

Stello

The current situation is Marble Hill. As most of you are fully aware in August of this year we issued an order which required the plant to shut down and remain shut down until a number of problems that were identified were resolved. It is now going into 8 months, since that order was issued, and today we are here to listen to what response PSI will have to the issues that were raised in the order.

The meeting that we are going to have here today is part of a program that we had with the NRC to have as many of its meetings as we can, recognizing the need to balance resources out near the vicinity of a plant so that you will be able to see what nameless bureaucrats in Washington do and I am sure many of you wonder how and why.

I know that there will be many of you who will have strong views about Marble Hill either way and I am sure much of what we do here today will cause some of you on each side of the issue to be somewhat unhappy. I guess if we strike the right cord where we cause each of the proponents and opponents if we call them that, to be equally unhappy or equally happy, we probably succeeded in forming the right measure of regulatory words.

We are not here today in the sense of having "public hearing" in the usual sense that a public hearing or a hearing with a formal board set up on behalf of the Nuclear Regulatory Commission sits and takes evidence in some formal fashion, that's not the type of meeting this is.

You will be able to participate in and we have set aside a time for that.

We will try at 8:30 to stop whatever we are doing and allow you to ask

questions and make comments as you see fit.

One thing I would ask is that those of you who are here if you could with the very subject of this meeting have questions about the subject of this meeting - if you would please come forward first and that there may be many of you who have questions that may be unrelated to the specific issue that we will be discussing - it could be about any subject and we will do our best to answer any question that you have related to the regulation of nuclear power in any of the areas that you wish to get into. All I ask is that those general questions - of a general nature - if they could be put off later so that all the people and there are a lot of you here - have an opportunity to ask about the subject of the meeting.

Let me not take much more time to these opening remarks and get on to introduce the people who are sitting here with me and I am going to ask the representatives of PSI to do the same so that you will be able to identify at least the first principals and the names of people and their faces.

My name is Victor Stello and I am the Director of the Office of Inspection and Enforcement and I signed the order to the subject of this meeting.

I have one thought that I missed that I ought to make sure that it is clear: The decision as to whether or not the construction of Marble Hill

will begin is a decision that will be made first by myself in terms of the recommendation to the five Commissioners of the Nuclear Regulatory Commission and there will be the meeting after we have figured our views are ready to recommend a course of action but it will be their decision finally that decides what the proper course of action will be.

I have to my right Harold Thornburg - raise your right hand, Jim Keppler, Director of RIII, Gaston Fiorelli, Branch Chief Construction, Frank Hawkins, Inspector, E. Schweibing, Inspector, J. Harrison, Resident Inspector.

And we have someone - Mr. Strasma - Where are you - there he is - who is our Public Affairs Officer and who will assist any of the news media and help me keep order to their affairs.

We have a number of representatives from the Office of Nuclear Regulation D. Vassalo, Walt Haas, John Gilray, Jerry Wilson and Mr. Byrnes from the legal office.

If the licensee will identify principal people real quick and be able to identify names - OH - you have name tags - real good.

We have some name tags and I will identify the people as I go through my presentation - Mr. Stello - if that's all right.

Mr. Stello - good evening - I am S. W. Shields - Vice President of Electric System. My duties with Public Service of Indiana include full responsibility for all quality insurance and Project management aspects of Marble Hill project and I report to Mr. Hugh A. Barker, Chief Executive Officer. I am pleased to meet with you this evening and summarize the material which has been transmitted to you recently.

In making the presentation it is my intention to tell you of the progress we have made since we have suspended safety related work last August 8th, followed by Mr. Jack Norris, Acting Quality Assurance Manager, who will brief you on PSI's, revised Quality Assurance program and staffing.

Mr. Charles Chmielewski, Superintendent Quality Systems, Mr. Charles Beckham, Manager Quality Engineering and Mr. Jeff Roberts Superintendent Inspection, will then tell you briefly of how their respective sections of the Quality Assurance Department function on a daily basis.

PSI's presentation will conclude with Mr. Vincent McMahon, Special consultant to me, describing the proposed restart plan.

All of us will, of course, answer any questions about our reports, requests or presentation here tonight.

I should like at this time to introduce the other members of the company and project here this evening who will also be available to answer questions. Mr. James Pennington, Vice President Financial Operations, Mr. George Brown, Project Director, Mr. John Bott, Licensing Manager, Mr. Paul Wattelet, Sergeant and Lundy Project Manager, Mr. Terrence Burns, Project Engineering Manager.

On August 8, 1979, PSI stopped all safety related construction work on this Marble Hill project due to certain deficiencies identified in its, and certain Contractors Quality Insurance programs.

On August 15, 1979, United States Nuclear Regulatory Commission issued an order confirming suspension of construction. This order confirmed PSI's action in stopping all safety related construction work and required PSI to submit a report to the Director of the Office of Inspection and Enforcement of the United States Nuclear Regulatory Commission, describing PSI's Revised Quality Insurance program and the steps taken by PSI to insure that future construction would be conducted in accordance with NRC requirements.

The confirming order also defined nine specific areas or activities which PSI should address.

On February 28, 1980 PSI submitted to Mr. Stello, Director of the Office of Inspection and Enforcement, PSI's description of licensee activities

addressing the order confirming suspension of construction.

The report addresses the various issues raised in the confirming order and describes the action which PSI has taken since PSI has stopped work.

On March 5, 1980 PSI submitted a request to Mr. Stello to be allowed to resume safety related inspections on materials already received on site. This will be the first phase of resumed safety related work.

I would like briefly to discuss some of the highlights of the February 28th report and March 5th request with you this evening.

The August 15, 1979 confirming order required PSI to have an independent management consultant review the Marble Hill project management and Quality Insurance program. PSI secured the services of management analysis company, or MAC, of San Diego, California, to perform such a review.

The MAC findings and recommendations track very closely to some of the earlier findings of the NRC.

Mack concluded that the basic problem of the Marble Hill project was the lack of personnel with adequate, commercial, nuclear construction experience, both within PSI and contractor organizations. The MAC report which was issued on October 2, 1979 also made several other specific recommendations which have been or are being addressed as described in Section IIIb of the February 28th report.

I guess at this point I will ask parenthetically if the topics of this report are available on the table right here for the public who are here this evening and have them request that we have made to restart.

