



Public Service Company ^{OF}

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NSIC

July 7, 1980
Fort St. Vrain
Unit No. 1
P-80198

Mr. Karl V. Seyfrit
Director Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

Subject: Masonry Block Walls

Gentlemen:

The following is Public Service Company of Colorado's sixty day response to IE Bulletin 80-11:

Item 1: Masonry walls that are in the proximity to or have attachments from safety related piping or equipment such that wall failure could affect a safety related system.

PSC has completed an investigation of all concrete masonry block walls in the turbine and reactor buildings. A total of 98 masonry walls were reviewed for the potential of affecting safety related equipment during a seismic event. The walls were divided into the following categories:

- | | |
|--|----------|
| A. Masonry Walls with no potential of affecting safety related equipment | 41 walls |
| B. Masonry walls with potential of affecting safety related equipment | 34 walls |
| C. Walls accessible from one side only that may or may not affect safety related equipment | 11 walls |
| D. Wall totally inaccessible that may or may not affect safety related equipment | 12 walls |

Example of masonry walls and associated equipment that have no potential of affecting safety related equipment are as follows:

- | | |
|---------------|-------------------------------------|
| Wall Number 1 | Hydrogen Bottle Storage Room |
| Wall Number 5 | North Wall Turbine Oil Storage Room |

Wall Number 53 Separation wall between the radio chemical laboratory and the counting room.

Examples of masonry walls and the associated equipment with the potential of affecting safety related systems are as follows:

Wall Number 14 & 16 Intermediate masonry walls (missile walls) in the switch gear room separating switch gear equipment

Wall Number 39 & 90 South wall of reactor instrument room with safety related cable trays adjacent to the wall

Examples of masonry walls that are accessible from only one side are as follows:

Wall Number 68 Pipe chase with safety related cable tray near wall

Wall Number 74 Pipe chase which has safety related two inch and under piping near wall

Examples of masonry walls that are totally inaccessible are as follows:

Wall Number 69,70 & 71 Wall located inside the liquid waste & gas waste facility

A wall number was assigned to each masonry block wall in order to uniquely identify it for audit and calculation purposes.

The majority of the attachments to the concrete masonry block walls are items such as electrical conduit and Class II, two inch and under pipe hangers. These items input very little force into the wall during a seismic event compared to forces due to large bore piping. As part of our audit procedure for our small and large bore piping programs (IE79-14), we have been removing all Class I pipe hangers from masonry block walls.

Item 2: Program for the reevaluation of the masonry walls

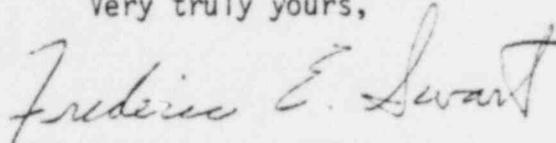
PSC in its audit of the concrete masonry block walls has, for all walls that are safety related and accessible, prepared sketches of the wall showing the location of all piping, conduit, junction boxes, cable trays, mechanical equipment, etc. that is attached to the wall. From these sketches it is our intent to determine loads that this equipment would impact into the wall during a seismic event. These loads will be used to evaluate the adequacy of the masonry wall. Each masonry block wall that is accessible and that has the potential of affecting a safety related system will have its own analysis to determine the adequacy of the wall. The estimated completion date for the reanalysis is November 3, 1980. If, in the course of the reanalysis of the safety related masonry block walls, problems develop with the stresses in the wall such that the wall could have the potential of affecting a safety related system, the wall shall be reinforced to carry the loads used in the analysis.

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Item 3: Testing program in the absence of appropriate acceptance
criteria

PSC has specifications and drawings concerning the materials used in the masonry block walls. This information includes such items as strengths of masonry block, strength of mortar, rebar size and spacing. Since conservative assumptions shall be used in the reanalysis of the block walls, no testing program of the walls at this time is felt to be required.

Very truly yours,

A handwritten signature in cursive script that reads "Frederic E. Swart". The signature is written in dark ink and is positioned above the typed name and title.

Frederic E. Swart
Nuclear Project Manager

FES/RAG:pa