr.  
Site Vice President

JAD/mew

- Attachments:
1. Entergy Responses to NRC RAI on Pilgrim Proposed License Amendment on Heavy Loads (3 pages).
  2. Entergy Drawing C-174 "Spent Fuel Storage Pool Floor Plan, Wall El. & Details" (1 Page)
  3. Entergy Drawing C-175 "Spent Fuel Storage Pool Floor Wall Elev's. & Details" (1 Page)
  4. Entergy Drawing C-178 "Spent Fuel Pool, Reactor Well, Steam Dryer & Separator Storage Pool Sections & Details – Sheet 1" (1 Page)
  5. Entergy Drawing M-413 "Plumbing and Drainage Elev. 74' – 3" (1 Page)
  6. Holtec Affidavit AFFi-1916-02 "Affidavit Pursuant to 10 CFR 2.390" (5 Pages)
  7. Holtec Proprietary Drawing 8262 Sheet 1 "Platform, Leveling Adjustable Assembly" (1 Page)
  8. Holtec Proprietary Drawing 8262 Sheet 2 "Platform, Leveling Adjustable Assembly" (1 Page)
  9. Holtec Proprietary Drawing 8777 Sheet 1 "Spent Fuel Pool Dry Cask Configuration" (1 Page)
  10. Holtec Proprietary Drawing 8777 Sheet 2 "Spent Fuel Pool Dry Cask Configuration" (1 Page)
  11. Holtec Proprietary Report HI-2104715 Rev. 7 "Seismic Analysis of the Loaded HI-TRAC in the SFP and SFP Slab Qualification" (112 Pages)

Attachments 7 through 11 contain proprietary information to be withheld from public disclosure under 10 CFR 2.390. When separated, this letter can be made public.

cc: Ms. Nadiyah Morgan, Project Manager  
Division of Operating Reactor Licensing  
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NRC Resident Inspector  
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Radiation Control Program  
Commonwealth of Massachusetts  
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Charlestown, MA 02129-1121

**ATTACHMENT 1**

**to**

**Entergy Letter No. 2.14.069**

**Entergy Responses to NRC RAI on Pilgrim Proposed License Amendment on Heavy Loads**

**(3 Pages)**

## ATTACHMENT 1 TO ENTERGY LETTER NO. 2.14.069

### Entergy Responses to NRC RAI on Pilgrim Proposed License Amendment on Heavy Loads

- REFERENCES:
1. Holtec Proprietary Drawing 8262 Sheet 1 "Platform, Leveling Adjustable Assembly" (See Attachment 7)
  2. Holtec Proprietary Drawing 8262 Sheet 2 "Platform, Leveling Adjustable Assembly" (See Attachment 8)
  3. Holtec Proprietary Drawing 8777 Sheet 1 "Spent Fuel Pool Dry Cask Configuration" (See Attachment 9)
  4. Holtec Proprietary Drawing 8777 Sheet 2 "Spent Fuel Pool Dry Cask Configuration" (See Attachment 10)
  5. Holtec Proprietary Report HI-2104715 Rev. 7 "Seismic Analysis of the Loaded HI-TRAC in the SFP and SFP Slab Qualification" (See Attachment 11)
  6. Entergy Drawing C-174 "Spent Fuel Storage Pool Floor Plan, Wall El. & Details" (See Attachment 2)
  7. Entergy Drawing C-175 "Spent Fuel Storage Pool Floor Wall Elev's. & Details" (See Attachment 3)
  8. Entergy Drawing C-178 "Spent Fuel Pool, Reactor Well, Steam Dryer & Separator Storage Pool Sections & Details – Sheet 1" (See Attachment 4)
  9. Entergy Drawing M-413 "Plumbing and Drainage Elev. 74' – 3" " (See Attachment 5)

The following are the responses to the RAIs:

#### **REQUEST 1**

Please provide a discussion of the details of the leveling platform point of reference such as the design, materials of construction, layout, operational characteristics, etc.

#### **Response:**

The leveling platform structure is a 2" thick stainless steel plate, hexagon shape in plan view, about 92" flat to flat and 9" high. It is supported by six adjustable stainless steel pedestals with 2" thick bearing pads, onto the 1" thick Spent Fuel Pool liner plate in the cask storage area. References 1 and 2 are the Holtec design drawings for the leveling platform fabrication. References 3 and 4 are the Holtec design drawings for the leveling platform installation.

**REQUEST 2**

Provide a discussion of the technical evaluation performed to confirm the stability of the transfer cask placement on the leveling platform point of reference during a design basis seismic event.

**Response:**

The evaluation of HI-TRAC loading on the Spent Fuel Pool floor liner and concrete slab, including seismic stability analysis of HI-TRAC on the leveling platform, is presented in Reference 5.

**REQUEST 3**

Provide a brief discussion of the term leveling platform "point of reference".