Since stopping work last August PSI has taken substantial steps to strengthen its project organization. The Project Director and the Quality Assurance Manager report directly to the Vice President Electric Systems. The project staff has been moved from PSI's Plainfield general headquarters to the Marble Hill site in order to improve coordination and communications. PSI has reorganized the project staff on a functional basis and has provided the construction effort on an area basis each having its own area Construction Manager.

The Quality Assurance program has been substantially modified by clarifying the stop work authority of the on-the-spot inspectors and the Quality Assurance manager. We have also added a Quality Engineering Section to the Quality Assurance staff which will provide detailed check lists methods and criteria by which Quality inspectors will perform their work in the future.

PSI has also significantly increased the experience levels of its project staff in training, recruiting and contract services. PSI feels that the increased staffing level and experience level available today will support the restart and receipt inspection as requested in PSI's March 5, 1980

request to Mr. Stello.

The staffing level as of January 1980 is compared with earlier staffing levels in Section IIIc of the February 28th report and PSI has added additional experienced staff since that date.

Additional areas of safety related work will commence as PSI is able to demonstrate and document that it has a sufficiently, increased, qualified staff. Mr. Lawrence Ramsett has recently joined the PSI organization as Quality Assurance Manager. Mr. Ramsett has 12 years of Nuclear Quality Assurance experience and will be in charge of the Marble Hill quality Assurance program reporting directly to me. The transition of Quality Assurance management from Mr. Norris to Mr. Ramsett will take place after Mr. Ramsett has become sufficiently oriented with respect to the status of the project.

Other NRC concerns last summer involved the amount of top management involvement in and an awareness of the problems of Marble Hill. Several steps have been taken to remedy this situation.

The relocation of the entire project staff to the site improves communications between various sections of the project. Having the Project Director and the Quality Assurance Manager both located at the site and reporting directly to me also improves the communication to PSI upper management.

Furthermore, our Chief Executive, Mr. Barker,, and I participated at meetings held at least monthly, and often more frequently at the site to keep informed as to the status of problems at the project.

Various reporting systems are being developed which will direct additional information to upper management.

In addition, PSI have reconstituted its Quality Assurance Review Committee consisting of several company officers - this group meets regularly to be informed on Quality assurance progress and problems and trends with regard to the project.

Additionally, I have an office at the site as well as one at General Headquarters. I have been spending a considerable amount of time at the project site and anticipate that this level of involvement will continue.

Since the stoppage report last August PSI has instituted a comprehensive program to verify the integrity of the work in place.

The first part of this verification program has been completed. Sargent & Lundy, Architect Engineers, issued a report entitled "Evaluation of In Place Concrete, Marble Hill Nuclear Generating Station, Units 1 and 2, November 20, 1979, based upon tests made by the Portland Cement Association."

Sargent & Lundy has concluded that the concrete structures at Marble Hill are structurally sound.

In addition to this, PSI has begun a review of safety category I material receipt at Marble Hill, to determine its adequacy for use in Marble Hill construction. PSI has also begun a record review and physical inspection of the work in place. This consists of a records review as well as physical examination of surface concrete to locate and document all concrete patches for re-repair and an examination of all physical re-enforcement still to determine the placement was adequate and satisfied design requirements; and an examination of bolted connections and location of structural steel and pipe hangers.

Reports on a construction verification program will be submitted to the NRC when they are completed. The construction verification program is discussed in more detail in Section IIIA of the February 28th report.

We feel we have faced our problems squarely and responsibly with sufficient resources to assure that any recurrence of the problem is highly unlikely. Our organization now provides for sufficient integration of activities at the site and has closed the gap to top corporate management. Our quality assurance program will properly identify nonconforming conditions and initiate directive action backed up by what is sufficient numbers of qualified people.

A project personnel department has been established at the site reporting directly to ~~to~~ to obtain and retain sufficient number of qualified people.

The project will not proceed faster than the availability of qualified personnel will permit

At this time Mr. Stello should I introduce Mr. Norris or shall we proceed with the presentation or answer questions.

Can't hear - the microphone ain't working -

Stello

Well, we didn't want it to work because we were getting a nasty feedback.

What I wanted to understand is at what point are you going to cover the organizations - How many you've added - what types of people and where they are?

Is that where you come into the next presentation?

If not then I would if you would like to have an understanding of how you bona fided the organization and augmented it in terms of how many people - what kinds of expertise - were in the organization. You could at least summarize that and help follow the next several speakers.

Shields

Okay - let me

Shields

Let's take the staffing as of June 1979, as of the first of the year as of today, in the various sections and see if that satisfies the request.

As of the Project Director - we had a Project Director as of 6/79, we have one today. In the construction area - I'm speaking of professionals now, not the clerical and other support people.

In the construction area - as of June we had 19 people - today - as of the 1st of the year we had 36 - today we have 45.

In the Project Engineering area we had 17 as of June of last year - 27 as of the 1st of the year - we have 36 as of today.

In Quality Assurance area we had 40 as of June of last year - 57 as of the 1st of the year and we have 73 today.

I think that pretty well covers the broad areas. Now that's not the total standard. As of June 79 as far as the pSI organization is concerned we had about 90 people on the site.

Today we have - between PSI and our contract people working directly for us we have 271. That includes all the support - professionals - clerical, etc.

Hass

Mr. Shields I have a question in mind of the supplementary people that you added from the MAC Corporation. In your response to the order you stated that you had planned to phase out those people some time as your people became more experienced and were able to handle the job.

Could you give us more specifics regarding how you plan to phase them out. How are you going to make the determination that your people are now able to handle the task?

Shields

Well, that will have to be - of course - we brought MAC out here as an experienced organization to help us out in our effort as we were able to train recruit or bring other contract people into our organization. We anticipate - let me give you some time - we anticipate that MAC will be involved for at least a year and probably no longer than 3 years and they will be phased out over that period of time. Now the criteria by which we view that and we would depend upon the recommendation from the experienced people in MAC and observation of the performance of those people who either recruited or trained to take their place. Okay, now we would like to introduce Mr. Jack Norris who is the Acting Quality Assurance Manager and who will describe in some detail our devised Quality Assurance program.

Thank you..

Norris

First, the purpose of this presentation is to briefly describe the organization of the Quality Assurance Department of the Marble Hill project and its functions in relationship to the requirements of the code of Federal regulations and the Boiler and Pressure Vessel Code.

The principal changes in the Quality Assurance program and its implementation since August 15, 1979 are in organization, relocation of the staff to the site simplification of the control of nonconformances, clarification and strengthening of stop work authority and establishment of a Quality Engineer function that better defines PSI and Quality Assurance verification activities.

