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September 4, 1987

Mr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Unit 2
"Continued Operation Criteria for LPCI Piping"
NRC Docket No. 50-237

- Reference (a): Letter from J. R. Wojnarowski to H. R. Denton,
dated April 1, 1986.
- (b): Letter from J. R. Wojnarowski to H. R. Denton,
dated April 11, 1986.
- (c): Letter from R. A. Gilbert to Commonwealth Edison
dated June 23, 1986 transmitting summary of
May 13, 1986 meeting.

Dear Mr. Murley:

The purpose of this letter is to document a telephone conversation held on September 3, 1987 with Mr. D. Muller and others of your staff. The attached list provides the names of the conference call participants. In that discussion, Commonwealth Edison Company requested concurrence to use Regulatory Guide 1.61 and ANSI/AISC N690-84 for a continued operation evaluation of the Low Pressure Core Injection piping on Dresden Unit 2.

In conjunction with the Dresden Unit 2 embedment strip plate evaluation, a support configuration on the LPCI System was identified which exceeded design basis requirements. The support configuration is shown in Figure 1. Further evaluation showed that a minor modification to the system would satisfy design basis requirements. The specific changes needed are: (1) larger diameter anchor bolts, and (2) a thicker baseplate.

It should be noted that Dresden Unit 2 is currently in operation. Preliminary analyses have shown that by using Regulatory Guide 1.61 damping and ANSI/AISC N690-84 ductilities that the LPCI system can perform its intended function without modification. With the exception of Regulation Guide 1.61 and ANSI N690, these additional analyses will be performed in accordance with the present licensing basis.

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Figure 1 shows the current configuration of the LPCI support. This support is attached to the reactor building floor by anchor bolts and by a weldment between the baseplate and strip plates embedded in the same floor. Using design basis loads and methods, both the baseplate and the anchor bolts exceed the design basis. We propose to use the allowable ductilities in ANSI/AISC N690-84 to qualify the existing baseplate and anchor bolts for continued operation. A minor design modification will be installed during the next refueling outage, such that the support will conform to design basis requirements.

The Staff concurred with the use of Regulatory Guide 1.61 damping values based on the precedence discussed in the above referenced letter. That letter documents discussions relative to a continued operation evaluation performed for the Dresden Unit 2 Recirculation System Piping. In references (a) and (b), Commonwealth Edison requested the use of a higher damping value for the Recirculation System Piping. In references (c), your staff indicated that such permission would be granted on a case by case basis. For the Recirculation System piping evaluation, Commonwealth Edison utilized Regulatory Guide 1.61 damping and design basis methods. The Staff also asked that several questions be addressed in this submittal. These questions and corresponding responses are provided as follows:

Question (1): How does the seismic spectra comply with Regulatory Guide 1.122 (i.e. peak broadening)?

Response: Regulatory Guide 1.122 was issued after Dresden Unit 2 seismic spectra were developed. Nevertheless, the spectral peaks were broadened $\pm 15\%$ which satisfies the requirements of Regulatory Guide 1.122.

Questions (2): How are closely spaced modes evaluated?

Response: All modes are combined by SRSS, with no other adjustment for closely spaced modes. This is consistent with the design basis.

Questions (3): How were load directions combined?

Response: Seismic loads are combined by adding the largest horizontal response absolutely with the vertical. This is consistent with the FSAR.

Questions (4): How does the LPCI continued operation analysis compare with the that for the Recirculation System?

Response: The analysis techniques are identical. Additionally, both the LPCI and Recirculation system piping are 12" and larger systems.

Regarding the use of ANSI/AISC N690-84 ductility ratios, the Staff requested a copy of the document prior to providing authorization. Commonwealth Edison transmitted a copy to your staff on September 3 following out telephone conversation.

Based on the results of our preliminary analyses, using Regulatory Guide 1.61 values and ANSI N-690 guidance, Commonwealth Edison believes the LPCI system supports configuration is operable. This preliminary analysis provides the basis for our assurance that Dresden 2 may continue to be operated. We commit to modify this support and restore it to meet the FSAR in our upcoming September 1988 refueling outage.

We appreciate your attention to this important issue. We request your concurrence in the use Regulatory Guide 1.61 and ANSI/AISC N690-84 for this specific embedment plate and its attachments.

Please direct any questions you may have regarding this transmittal to this office.