**Response:**

The leveling platform has been installed in the same location in the cask handling area of the Spent Fuel Pool floor where the Cask Drop Energy Absorbing System (CDEAS, aka energy absorbing pad) was previously located. TS 4.3.4.b uses the term "energy absorbing pad" to establish a location basis from which to measure a horizontal distance equal to the height the cask for the purpose of excluding fuel assembly storage in rack cells if the spent fuel decay time is less than 200 days. Thus, the CDEAS is simply a point of reference for the measurement parameter. The proposed change to TS 4.3.4.b would replace the term "energy absorbing pad" to "leveling platform", and the intent is unaltered.

**REQUEST 4**

In its September 11, 2014, letter, the licensee stated, "To accommodate the Holtec system, the energy absorbing pad was removed and replaced with the leveling platform." The licensee also stated that, "The energy absorbing pad was installed to protect the liner of the SFP from damage due to drop of a spent fuel cask or other heavy loads in the SFP cask loading area using the original non-single-failure-proof Reactor Building crane."

With the removal of the energy absorbing pad, provide a discussion of the protection(s) in-place for the SFP liner.

**Response:**

The CDEAS is no longer required because Dry Fuel Storage cask handling operations will be conducted with a single-failure-proof handling system. The leveling platform protects the 1" thick Spent Fuel Pool liner plate in the cask storage area by providing explicitly designed bearing pads at six locations to distribute and transfer cask loadings to the Spent Fuel Pool concrete structure.

**REQUEST 5**

Section 10.3.6 of the Pilgrim Updated Final Safety Evaluation Report, Revision 27, contains the following statement regarding protection of the liner following a cask drop during transport cask movement in the SFP:

Analysis has demonstrated that with the energy absorber in place, damage to the floor will not result in a leakage rate greater than the pool makeup capability.

Although the use of a new single failure proof crane precludes the need to consider a cask drop, the increased weight of the MPC relative to the transport cask and the design of the leveling platform affect the loading on the SFP liner. Describe any analysis completed to verify the SFP liner integrity during MPC loading operations, including the mechanical loads considered (dead, live, and seismic), design features of the leveling platform that affect loading on the SFP liner, important analysis assumptions, and analytical results.

**Response:**

The evaluation of HI-TRAC loading on the Spent Fuel Pool floor liner and reinforced concrete slab, including seismic stability analysis of HI-TRAC on the leveling platform, is presented in Reference 5. The leveling platform structure transfers cask loads (dead and seismic) through the 1" thick Spent Fuel Pool liner plate and supporting slab in the cask storage area with 2" thick bearing pads, at each support pedestal location. Results demonstrate a large factor of safety for punching shear failure from the peak vertical cask loading during an SSE.

The principal design drawings for the Spent Fuel Pool liner system are C-174, C-175 and C-178 (References 6, 7, and 8). Three (3) small vertical monitoring trenches formed in the concrete are shown in each of the four walls of the Spent Fuel Pool. They communicate with horizontal monitoring trenches running along the perimeter of the floor to wall intersection. The drawings for the Spent Fuel Pool floor liner do not show any interior monitoring trenches running beneath it. Drawing M-413 (Reference 9) shows the location of the drain piping connected to the fittings (See Detail 2 on C-178) that collect any monitoring trench flow. In the cask handling area, the 1" thick floor liner plate does have a horizontal monitoring trench at the intersection of the floor to wall liner as shown in Section A on C-178, but the trench is not in a zone of influence of pad bearing pressures.