The Quality Assurance Manager reports directly to the PSI Vice President of Electric System who reports to the President of Public Service of Indiana. The Quality Assurance Manager reports at the same level as the Marble Hill project director and has unrestricted authority to identify quality problems and to initiate action to cause their correction.

Reporting directly to the Quality Assurance Manager are the Managers of Quality Engineering, the Superintendent of Quality Assistance and the Superintendent of Inspection.

The reporting line for the Quality Assurance Manager and the change in structure of the Quality Assurance Department are the principal organizational changes made since August 15 that directly affect the Quality Assurance Program.

All of the Quality Assurance Organizations are now located at the Marble Hill Site whereas formerly some of the functions were located at PSI's General Headquarters. This geographic change shortens and improves communication lines relative to project quality, and it brought some of PSI's more experienced Quality Assurance personnel to the site.

Within the Quality Assurance Department, the functions relating to Quality Assurance participation in the review of design documents, the analysis and specification of quality requirements in procurement documents, the review of Contractor procedures and the definition of PSI participation in assuring design, procurement and construction quality has been centered in the Quality Engineering Section.

The Quality Systems Section has the responsibility for preparing and maintaining the Quality Assurance Manuals and Project Management Procedures necessary for their implementation. It also has the responsibility for scheduling and coordinating internal and external Quality Assurance Audits, for maintaining Quality Records and is currently responsible for supervising Quality Assurance activities relating to the ultimate operation of the Marble Hill Stations.

The Inspection Section is responsible for conducting inspection and surveillance of safety-related hardware and activities for the Marble Hill facility. Inspection

and surveillance is performed by qualified personnel utilizing Checklists and Surveillance Plans prepared by Quality Engineering. The Inspection Section conducts surveillance of manufacturing and testing of safety-related components at Supplier's plants, receiving inspection of PSI procured items at the Marble Hill Site, and surveillance of Contractor's activities in the storage, maintenance, construction and installation of safety-related components, systems and structures at the site. Inspectors have the authority to stop processes which, in their judgement, will produce poor quality. The Quality Assurance Manager has the authority to stop all of a Contractor's activities if deemed necessary, to obtain corrective action relative to quality performance.

The Quality Assurance Program for Marble Hill is described in two Quality Assurance Manuals. Each directly relates to the eighteen Quality Assurance criteria defined for nuclear power plants. One of the manuals has been written and arranged directly to requirements of the Section III of the Boiler and Pressure Vessel Code; it has been examined by a Survey Team of the American Society of Mechanical Engineers and has been found acceptable. PSI has received an interim letter of authorization for an N-Certificate. The other manual has been prepared in relation to PSI's responsibilities under Federal law as Owner of the Marble Hill facility. Changes to either manual are controlled so as to keep the basic requirements and methodology of each functioning in parallel.

The Quality Assurance Manager provides formal reports to PSI Management monthly on the implementation and effectiveness of the Quality Assurance Program. In addition, PSI employs an outside organization to annually perform an independent evaluation of Project Quality Assurance activities. Finally, the Quality Assurance Review Committee, which is described in Section 2 of the Project

Quality Assurance Manual, performs an oversight function to evaluate quality functions. This committee is chaired by the Vice President-Electric System and includes six other Company Officers, the Project Director, the Licensing Manager, the Quality Assurance Manager, and the Director of Purchasing who reports to the Senior Vice President-Finance. The Committee meets at least bi-monthly reviews reports, and evaluates actions relative to significant events.

PSI has committed to provide notification to the NRC prior to implementing any substantive changes in the PSI submitted and NRC approved Quality Program Description and for notification to the NRC of any changes in organization structure within thirty days of their announcement. The Quality Assurance Manuals in Section 2 are being revised to reflect this commitment.

Since the August 8, 1979 shutdown PSI has utilized some contract employees to augment its staff with qualified personnel having nuclear construction experiences. Quality Assurance positions filled by contract personnel having been those of the Quality Assurance manager, Manager of Quality Engineering and several other discipline superintendents, within Quality Engineering. Simultaneously a recruiting program was initiated to find senior qualified personnel to displace those hired on a contract basis. Personnel had recently been employed by PSI to fill the positions of the Quality Assurance Manager and the Quality Engineer Manager. After a short period of transition these persons will assume full authority for these positions. Thus, the Quality Assurance Manager and permanent staff directly reporting to him will be PSI employees.

Action to recruit superintendents in the various quality and Engineering discipline is under way. A PSI employee to head the civil Engineering discipline

is scheduled to start April 15th. Contract employees in the other disciplines will similarly be displaced as qualified personnel are hired to fill the other discipline positions.

Stello

Let me interrupt you again for a moment - Could we at least try to have the highlights of what changed, a little - picture if you will come before and after - where the important things that you are doing now that will prevent reoccurrence to the problem, the kind of picture that I am trying to develop in my own mind - so if you could - what I will ask you to do is as you go through your briefing which is kind of lengthy if you could try to shorten it up a bit but what I am interested in is in each of these sections to try to get this before and after picture.

Norris

Let me speak to that for a moment the - possibly the most significant thing that we have done in the area of the reorganization of the Quality Assurance Department is to provide the Quality Engineering functions. We will discuss that function later on - Charlie Beckman will be discussing it - but in that discussion the idea is a better analysis of the technical requirements of the job and more clear cut instructions to the inspectors so that he can make a clear cut except-reject decision. The Quality Engineering function identifies the characteristic to be inspected - the methods to be used - the point where stop work and hold points will be established and witnessed and the acceptance criteria of those points.

By giving better definition to the inspector and leaving more of it in the

hands of the Engineering professionals and less in the hands of the inspection levels without in any way intending to demean them - make that clear what the requirements are and we think that will be the most significant improvement and that the stop work authority which has now been extended to the inspector level - so based on his knowledge and judgement he can stop a process which appears to him to be out of control.

Stello

Let me ask you to use the example of the concrete voiding, of what the changes that you are describing now that are in place today, not in place in June; we certainly couldn't prevent voiding but minimizing and assuring that anybody in the concrete business works properly; give me some key things that you have done in the Quality Assurance program areas that would point rather strongly to assuring that kind of thing would not reoccur.