Yours very truly,



I. M. Johnson
Nuclear Licensing Administrator

cc: Dresden Resident Inspector
T. Ross - NRR
M. Grotenhuis - NRR
D. Muller - NRR
A. B. Davis - NRR

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EMPLOYMENT PLATE EVALUATION

MEETING

SEPT. 3, 1987

ATTENDANCE LIST

<u>NAME</u>	<u>COMPANY</u>	<u>DEPT.</u>
ALAN HO	IMPALL	ENGINEERING DIV.
Adolf Walser	S+L	Struct. Project Eng.
DAN GULLAKSEN	S&L	STRUCT. ENG. DIVISION
R. W. KROEBEL	S&L	" " "
P. C. BHATT	S&L	" " "
DAN BAILEY	IMPALL	E.P.
TED WITTIG	"	ENGINEERING DIVISION
S. Javidan	CECC	BWR Engineering
J. A. GAVULA	NRC RTI	R. Insp.
J.M. JOHNSON	CECO	NUC. LIC.
T. ROSS	NRR	BDII-2 DL LPM
D. MULLER	NRR	BDII-2 DIRECTOR
M. GROTENHUIS	NRR	BDII-2 D LPM
R. LAPINSKI	NRR	NRR
A. LEE	NRR	NRR EMB

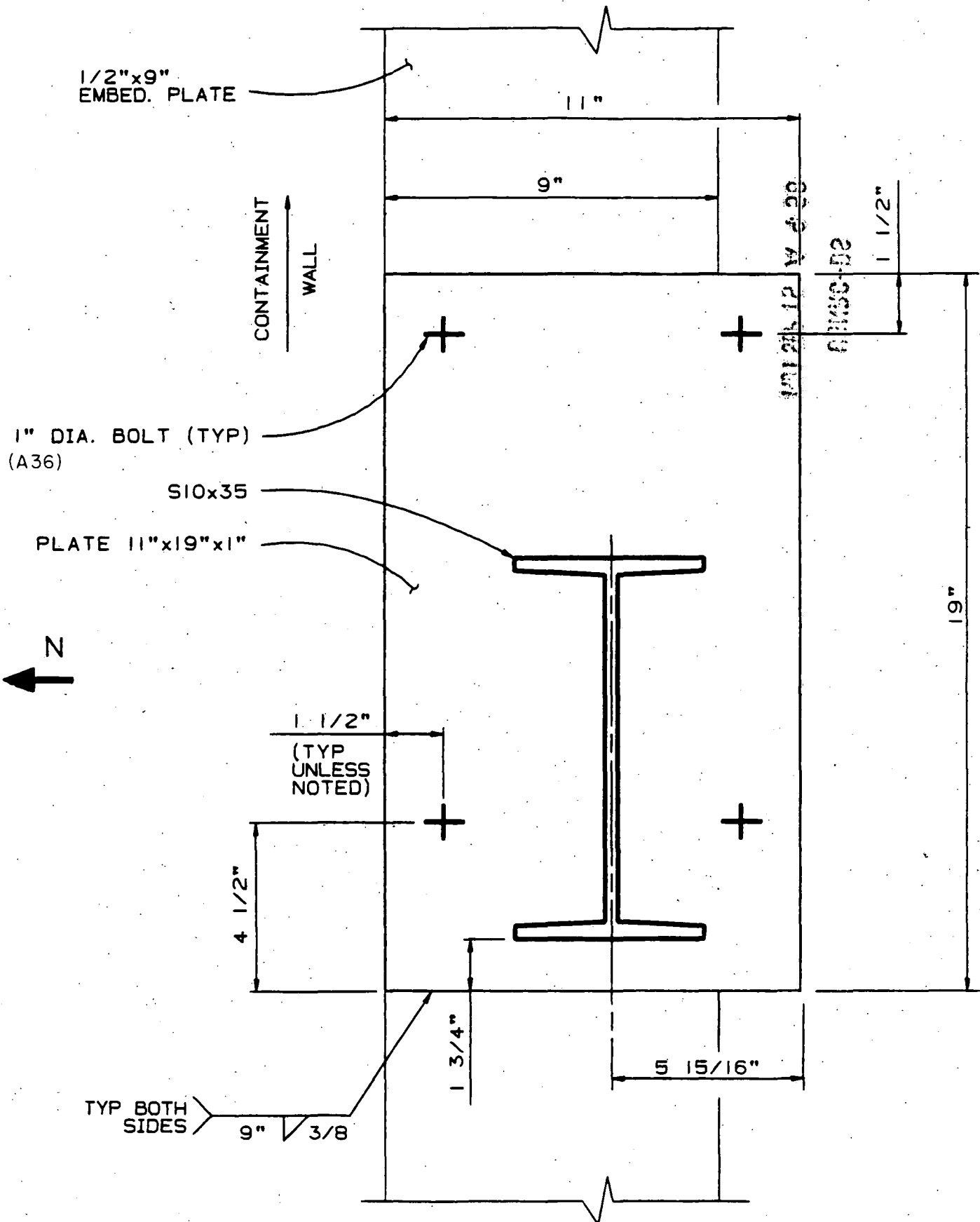


FIGURE 1