**ATTACHMENT 2**

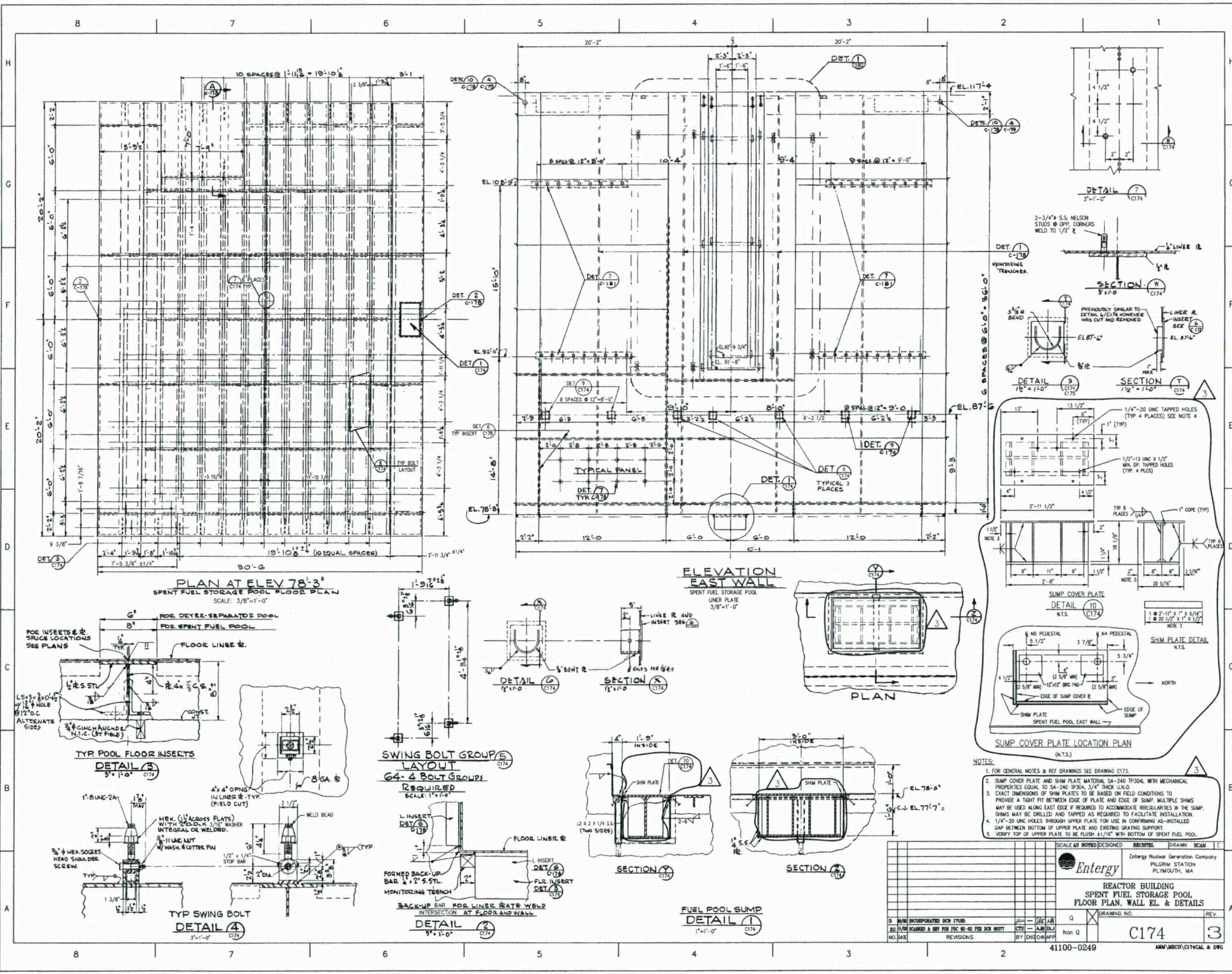
to

**Entergy Letter No. 2.14.069**

**Entergy Drawing C-174  
"Spent Fuel Storage Pool Floor Plan, Wall El. & Details"**

**(1 Page)**

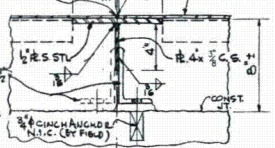




**PLAN AT ELEV 78'-3"**  
**SPENT FUEL STORAGE POOL FLOOR PLAN**  
 SCALE: 3/8"=1'-0"

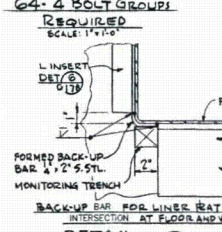
**ELEVATION EAST WALL**  
 SPENT FUEL STORAGE POOL  
 LINER PLATE  
 3/8"=1'-0"

**FOR INSERTS & SPLICING LOCATIONS SEE PLANS**



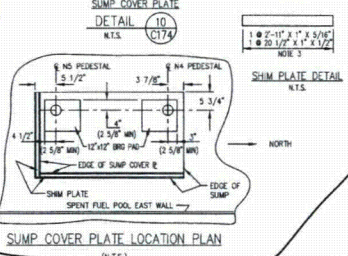
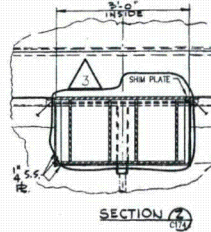
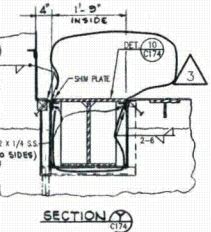
**TYP POOL FLOOR INSERTS**  
**DETAIL 3**  
 5/8"=1'-0" C174