Norris

Well, in your training of inspectors and the general surveillance action, the consolidation of concrete is probably the principal reason for voids being identified in the concrete. One of the things is the knowledge and experience and training in the proper methods of consolidating concrete. When he would see concrete not being consolidated properly, as you know that is with a vibrating tool which moves vertically up and down, if it is moved laterally or not moved at the right spacing then there is more opportunity for lack of good consolidation. So in that particular point he would stop at that and require it to be corrected before he continues placing concrete.

Fiorelli

Mr. Morris - you started identifying as one of the significant changes the function of Quality Engineering, namely, individuals identifying what kind of quality requirements should be imposed on a certain construction activity. With respect to the concrete work you indicated that one of the corrections that should minimize the problem is training - but getting back to your initial identification of the major changes- Will there be any Quality Engineering - new Quality Engineering requirements imposed on the activity - in other words - will that group as part of their responsibility identify what quality control measures are necessary to prevent that honeycombing of concrete.

Norris

Well, that is one of the reasons for placing more responsibility in the hands of quality Engineers so that they can physically identify what the quality verification methods will be and what the quality improvement methods will be. If they required a knowledge of the specifications the knowledge of the practices of proper placement of concrete and then to pass that information along in the things to be observed when surveillance is conducted so that at that particular time the inspector has the advantage of having been instructed of what's important - he has a check list that tells him what to check for - he has been trained in these methods and he will do a better job because of what I believe will be superior technical guidance.

Thornburg

Now - you say that the people - the 35 people that have stop work authority - is there job - their job title Quality Engineer?

Norris

The 35 people who have stop work authority are entitled Inspectors. There are more than 35 - if I may - - .

Thornburg

There is a danger sometime in delegating stop work authority too low because you get a lot of controversy about stopping work and maybe you shouldn't have stopped working if these people aren't properly qualified - I've seen that happen - so I was trying to find out what the background of these 35 people were.

Norris

Well, all of the people are being qualified in accordance with the requirements of ANSI45.2.6 the nondestructive people will meet SNT requirements. They will be level 1, 2 or 3. The level 1 people must work under close supervision and cannot work without detailed supervision and level 2 men working with them. Level 2 people will be qualified so that they can make the necessary decisions they will be trained under.

Thornburg

So you start with Level 2 - is that right.

Norris

Well, actually we have not - at this moment we have not constrained any person who sees a process which appears to be questionable from questioning that process

Thornburg

Of course, the problem is you can change organizations and you can write procedure only and we can sit here and talk about numbers of people and their qualifications - but still it comes down to doing it right.

Norris

That's correct.

Thornburg

And that's what we'll be watching. That's what we'll be very very interested in not only trained Quality Assurance people but everyone has to have an interest in quality and doing a job right and consolidating concrete. The guy ought to know if he sees it, what the fellow on the other end of the vibration is doing wrong.

Norris

We're working very closely with our contractors also to see that they have training so their people are properly qualified. In fact, the contractors have considerably updated their staffing particularly in the area of concrete placement - so they have increased their staff and also increased the experience of their staff. We believe that by this coordinated effort we will improve quality by having joint meetings. We will determine what needs to be done in a particular placement before that placement is done.

Thornburg

You will have pre-replacement meetings so that everyone understands what their function is.

Norris

That is correct - On any complex placement

Thornburg

Will you give the Quality Assurance guy plenty of time to do his thing. You're not going to pull up the trucks and start gunning the engine and telling him he's got 2 minutes to cap it.

Norris

We intend to leave the work so that the Quality Assurance people can monitor it.

Thornburg

Well, sometimes the language in Quality Assurance sounds sometimes like double talk when it comes right down to doing it right.

Stello

Emergency phone call for Gene Edwards - Gene Edwards - anybody by that name.

Let me ask Mr. Morris - Your presentation - we have a copy of and have been following - I wonder since time will be very important to us and we'll have your written submittal as part of the presentation and part of the record of the meeting - I wonder if I could ask you in each of these sections if you could just kind of summarize and synopsize cause we have questions that we want to get into and do want to stop at 8:30 and I'm afraid that we might be here until very late or tomorrow morning - so if we could just go through each of these sections summarizing your high points and I would like to get on with the questioning

Shields

Let me make one comment Mr. Stello before we proceed - while you have printed copies of our presentation - there are copies also on the table for the others so they are available out there too.

Stello

What tables are they at?

Shields

Brad / OK

Stello

Would you just say again what table in back of the room.

Okay - there will be copies there and anyone in the public is welcome to have copies.

If you'll just summary then we'll get to go through a number of questions I'd like to if we could try to get through so that we don't have any interruptions in about 20 minutes.

Norris

I'll do that.

I was speaking to the design control. Marble Hall safety design is a replicate of the Commonwealth Edison Company Byron plant. Its construction has been licensed on the basis of replication guide lines which assure that differences

in the two designs are minimized and identified. The design views or the design verification for the plant is carried primarily by the AE the and by Weslusion the designer of the NSSS. PSI engineers and Quality Assurance engineers review all of the nonreplicate design and all the procurement specifications for PSI specific procurement.

As Owner, PSI assures through reviews performed by Project Engineering and Quality Assurance, that components, systems and structures are properly classified as to safety, ASME Code, seismic category, and electrical classification; and assures that appropriate Quality Assurance requirements are invoked. These classifications are performed in accordance with NRC Regulatory Guides 1.26 and 1.29 and are referenced in Section 3 of the Project Quality Assurance Manual.

PSI Project Engineering and Quality Assurance review and approves design criteria to assure that applicable Regulatory, Code, or other Standard requirements have been translated into design criteria.

PSI, through Project Management Procedures, controls Sargent and Lundy approved designs prior to their issuance to Contractors for implementation. Changes to approved designs and specifications require equivalent approvals to the original document. PSI also requires that approved drawings and specifications be updated to incorporate approved changes after five such changes, or within six

months, whichever is sooner. This practice assures that designs are kept current with as-built configurations. No change in construction is authorized until the design change has been approved.

Procurement Controls

The PSI Quality Assurance Superintendent located within the Quality Engineering Section is responsible for the review of procurement documents prior to issuance of, or changes to, a Purchase Order, Letter of Intent, or Contract for Safety-Related Items.

The purpose of this review is to assure that appropriate requirements necessary to assure the quality of a purchased or subcontracted item or service have been included in the procurement document; that required documentation has been specified; and rights of access have been provided for surveillance of manufacturing and fabrication processes by PSI personnel or by PSI agents.

