



UNITED STATES
CLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 25 1980

The Honorable Warren G. Magnuson
United States Senate
Washington, DC 20510

Dear Senator Magnuson:

This is in response to your Request for Response to Mr. John Duncan, Secretary, DOE, dated February 8, 1980 with regard to a letter dated January 29, 1980 you received from Mr. Robert A. Brown. Mr. Brown indicated in his letter that he had not received a reply to his September 19, 1979 letter to Mr. Duncan of DOE.

The Department of Energy referred your request to the NRC on March 14, 1980. The NRC was already investigating the allegations contained in Mr. Brown's letter of September 19, 1979 relating to certain aspects of work at the WPPSS Nuclear Unit 2. It should be noted that certain other aspects of the September 19, 1975 letter concerned work at the Hanford Reservation which is under the jurisdiction of DOE and, therefore have not been addressed during our investigations.

As you may recall, Mr. Brown had a series of allegations that were contained in a letter dated August 21, 1979 which had been sent to Mr. Monroe, Administrator of the Bonneville Power Corporation, with a copy to you. That letter was also referred to the NRC and we sent you a response on October 15, 1979 that addressed those allegations.

The results of our most recent investigation of Mr. Brown's allegations, which we determined to possibly relate to safety as opposed to schedules and cost, indicate that one allegation was substantiated but had no safety significance. Another was partially substantiated and had safety significance. The other possible safety items alleged lacked sufficient specifics to pursue or were not technically correct. The enclosure provides the details of our response to each item we identified as safety-related and alleged by Mr. Brown. We also learned that many of the cost questions he raised relate to the Hanford Reservation which is under DOE's jurisdiction. We are notifying DOE of those items as a result of our investigation.

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APR 25 1980

I trust the information and discussion will provide the necessary details for you to reassure your constituent that the control of safety is being maintained by the NRC.

Sincerely,

*original signed by
L. Kevin Cornell*

William J. Dircks
Acting Executive Director
for Operations

Enclosure:
Response to Safety
Allegations by Mr. R. Brown

Enclosure

Response to Safety Allegations
Made by Mr. Robert Brown

1. Allegation that not one of the inspectors from the site quality control group, the NRC, insurance company or the engineering office knows anything about inspection. They don't know what is right and wrong and have no experience and cannot provide an answer.

The NRC does not rely on insurance inspectors to provide safety inspection results. The State of Washington recognizes certain insurance companies that function as Authorized Nuclear Inspectors in the review for compliance with state laws which recognize the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The training, qualification and certification of these inspectors is under the jurisdiction of the National Board of Boiler and Pressure Vessel Inspectors.

The experience and performance of the inspectors in the quality control group at the site are reviewed by the NRC during the course of normal NRC inspection efforts. The NRC has found several instances of inadequate inspection and the licensee has been cited for noncompliance with NRC regulations. The instances that we have found related to the inspection of pipe supports. These specific cases have been corrected although just recently another instance of inadequate inspection was found. This recent matter is under review at the present time to determine what action is necessary.

The personnel from the engineering office are not considered by the NRC to be inspectors, but are generally sent to a site to followup a specific problem. Usually it is a matter where they have participated from the engineering/design aspects.

The NRC inspectors are put through initial training courses as well as refresher courses. Some inspectors are capable of general inspections in many technical areas while others are specialists in a specific technical area. We are confident that the NRC inspectors involved at the WPPSS Nuclear Unit 2 are capable of defining safety-related problems and seeing that proper corrective action is taken.

This allegation was partially substantiated.

2. Concrete anchor bolts are not load tested after installation, but are checked on the basis of measurements.

The program instituted by the licensee as well as the result of NRC inspections to verify the adequacy of anchor bolts were addressed in the letter of October 15, 1979 to Senator Magnuson.

3. Pipe supports are designed for heavy loads then the pipes are attached by a weaker link.

While licensee representatives were unable to identify the current use of 1/4" U-bolts in pipe supports, it was found that some 1/4" U-bolts had been installed in the past and that this condition was subjected to engineering review and properly dispositioned. The Burns & Roe program for reviewing the designs of completed pipe support assemblies provides for an analysis to verify the as-built condition of the support thus providing reasonable assurance that the support will perform its intended function.