**SWING BOLT GROUP(S) LAYOUT**  
**G4-4 BOLT GROUPS**  
 REQUIRED SCALE: 1/4"=1'-0"

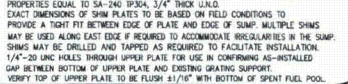


**BACK-UP BAR FOR LINER PLATE WELD INTERSECTION AT FLOOR AND WALL**  
**DETAIL 2**  
 3/4"=1'-0" C174

**FUEL POOL SUMP**  
**DETAIL 1**  
 1/4"=1'-0" C174



**SUMP COVER PLATE**  
**DETAIL 10**  
 N.T.S. C174



**SHIM PLATE DETAIL**  
 N.T.S.

- NOTES:**
1. FOR GENERAL NOTES & REF DRAWINGS SEE DRAWING C173.
  2. SUMP COVER PLATE AND SHIM PLATE MATERIAL: SA-240 TP304L WITH MECHANICAL PROPERTIES GOING TO SA-240 TP304. 3/4" THICK UNLESS OTHERWISE NOTED.
  3. EXACT DIMENSIONS OF SHIM PLATE TO BE BASED ON FIELD CONDITIONS TO PROVIDE A TIGHT FIT BETWEEN EDGE OF PLATE AND EDGE OF SUMP. MULTIPLE SHIMS MAY BE USED ALONG EAST EDGE IF REQUIRED TO ACCOMMODATE IRREGULARITIES IN THE SUMP. SHIMS MAY BE DRILLED AND TAPPED AS REQUIRED TO FACILITATE INSTALLATION.
  4. 1/4"-20 UNC HOLES THROUGH UPPER PLATE FOR USE IN CONFIRMING AS-INSTALLED GAP BETWEEN BOTTOM OF UPPER PLATE AND EXISTING GRATING SUPPORT.
  5. VERIFY TOP OF UPPER PLATE TO BE FLUSH 31/16" WITH BOTTOM OF SPENT FUEL POOL.

NO.	DATE	BY	CHKD.	APP'D.	REVISIONS

SCALE AS NOTED DESIGNED: [Signature] CHECKED: [Signature] DRAWN: [Signature] SCAN: [Signature]

Entergy  
 Entergy Nuclear Generation Company  
 PILGRIM STATION  
 PILGRIM/OUTY, MA

REACTOR BUILDING  
 SPENT FUEL STORAGE POOL  
 FLOOR PLAN, WALL EL. & DETAILS

DRAWING NO. **C174** REV. **3**

41100-0249 ANNA/MSJ/C174/C&D

ATTACHMENT 3

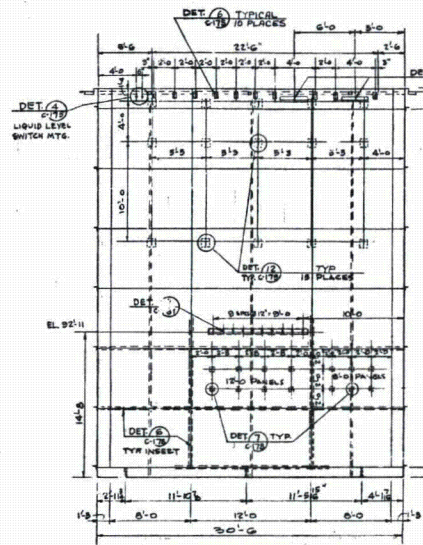
to

Entergy Letter No. 2.14.069

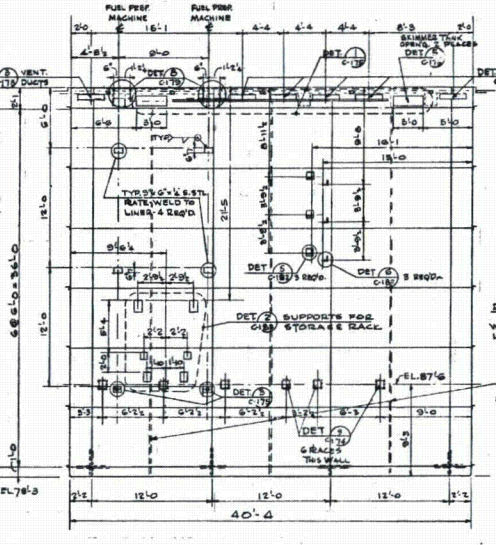
Entergy Drawing C-175  
"Spent Fuel Storage Pool Floor Wall Elev's. & Details"

(1 Page)

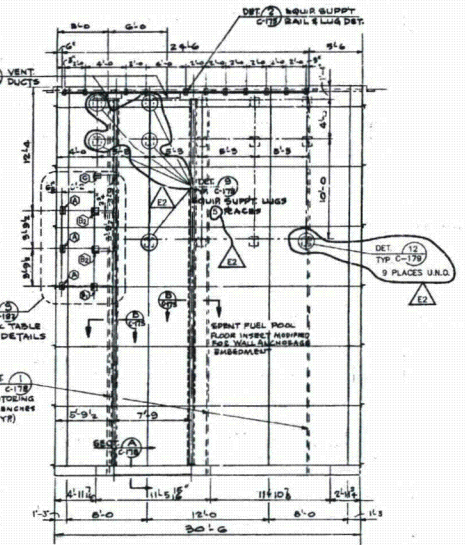
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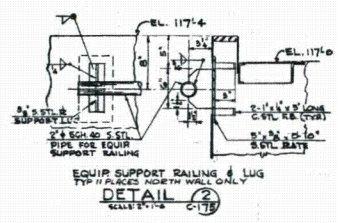
ELEVATION SOUTH WALL  
SPENT FUEL STORAGE POOL  
LINER BEATS  
W = 14'-0"