Prior to bid award, Quality Assurance participates in evaluation of the bid, assures that there are no unresolved exceptions taken to quality requirements, and that the Supplier has been evaluated for adequacy of its Quality Assurance Manual and for Quality Assurance capability. The Quality Assurance Department maintains an Approved Supplier and Contractor List.

The appropriate discipline Quality Engineering Superintendent is responsible for determining the extent to which the quality of purchased items shall be verified by PSI at the source, or at receipt inspection, for identifying required hold and witness points, and for providing the necessary Source

Surveillance Plans and Receipt Inspection Checklists to verify quality. The performance of surveillance at the source is a responsibility of the inspection Superintendent and may utilize either PSI Quality Assurance Engineers or contract personnel trained in PSI's Surveillance Program and working under the Superintendent's general direction.

Receipt Inspection of PSI procured items is conducted at the site by PSI personnel. PSI conducts surveillance of Site Contractor Receipt Inspection, storage and maintenance activities, and site construction activities.

Identification and Control of Material

Material and components purchased by PSI are Receipt Inspected and dispatched to laydown or warehouse areas operated by site Contractors for maintenance of preservation and proper storage conditions. Items and materials accepted are identified to the Materials Manager on a QC Accept/Release Form. The Materials Manager verifies this acceptability before releasing any material to a Contractor for construction. Control of material, parts, components and structures by the site Contractors is performed in accordance with their procedures, reviewed and approved by PSI Quality Assurance and subject to surveillance and periodic audit by PSI.

Consumable materials which impact upon safety are either purchased and controlled by PSI or by Contractors in accordance with procedures which have been reviewed and concurred in by PSI Quality Assurance. This includes materials such as weld filler metals, grout, and certain lubricants, preservatives, coating materials

and paints. Such controls will be expanded to include materials essential to an operating facility when that phase of activity is approached. Contractors and PSI conduct periodic audits to assure that such procedures are implemented and are effective.

Special Processes

There are certain processes the quality of which cannot be verified by direct inspection of the product. Such processes have been classified "special processes" and include welding, heat treating, painting, coating, cleaning and flushing, and non-destructive testing. Where these processes are used, PSI requires that the process be controlled by qualification of one or more of the following: the equipment, procedure or personnel.

The Manager Quality Engineering, based on review of drawings and specifications, is responsible for identifying for PSI those processes requiring special controls and utilizing or developing methods for qualifying or certifying equipment, processes or personnel necessary to their performance.

Except for non-destructive testing, special processes are normally performed by Suppliers during procurement by Contractors at the site during construction. PSI Quality Assurance reviews procedures for control of the process and qualifications of personnel, and verifies adherence to procedures through surveillance and audits of the A-E, NSSS Supplier, site Contractors and Suppliers.

PSI personnel performing Nondestructive Testing are examined and certified to the requirements of the American Society for Nondestructive Testing and Section III of the ASME Boiler and Pressure Vessel Code.

Inspection and Test

Inspection staffing is planned in relation to short and long term schedules that identify manpower needs. In addition, the Inspection Superintendent participates in daily project meetings that address specific schedule and work assignments. Work will not be allowed to proceed that is not adequately staffed by qualified Inspectors from the Contractor and PSI.

Inspections and tests are performed or witnessed by PSI Inspectors in accordance with Inspection Checklists or Surveillance Plans. These prescribe the minimum activities for quality verification by PSI personnel and identify mandatory hold and inspection points by PSI Quality Assurance and by the Authorized Nuclear Inspector.

Inspection and test personnel verifying quality are required to be independent of the individual or group who perform the activity being verified. Inspectors are required to be trained, qualified and certified in the performance of their intended function in accordance with requirements of ANSI N45.2.6 - 1973.

Certification may be based on education and experience in the performance of related tasks or it may be based upon proficiency testing or completion of a comprehensive training program. Where certification is based upon testing. Section 10 of the Project Quality Assurance Manual requires that the areas to be tested and the testing results be documented. Likewise, it requires that the content of training programs be established prior to the start of training.

Control of Measuring and Test Equipment

The PSI Project Quality Assurance Manual establishes requirements for the measurement accuracy, and for the calibration and control of measuring and test equipment used by PSI. Calibration is performed by laboratories under contract to PSI either on-site or off-site. Suppliers and Site Contractors establish procedures for calibration and control of equipment they use. Such procedures are reviewed and their use concurred in by PSI Quality Assurance. Periodic audits by the Contractors and separately by PSI assure that procedures are invoked and are adequate.

PSI requires that measurement accuracy be such that equipment shall be within one quarter of the tolerance of the parameter being measured, unless such requirement is beyond the state of the art for the equipment in question. Discipline Quality Engineers are responsible for specifying inspection methods that achieve this required accuracy, and for including an assessment of Contractor methods to assure that these requirements are met.

Checklists identify the inspection method and require recording of the serial number of the specific instrument used. Thus, in the event of a future nonconformance relating to calibration, it is possible to identify materials or equipment whose quality status may be questioned due to possible measurement error. In such an instance, both the measuring instrument and the measured item are considered nonconforming until evaluated.

Control of calibration of PSI measuring and test equipment is the responsibility of the Superintendent, Inspection. Auditing of Supplier and Contractor controls of such equipment is the responsibility of the Superintendent Quality Systems.

Handling and Storage

Site storage is assigned to the site Contractors who have the responsibility to maintain required preservation.

Quality Assurance conducts surveillance of handling and storage activities in accordance with acceptance criteria established in Engineering Documents and Procurement Specifications. In general, the storage and maintenance practices are required to satisfy the requirements of ANSI N45.2.2.

Inspection, Test and Operating Status

The PSI Project Quality Assurance Manual Section 14 requires the use of status indicators, starting with Receipt Inspection, continuing through

storage and construction tests.

PSI is responsible for identification and status of PSI purchased material until it is issued to site Contractors. The identification and status controls of site Contractors are monitored through review and approval of their procedures and by surveillance and audit by PSI Quality Assurance.

Nonconforming Materials and Items and Corrective Action

Each employee of PSI or its Contractors is responsible for bringing to the attention of Quality Assurance, any questions relating to materials and processes which do not conform to specified requirements.

Nonconforming items are required to be so identified and withheld from use or further processing until a technical evaluation has been accomplished.

Suppliers and Contractors are not permitted to make "accept-as-is" or repair" decisions on nonconforming items without prior authorization by PSI.