The fact is that the anchor to the concrete is given a larger margin of safety in order to reflect somewhat less capability to perform an "exact analysis" on the load capability, whereas the determination of load capability for a U-bolt clamp is more direct. The allegor addressed this item apparently due to cost considerations.

Conclusion

The results of the investigation of Items 1 and 3 were reviewed with the allegor on February 27, 1980. The allegor stated that he had never had a real concern for safety, but he was concerned with wastefully excessive pipe support structure designs and redundant inspections of anchor bolts. The allegor had no further questions regarding the ability of the anchor bolts or supports to perform their safety function. Item 2 was discussed with the allegor and the concern over the fact that the Code inspector may find a defect after the NRC inspector had finished was addressed. The allegor now understands that each inspector may be looking at different aspects as this Code review is completed. Therefore the findings may be different.



Kennewick, Wa. 99336
September 1979.

Mr. John Duncan, Secretary,
Department of Energy,
Forrestal Building,
1000 Independence Ave. SW,
Washington, DC 20585.

Dear Mr. Duncan,

I am writing to you regarding my concern of the cost of the nuclear projects that are being built in this area, and the operation and maintenance of them. I believe our greatest problem is the engineers that are drawing prints and writing specifications. I have had some education in mechanical engineering, mostly on pipe, and 45 years experience. What I am really concerned about is using common sense.

Many crafts, especially the young craftsmen, work with all this inspection, and they can see that not one of the inspectors from quality control, NRC, insurance, and from the engineers office, know anything about the inspection except what they have written on a piece of paper. The inspectors don't know whether they are wrong, right or otherwise. They simply have had no experience, they don't know the answer. This gives the young craftsman a poor attitude and they get so they don't care, for they can see about half of the things the engineers want just don't make sense. For example, 3/8" x 4" angle iron is welded together with a knee brace and bolted on a wall with 4 7/8 x 5" anchor bolts to each plate as shown (fig. 1). Then the engineers hang their pipe on it with 1/4" u-bolts! Do they really think that 1/4" u-bolts will hold as much as the rest of the hanger? Who do they think they're fooling? The engineers and quality control they have at WFPSS on the #2 plant are completely in another world. Another example: on the inspection of anchor bolts, quality control measures to see how far the tapered pin is in the anchor when they should use a stress test to find out what it would hold.

Right now I am setting pump bases on a tank farm under Jones Construction and Vitro Engineers, which the contractor I work for is a sub. The mechanical engineers are wanting these bases set within 1/32 of an inch, with the center line of the pump base between the dowel pins exactly north and south. Now these bases are sitting on 12", 14" and 24" pipe. The base itself is about 12" larger than the pipe and welded on. The warpage from the weld on a 1" base is sometimes 1/4", so how can you hold within the 1/32 of an inch? (fig. 2) There are jumpers that go from the pump base to pipe nozzles on the wall in concrete pits which have to be within 1/32 of an inch too. They make the jumpers first, and it doesn't make sense to

Harford Reservation



Hanford Reservation

...all large pump bases and many different sizes of pipe nozzles to fit the jumpers. They should build the jumper to fit the pump bases and nozzles, since the jumpers are not over three or four feet at the most. They will have craftsmen grinding and rewelding bases for weeks, and even bust out concrete to move the nozzle to fit the jumper. Now I believe in good work, but this is nothing but stupidity, when they should know the warpage in a weld will throw them off more than they allow, and they could have built the jumper to fit as built. Even if they are off 1/4" and the north and south are off 1/4", the pumps will work just the same. I have installed hundreds of pump bases in chemical plants, paper mills and many different places, and they are safe.

They're also doing something stupid with their specs on testing pipe with the hydro test. For example, they will ask for a three hundred pound test and they will want a gauge that has been calibrated within the last few days, and they'll want a relief valve that is set at 10% above the test pressure and also calibrated. They'll need about 25 different pressures from 30 lbs. up to 650 lb. and that takes about 25 relief valves. The engineers send down a woman to inspect the test. She'll make us hold the test for a certain length of time, okay the test on the pipe, then ask us to bring the pressure up 10% to see if the relief valve is working. If it doesn't work within a few pounds of what it is calibrated at, the whole test is turned down. Now, are we testing the relief valve for some company, or are we testing the pipe? They might call this safety, but I have tested pipe up to 4000 lbs., and used two gauges in case one was not accurate or malfunctioned. We do it by hand, and cold water does not cause a safety hazard. Just imagine the time loss and man hours spent on things like this. How can a small contractor make it on a set bid with this going on!