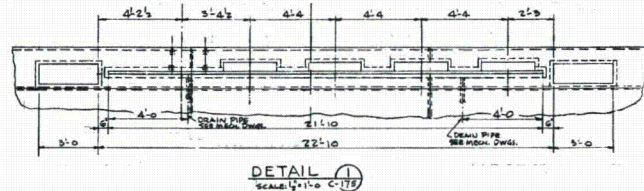
ELEVATION WEST WALL  
SPENT FUEL STORAGE POOL  
LINER BEATS  
W = 14'-0"



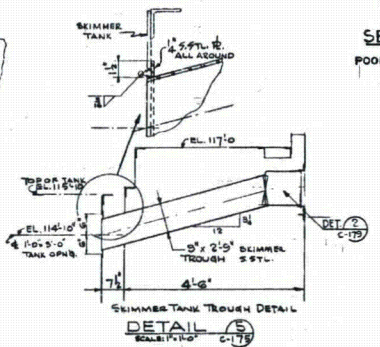
ELEVATION NORTH WALL  
SPENT FUEL STORAGE POOL  
LINER BEATS  
W = 14'-0"



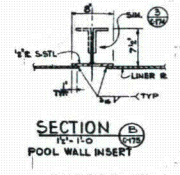
EQUIP SUPPORT RAILING & LUG  
TYP 11 PLACES NORTH WALL ONLY  
SCALE: 1/2\"/>



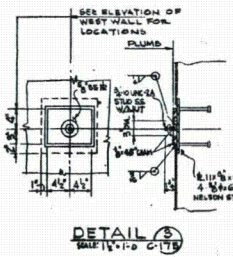
DETAIL 1  
SCALE: 1/2\"/>



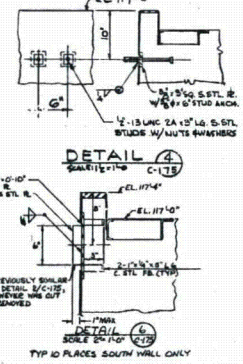
SWIMMER TANK THROUGH DETAIL  
SCALE: 1/2\"/>



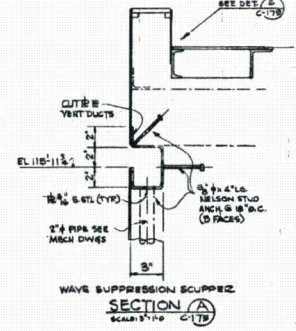
SECTION B  
SCALE: 1/2\"/>



DETAIL 3  
SCALE: 1/2\"/>



DETAIL 4  
SCALE: 1/2\"/>



SECTION A  
SCALE: 1/2\"/>

NOTE:  
1. FOR GENERAL NOTES & REF. DWGS. SEE DWG. C-173

APPROVED FOR  
(SIGNATURE)

SCALE: AS NOTED/DESIGNED	SECRET	DRAWN	SCALE	E
		Entergy Nuclear Generation Company PROGRAM STATION FLEXINGTON, MA		
REACTOR BUILDING SPENT FUEL STORAGE POOL WALL ELEV'S. & DETAILS				
TITLE OF REFERENCE DRAWING		DRAWING NO. NO. DATE		REVISIONS
41100-0250		Non Q		DRAWING NO.
C175		REV.		B2