PSI Nonconformance Reports are issued by PSI where first line inspection is a PSI responsibility. In all other cases where PSI finds a nonconformance, a Corrective Action Request is issued to the responsible Contractor/Supplier Organization.

Nonconformance Reports and Corrective Action Requests are followed to assure that the required disposition has been made by Cognizant Engineers and has been implemented by the responsible organization.

Nonconformance Reports, Corrective Action Requests and the results of audits are analyzed to determine adverse trends and the need for further corrective action.

Records

The PSI program for management and retention of records is in accordance with the requirements of ANSI N45.2.9.

Quality Assurance Records retention is a responsibility of the Superintendent Quality Systems. Hard copy and microfiche copies are maintained at the Site with microfiche backup at PSI's General Headquarters.

Records are classified as "lifetime" and "non-permanent". Lifetime records are maintained for the life of the plant or the lifetime of the component within the plant. Lifetime records are those that have significant value in demonstrating capability for safe operation of the plant or to maintaining, or modifying items within the plant. Record classifications and retention periods are identified in Section 17 of the Project Quality Assurance Manual.

Procurement documents require Code Suppliers to maintain certain records for a period of five years after completion of the item or a minimum of two years after commercial operation of the plant. The Quality Assurance Manager assures that Quality Verification Records are maintained and retained in accordance with the requirements of ANSI N45.2.9.

Audits

The Superintendent Quality Systems is responsible for planning, scheduling and performing audits of Quality Assurance Program activities of PSI, its Suppliers and Contractors. In addition to this, an annual audit is directed by the Vice President-Electric System and, conducted by an outside organization.

Audits of the entire PSI program are conducted by Quality Assurance at least annually. Audits of Suppliers or Contractors are scheduled at least once during the contract or purchase order, . . . annually, whichever is more frequent.

Audits are scheduled to occur as early in the life of an activity as is practicable to assure timely implementation of Quality Assurance requirements.

Audits are conducted in accordance with requirements of ANSI N45.2.12. Lead Auditors are required to be qualified in accordance with ANSI N45.2.23. An annual schedule of audits is revised quarterly to adjust for necessary revisions due to quality performance.

Audit findings are followed until responsive corrective action has been received and confirmed to be implemented.

Summary

The Quality Assurance Section of the Marble Hill Project is an integral effort dedicated to the success of the project in terms of nuclear safety and plant reliability. All activities are now located at the site. The Quality Assurance staff has been, and is, undergoing extensive training in the Quality Assurance Manual and implementing procedures. The staff is being augmented by recruitment of personnel qualified in various disciplines and by the use of Contract personnel.

PSI had committed itself to adherence to certain nuclear quality standards and regulatory guides in the Preliminary Safety Analysis Report. These are identified in Section 2 of the Project Quality Assurance Manual. Four of these were in draft form at the time of submitting the PSAR. PSI is now utilizing the approved issues of these standards as endorsed by current regulatory guides.

PSI had identified in Chapter 17.1 of the PSAR, a listing of systems, components and structures to which the Quality Assurance Program applies. This list has been further refined and defined in a document, "Classification Criteria of Structures, Systems and Components". These classifications are in accordance with Regulatory Guides 1.26, 1.29 and 1.32, IEEE Standard 308-1971, and DC-RN-01-MH "Design Criteria for Replication".

The classification document is a controlled document requiring approval by the Architect Engineer, the PSI Project Director, the PSI Project Engineer and the PSI Quality Assurance Manager.

PSI will apply appropriate Quality Assurance Program elements to the design, procurement, installation inspection and testing of the fire protection system with approved procedures to meet the requirements of NRC Branch Technical Bulletin ASB-9-5.1.

Stello

Let me ask one of the current views. Based on what you described can you give me the four or five things that you think you have done that has made the largest contribution to assuring that the construction of the plant will be of high quality - what you describe you feel are the really important things you have changed and those that you feel the need to look at most carefully in the future to assure things stay on.

Norris

A stronger organizational structure - as I said earlier - the quality engineering function and its definition of the requirements to inspectors is an extremely important function. Another one which was moving the entire staff to the site. This shortening of communication lines by roughly 120 miles has a very significant effect on the inner phase between the qualified technical people and inspectors at the site.

Norris

I believe that the strengthening of the stop work authority - not really giving the authority to act but the responsibility to act responsibly to inspectors and training them so that they can do their job has a very significant effect on the improvement of employee at the site.

Generally, after that it is the difference of improving the skills of all the people raising the levels - the experience levels of the people at the site or providing specific training for these key people at the site so that they can make sounder judgments. The problem as I see it is one of being able to when you identify a problem to take the necessary action to bring about corrections. And that's the end to our efforts.

Stello

Do you perceive that you have got the message across that management at the highest level is committed to demanding the quality product. That message has clearly been delivered to all of the people making decisions. There is no question that you the owner of this plant not only desire, but are in demand that everyone that works on the plant - everyone of your contractors - are going to be held to deliver the highest quality product.

What have you done to really get that message out?

Shields

May I respond to that because any other kind of dedication doesn't make

any sense. Total dedication to quality - first of all when the quality is not in evidence the physical characteristics of the structures themselves backed up by the documentation it is quite obvious we could never operate the plant because we could never license it to operate.

Secondly, the economy of the generation from the plant depends upon its availability and if the quality is not built in the availability it won't be there.

I assure we have a total dedication to the quality and we have emphasized that with our own personnel and we have a level of training that has been given to every member of PSI, every person working at that site and it will be updated to include every person that comes on indicating our identification with quality and I assure you that work that does not come up to the proper standards will not be permitted to continue.

Keppler

Mr. Shields I have a few questions here on the QA program.

Before I do I'd like to ask a couple of background questions.

What is the current percent of completion on Units 1 and 2.

Shields

Well, correctly we're indicating that the Unit 1 is in the order of 30% and Unit 2 in the order of about 8.3%.

Keppler

Is that of now?

Shields

That's of the current date, yes.

Keppler

What were those numbers at the time of the stop work order?

Shields

Evaluated on the same basis they were in the order of 25% for Unit 1 and about 7½ for unit two.

Keppler

Could you tell us how many man months were involved in resolving the issues identified by the NRC, MAC and the National Board.

Shields

The effort by PSI people and contractors helping us, we estimate we put in about 350 man months of effort between our own organization and our contractors addressing the concerns of both MAC and the NRC

Keppler

In your letter to Mr. Stello, you talked about doing one of the first points is to resume receipt inspection at the site.