The so-called professional people in the mechanical field are the ones that have confused the craftsmen to the point they're getting just like the engineers, trying to spend just as much time as possible complicating the work, to the point they're going to price the people clear out of nuclear energy. A lot of this money is tax money!

I think somebody had better start using some common sense and quit listening to those so called professionals. I would like to spend a week on the Hanford project with any one of the senators, representatives or heads of the Energy Department and explain the millions of dollars that are wasted here. I think some body some place should be held accountable for this, or step down and let somebody take over that can.

There are several good craftsmen here and we have been meeting and thinking of going to the news media and explaining and proving exactly why WPFSS and the tank farms and the nuclear projects at Hanford are costing ten times what they should.

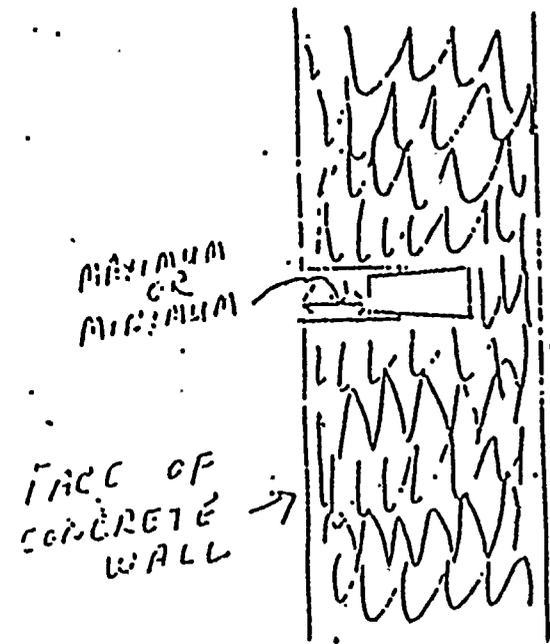
Sincerely,

Robert A. Brown

Robert A. Brown

Enclosure

FIGURE 3



1/4" U-BOLT TO HOLD PIPE

3/8x4" ANGLE IRON

9 - 7/8x5" ANCHOR BOLTS

FIGURE 1

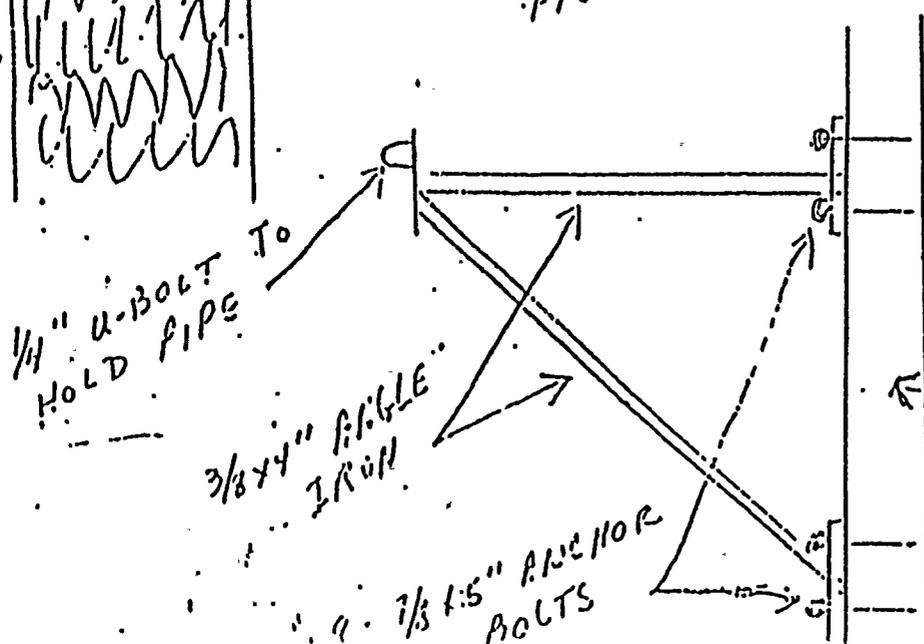
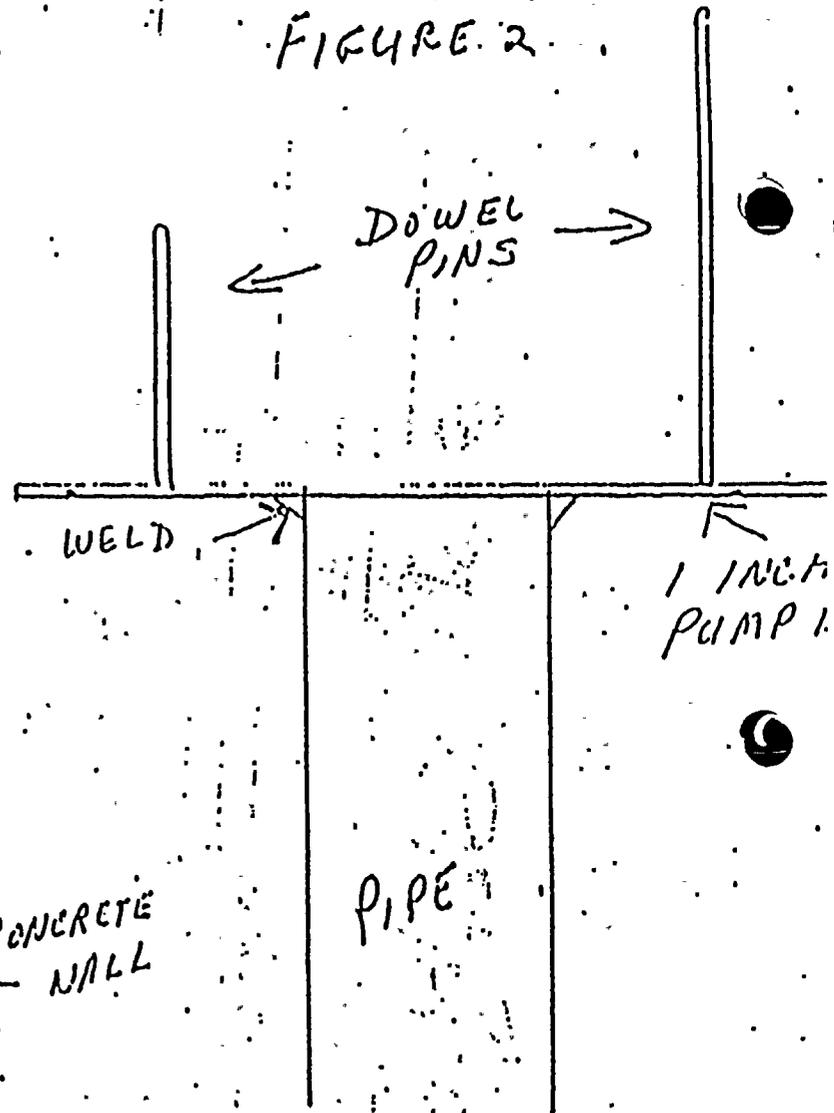


FIGURE 2





1503 W. 5th Ave.,
Kennewick, Wa. 99336
January 29, 1980.

FEB 4

Senator Warren G. Magnuson,
127 Russell,
Senate Office Building,
Washington, D.C. 20510

Dear Mr. Magnuson,

I am writing you regarding our production per man hour and the reason it is so low. We will be having foreign countries building everything we have if we don't stop this.

I sent a letter six months ago to Mr. Duncan, Secretary to the Department of Energy, about this same thing. I have not received an answer.

The one thing that I can prove that costs at least five times what it should is testing pipe. We use the same test pump for 30 lbs. up to 600 lbs. tests. If we have a 600 lb. test we have to use a 660 lb. relief valve and if we have a 100 lb. test we use 110 lb. relief valves. 10% above the test, they say, is for safety. If we have 25 different pound tests we have to have 25 relief valves calibrated and 25 gauges calibrated within 10% of the test. If the relief valve doesn't work at these settings, the inspectors turn the test down. I think this is unjustified or stupid. When we've already tested the pump and the same pipe at 600 lbs. with a 660 lb. relief valve, and then make a 100 lb. test and change the gauge and relief valve to 10% above the test, for safety they say, that doesn't really make sense.

These are just a few of the things going on here. Everyone has an alibi here for not working when the engineers don't do their work right. I really think they do it to prolong the work so it will last longer. Then all the other crafts follow suit. I am sure the law makers don't know what really goes on here.

Sincerely,

Robert A. Brown

Robert A. Brown

Handwritten Reservation