8 7 6 5 4 3 2 1

B A C B A

1 2 3 4

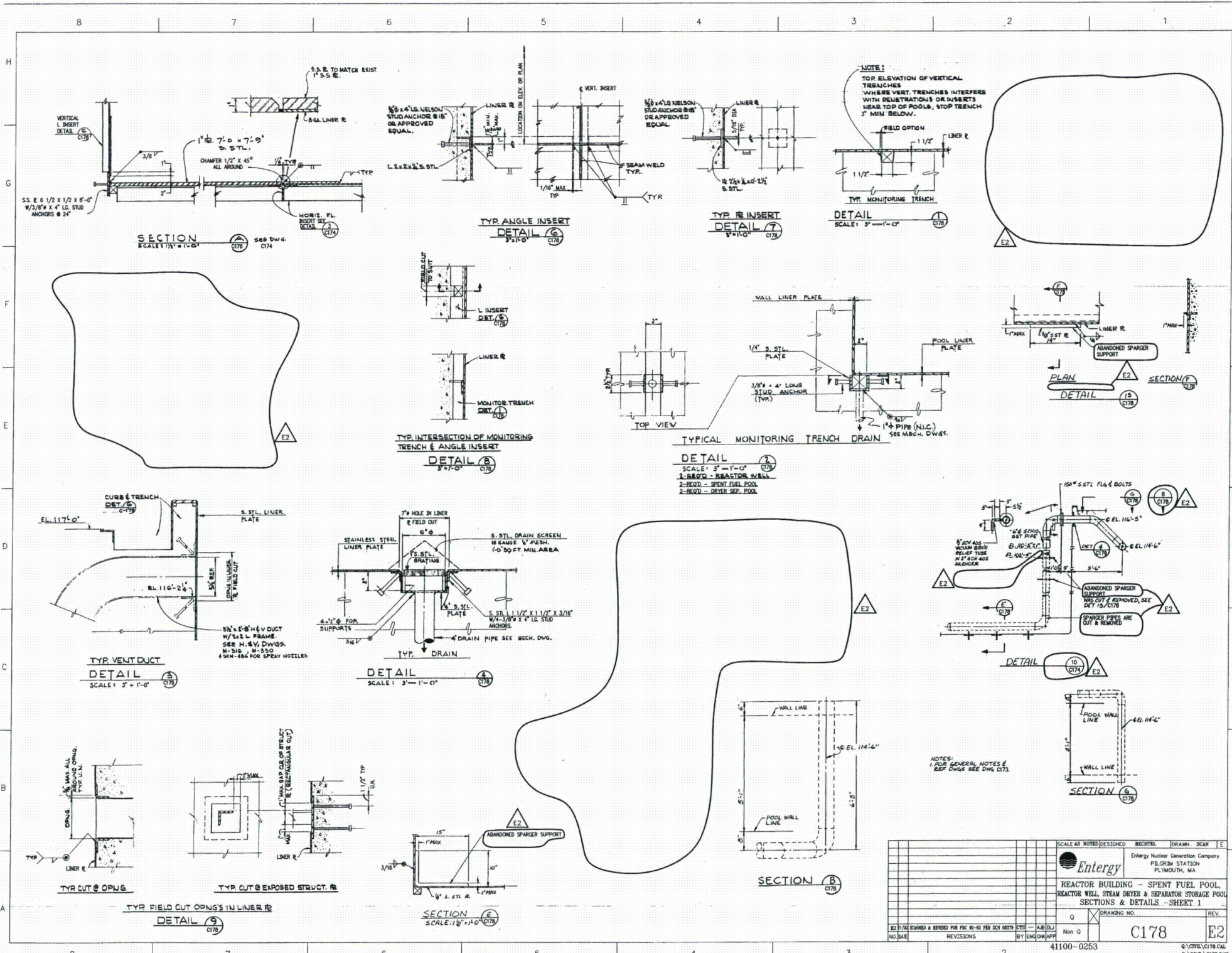
ATTACHMENT 4

to

Entergy Letter No. 2.14.069

Entergy Drawing C-178  
"Spent Fuel Pool, Reactor Well, Steam Dryer & Separator Storage Pool Sections & Details –  
Sheet 1"

(1 Page)



**NOTE:**  
TOP ELEVATION OF VERTICAL TRENCHES WHERE VERT. TRENCHES INTERFERE WITH PENETRATIONS OR INSERTS NEAR TOP OF POOLS, STOP TRENCH 3' MIN. BELOW.

FIELD OPTION

TYP. MONITORING TRENCH

**DETAIL (7)**  
SCALE: 3" = 1'-0"

WALL LINER PLATE

1/4" S. STL. PLATE

3/8" x 4" LONG STUD ANCHOR (TYR)

1/4" PIPE (N.L.C.) SEE MECH. DWGS.

POOL LINER PLATE

**DETAIL (8)**  
SCALE: 3" = 1'-0"

3-RECO - REACTOR WALL  
2-RECO - SPENT FUEL POOL  
2-RECO - DRYER SEP. POOL

150" S. STL. FLG. & BOLTS

1/2" SCH. 40S. SET PIPE

1/2" SCH. 40S. WELDED BRASS RELIEF TUBE AT 12" SCH. 40S. REDUCER

EL. 68'-8"

EL. 68'-0"

EL. 114'-6"

EL. 114'-5"

EL. 114'-6"

ABANDONED SPARGER SUPPORT WAS CUT IF REMOVED, SEE DET. 10/17/78

SPARGER TUBES ARE CUT & REMOVED

**DETAIL (10)**  
SCALE: 3" = 1'-0"

POOL WALL LINE

WALL LINE

EL. 114'-6"

**SECTION (6)**  
SCALE: 3" = 1'-0"

**NOTES:**  
1. FOR GENERAL NOTES & REF. DWGS. SEE DWG. 0173.

SCALE AS NOTED/DESIGNED		RECHTEL	DRAWN	SCAN	E
		Entergy Nuclear Generation Company PLOREM STATION PLYMOUTH, MA			
REACTOR BUILDING - SPENT FUEL POOL REACTOR WALL, STEAM DRYER & SEPARATOR STORAGE POOL SECTIONS & DETAILS - SHEET 1					
NO. DATE		REVISIONS	BY	LENGTH	APP
Q		Non Q			
DRAWING NO.		REV.			
C178		E2			
41100-0253		Q/CV78/C178 CAL		Q/CV78/C178 DWG	