Keppler

Could you take a few minutes and highlight for us what your procedures are, your controls, your organization for that work that you hope to start this work.

Shields

All right, may I have Mr. McMahon explain that process please.

McMahon

Our plan to start receiving inspection we will plan to start with PSI receipt inspection of PSI purchased materials and items first. The prerequisite to do that is that we happen to have those procedures in place related to that function and related to the storage of those materials and items. In addition, we have to have the inspection personnel qualified and trained. Now, those procedures and the personnel are in place and the training and qualification has been completed.

PSI Speaker

have the proper organization and adequate qualified and trained personnel. And now once that we have contractors qualified to start receipt inspection and we have permission to proceed, only at that time will we turn over materials that PSI has receipt inspected and accepted. Only at that time will we turn them over to the contractors.

Even at that time we will have a hold on those materials and items so that we cannot be installed. Until that later date when we start construction installation activities. Does this answer your . . .

Keppler

Whose control will they be under at that later point. Yours or the contractors? PSI or the contractors?

PSI Speaker

Well, the PSI-purchased materials and items, once they have been inspected and accepted they will stay under the custody of PSI until such time as the contractor receiving inspection and storage programs is satisfactory. At that time they would be turned over to the contractor. We still have a responsibility for those but they would be turned over to the contractor and we would perform surveillance on their handling and storage of these items.

Keppler

OK, different question - Could you fill us in on where you stand with the resolution of your Code concerns, Code questions or the quality of the ASME procured equipment with the State of Indiana Code Inspector.

PSI Speaker

We have met with the Indiana and National board in January - reviewed and resolved the concerns with them. At that time we established the 14 point program that we have been following and we have had follow up meeting with them a couple of weeks ago at which time we reviewed the status of these 14 items. It's our impression that they concurred these items had been resolved and also at that time that we reviewed our plan for reviewing all past Code work done at the site and we believe that this matter has been taken care of properly.

Keppler

Do you consider the issue resolved?

PSI Speaker

We consider the issues to be resolved in that the individual items have been addressed and they're satisfied. We do have a program again to review all previous Code work, and, of course, if we identify any further problems they will have to be taken care of properly at that time.

Stello

One thing I'm not clear on. I guess Mr. Norris in his remarks indicated that you were going to, that you had received an interim letter of Authorization for an N-certificate--Why is it interim?

PSI Speaker

The use of the interim letter is a fairly standard practice on construction sites. It is the process whereby you have the program review and it's an interim authorization procedures and, as I say, fairly standard. After a period of implementation then you request the ASME to come back in and verify that you have been implementing it properly. At that time then - if they are satisfied with your implementation at that time they will issue you an N-stamp.

Stello

In simple language is that a requirement that they have got to issue you an interim O.K. and when you start the program and see how it works and then be satisfied that it is working before they issue the stamps. Is that what you are saying?

PSI Speaker

I'm sorry, I didn't hear the first part of your . . .

Stello

The reason that it's interim is that the usual practice of the ASME Code Stamp Committee is you get a letter. They say they think you have everything you need and they will let you continue on your program and watch

how it works and if you do everything you said you're going to do, then you get the N-Stamp, it should be

PSI Speaker

That's correct.

Fiorelli (NRC)

Mr. Stello would like to know if you are going to get the N-Stamp?

PSI Speaker

Yes, that is our intention to proceed to get the N-certification and our intention is to demonstrate our implementation of the ASME program at the time the NRC permits us to resume piping activities.

Fiorelli

One of the problems that we perceive with respect to the construction of Marble Hill, prior to the August confirming order was a problem with the timely recognition and awareness of management of problems that occurred out at the sites. Now I heard you talking about you'd moved - for all practical purposes - the staff to the site and how that cuts down the lines of communication - but aside from that what kind of tools do you intend to use to make yourself aware of problems on a timely basis in terms of trending, in terms of significance, in terms of these kinds of things so that you can get yourself directly involved and turn the situation around. Can you comment on that end of it?

Shields

Well, the first the Quality Assurance Manager reports directly to me and we do have frequent informal conversations about the progress and status of the job.

On a formal basis the Quality Assurance Manager issues to me monthly a report on the quality aspects of the project and the trends of nonconforming conditions. In other words that department has established a trending procedure whereby they track nonconformances to see or to track the upward and downward movement of quality, if you will.

Fiorelli

Just a second--Help me understand that--are they going to track, for instance, the number of honeycombed areas, the number of cadwelds, the number badwelds, the number of problems with welds and that sort of thing--is that what they are going to track? That sort of thing?

Shields

Yes, all nonconforming conditions will be tracked and trended.

The nonconforming conditions can be characterized by cause, by organization and so on, so that the problem areas can be pinpointed.

Fiorelli

O.K. - then I am going to make the assumption that when you get this information on a timely, monthly basis, frequency you identify, when you see a

bad trend that you intend to inject yourself in terms of getting it stopped, getting it corrected whatever`

Shields

That is absolutely correct. That information comes to the Quality Assurance Manager even more frequently than it does to me. I believe he gets that information on about a 10 day or two week basis and it would come to my attention on a monthly basis and on corrective action. I would expect would have been initiated even before coming to my attention. If it had by that time I would have interjected myself in the process.

Fiorelli

O.K., but I was really addressing myself to your involvement in either becoming aware of or confirming with the Quality Assurance Manager takes some action to correct the problem

O.K. one other question - Another problem area is the acceptance, if you will, or the awareness of, the qualification of certain types of construction personnel involved in inspection and testing, and so forth.

Do you intend prior to resuming - do you intend the process of getting ready for the resumption of construction to verify that the various inspection and testing personnel will be qualified in accordance with the Reg. Guide.

Shields

Let me have Mr. Norris explain what has been done and will be done prior to that event.

Norris

One of the things we are doing, first in direct answer to your questions, all of our inspection personnel will be qualified to the requirements of the Reg. Guide, to ANSI N45.2.6. And we are using the 1973 issue because that's the one that the Regulatory Guide has endorsed. And we are doing it with the idea that we will establish definite restraints on the use of experience and training in the inspection training courses as they relate to experience on the job. We have greatly increased our demand for experienced personnel. Each person is trained in the project management procedures that we have on the job before those project management procedures are used. And there is a test documented and on record. In addition to that, the quality engineer that develops a check list is required to work with the inspection supervisor and inspector on the demonstration that that check list will work, that it is understood and that it will function. So there is a first-line training on each use of the check list and we know that it has gone down to the appropriate level. We don't leave to chance . . .