ATTACHMENT 5

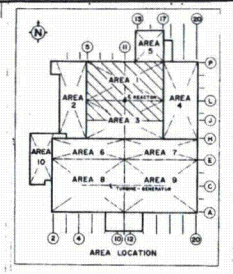
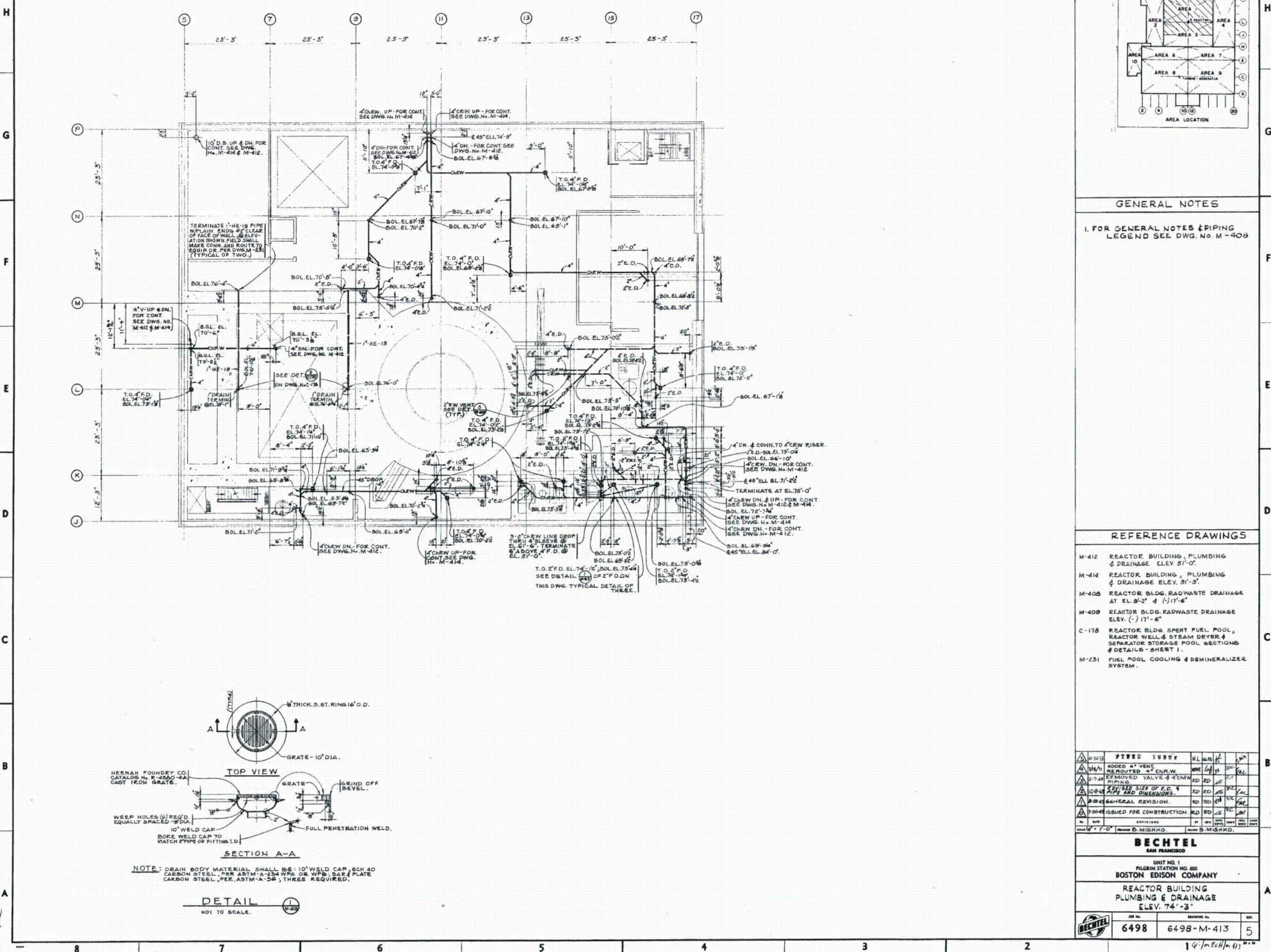
to

Entergy Letter No. 2.14.069

Entergy Drawing M-413  
"Plumbing and Drainage Elev. 74' – 3" "

(1 Page)

M-413



GENERAL NOTES

1. FOR GENERAL NOTES & PIPING LEGEND SEE DWG. NO. M-408

REFERENCE DRAWINGS

- M-412 REACTOR BUILDING, PLUMBING & DRAINAGE ELEV. 51'-0"
- M-414 REACTOR BUILDING, PLUMBING & DRAINAGE ELEV. 51'-5"
- M-408 REACTOR BLDG. RADWASTE DRAINAGE AT EL. 51'-2" & (-) 11'-6"
- M-409 REACTOR BLDG. RADWASTE DRAINAGE ELEV. (-) 11'-6"
- C-178 REACTOR BLDG. SPENT FUEL POOL, REACTOR WELL & STEAM DRYER & SEPARATOR STORAGE POOL, SECTIONS & DETAILS - SHEET 1.
- M-231 FUEL POOL COOLING & DEMINERALIZER SYSTEM.

NO.	DATE	DESCRIPTION	BY	CHKD.
1	11-10-50	ISSUED FOR CONSTRUCTION	RD	RD
2	11-10-50	GENERAL REVISION	RD	RD
3	11-10-50	REMOVED VALVE & 4" CW RISING	RD	RD
4	11-10-50	REVISED SIZE OF S.S. & DR. DIMENSIONS	RD	RD
5	11-10-50	ROSES 2" VERT. REROUTED 2" CW RW	RD	RD
6	11-10-50	PIPING 1880*	RD	RD

**BECHTEL**  
SAN FRANCISCO

UNIT NO. 1  
PILGRIM STATION NO. 600  
BOSTON EDISON COMPANY

REACTOR BUILDING  
PLUMBING & DRAINAGE  
ELEV. 74'-0"

NO. 6498 6498-M-413 5

ATTACHMENT 6

to

Entergy Letter No. 2.14.069

Holtec Affidavit AFFi-1916-02  
"Affidavit Pursuant to 10 CFR 2.390" (5 Pages)

(1 Page)





Holtec Center, One Holtec Drive, Marlton, NJ 08053

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Fax (856) 797-0909

Holtec International Document ID AFFI-1916-02

**AFFIDAVIT PURSUANT TO 10 CFR 2.390**

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I, Kimberly Manzione, being duly sworn, depose and state as follows:

- (1) I have reviewed the information described in paragraph (2) which is sought to be withheld, and am authorized to apply for its withholding.
- (2) The information sought to be withheld is information provided within Holtec report HI-2104715 Revision 7, Holtec drawing 8262 Revision 8, and Holtec drawing 8777 Revision 5 which contains Holtec Proprietary information and is appropriately marked as such.
- (3) In making this application for withholding of proprietary information of which it is the owner, Holtec International relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4) and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10CFR Part 9.17(a)(4), 2.390(a)(4), and 2.390(b)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).

**AFFIDAVIT PURSUANT TO 10 CFR 2.390**

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- (4) Some examples of categories of information which fit into the definition of proprietary information are:
- a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by Holtec's competitors without license from Holtec International constitutes a competitive economic advantage over other companies;
  - b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
  - c. Information which reveals cost or price information, production, capacities, budget levels, or commercial strategies of Holtec International, its customers, or its suppliers;
  - d. Information which reveals aspects of past, present, or future Holtec International customer-funded development plans and programs of potential commercial value to Holtec International;
  - e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraph 4.b, above.

- (5) The information sought to be withheld is being submitted to the NRC in confidence. The information (including that compiled from many sources) is of a sort customarily held in confidence by Holtec International, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by Holtec International. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary

**AFFIDAVIT PURSUANT TO 10 CFR 2.390**

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agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

- (6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within Holtec International is limited on a "need to know" basis.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his designee), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside Holtec International are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information classified as proprietary was developed and compiled by Holtec International at a significant cost to Holtec International. This information is classified as proprietary because it contains detailed descriptions of analytical approaches and methodologies not available elsewhere. This information would provide other parties, including competitors, with information from Holtec International's technical database and the results of evaluations performed by Holtec International. A substantial effort has been expended by Holtec International to develop this information. Release of this information would improve a competitor's position because it would enable Holtec's competitor to copy our technology and offer it for sale in competition with our company, causing us financial injury.

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- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to Holtec International's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of Holtec International's comprehensive spent fuel storage technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology, and includes development of the expertise to determine and apply the appropriate evaluation process.

The research, development, engineering, and analytical costs comprise a substantial investment of time and money by Holtec International.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

Holtec International's competitive advantage will be lost if its competitors are able to use the results of the Holtec International experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to Holtec International would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive Holtec International of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

AFFIDAVIT PURSUANT TO 10 CFR 2.390

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STATE OF NEW JERSEY     )  
  )  
COUNTY OF BURLINGTON )       ss:

Kimberly Manzione, being duly sworn, deposes and says:

That she has read the foregoing affidavit and the matters stated therein are true and correct to the best of her knowledge, information, and belief.

Executed at Marlton, New Jersey, this 26<sup>th</sup> day of September, 2014.

*Kimberly Manzione*

Kimberly Manzione  
Holtec International

Subscribed and sworn before me this 26<sup>th</sup> day of September, 2014.

*Maria C. Massi*

MARIA C. MASSI  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires April 25, 2015