Fiorelli

I was addressing my question more to the qualifications of contractor people. For example say concrete is the construction activity, does PSI intend to confirm and verify the qualification of the technicians or, excuse me, the inspectors the testors who do concrete work by the subcontractor.

Norris

The answer to that is yes. I didn't listen as well the first time or I would have told you that much shorter.

Fiorelli

O.K. Thank you. Yes I do

NRC Speaker

Mr. Shields - in connection with your overall corporate responsibility for QA you mention that you are establishing quality assurance review committee. I wondered if you could give us some more details regarding how regular did you expect that committee to meet, and what specifically will it do. You mentioned discussion of QA progress and analysis of trends. Can you give us some more detail. Just what kind of activity will that group perform?

Shields

Each corporate officer or department head which has even remote responsibility with the project is a member of that committee which I chair. The frequency of the meetings was established this year as monthly. We our commitment is no less than every other month. The Quality reports that come to me are presented to that committee in establishing the trends and establishing a program as there might be quality problems identified in any of these areas where these committee members might have responsibilities. They are assigned action items to correct those situations if they have not been addressed before that meeting. It is primarily an information dissemination as to the quality and awareness of where we are in our program and its effectiveness to the corporate organization.

NRC

Will the results of these meetings be documented?

Shields

Yes, sir, they are.

I guess I could add one more thing - I also have the responsibility to see that once a year at a minimum a management audit be performed, completely independent of the quality assurance organization to get another independent view, if you will, as to the effectiveness of the program. Another check on the effectiveness of the program. That report comes to me and that again would be reviewed by that committee and the results made known to that group.

Stello

With respect to all of your contractors have you go back and examined with great care - very carefully - each contractor to make sure that there isn't built into the contract an incentive that causes work to be rushed and hurried and would be counter productive to good quality. What have you done to make sure that that's not part of the contract and, where it is, what have you done to fix it.

Shields

Each contract has been so reviewed and there's very few problems in this area we find and Mr. Lawrence, perhaps you can give us the results of that.

Norris

We reviewed all of the contracts in this and purchase orders pertaining to safety related items for Marble Hill to determine right quality assurance requirements had been imposed in the contract, that the, there had been no unresolved exceptions taken by any of the suppliers. We have determined

that in each case the contractors and the contract clearly states what the quality assurance requirements are, what the performance shall be. In one instance there was a contract that did not, contractor that did not have a quality assurance program but was operating under the umbrella of the contractor for which he was working. As if he was one of that company's organizations. And was the only exception where there was not a complete specification developed in the purchase order and responded to by the contractor in all cases with a quality assurance program that fit the requirements.

Stello

Have you made any changes to any contracts as a result of that review or are they all the same now as they were before?

Norris

From the standpoint of quality assurance they are the same requirements.

Shields

Let me follow on that, we do have one contractual arrangement which must be modified and I would like to have Mr. McMahon explain that, if I may.

McMahon

In early December PSI applied for and had their QA program reviewed by the ASME and they received the interim letter subsequent to that. As a result of that, PSI will be a N-Stamp holder and consequently we have reviewed the contractors under that light determined that we had one invalid contract under the ASME Code rules in that we had a non-Code contractor subcontracting Code work for us. We are in the process of

revising that contract so that the fabricator and supplier of Code items is under contract directly to PSI as the N-Stamp holder and that's the major contract changes that we are undergoing.

Stello

I was interested in the broader picture in terms of different types of contract that can and are negotiated, some of which they have an incentive to reward the contractor for work that was completed faster. To the extent that that's the case then it is possible that they do not be as dilligent about quality. When those contracts have clauses like this - an incentive clause in them did you go back and question whether the dedication for the quality of the product is clearly overriding any other commitment from the contractor.

Shields

As you describe the contract as an incentive type of contract, we have not written any. Our labor contracts are fixed price contracts - you may say that that has some pressure if you will to short quality and however, the commitment and the requirements are clearly stated so we fully intend to see that they are fully met.

Stello

Does that also . . . You're sure that all the organizations, you contract organizations, have that same message.

Shields

Absolutely.

Stello

What would you do with a contractor the first time you find out that he is not doing it that way.

Shields

As we indicated before the quality assurance manager has the full authority to stop a contract organization that is not meeting his quality commitments.

Stello

So I'm kind of interested in figures. If you have the commitment that says if I have a contractor who is committed to give me a quality product, if he doesn't then I will just get me another contractor. Is that the kind of commitment that's there. Do they have that message.

Shields

If that is the only way we are going to maintain the quality then that certainly what will happen.

Stello

Let's see, I think you have got three more speakers. Is that correct?

Shields

Yes. We have the three section heads, if you will, of the Quality Assurance area that are available to describe their various responsibilities briefly.

Stello

Could we--make an effort to try to condense those to maybe a few minutes each.
Are any of them here to concur

Shields

O.K., I think they will run five minutes at the most, anyway.

Stello

O.K. That's reasonable.

Shields

First I have Mr. Chmielewski

Chmielewski

I am the Superintendent of our Quality Systems organization. Our Quality Systems organization is divided into three groups, each of which has a Supervisor. These are Program Support, QA records and QA operations. The program support group coordinates preparation of our Quality Assurance manuals and controls their distribution. This is the group that provides the manuals and revisions to the proper people and will deal with approval prior to issuance. The program support group is also responsible for developing quality related project management procedures which we call PMP's. This group may prepare the PMP's but often the actual drafting procedure will be done by other QA groups with program support making sure that the proper subjects are covered and that the procedures meets PSI's commitments to regulatory guides and standards as described by Mr. Norris and the procedure meets QA manual requirements. I might interject a note that we have

completed drafts of approximately 14 of 20 identified procedures that we would need for the start of all activities related to Quality Assurance. Another function of the program support group is to provide and coordinate training in quality assurance practices. This is done by scheduling training, developing lesson materials, assisting instructors and assuring records of training are complete.

One of the first jobs of related to training that we have been doing is reevaluating the qualifications of all our inspection personnel. At the present time we have evaluated or reevaluated the 29 PSI inspectors, 17 contract personnel and the qualification of 10 individuals in our Quality Engineering organization.

Development and maintenance of the quality training program it is also performed by the program's support group. This program characterizes deficiencies by cause and provides lists and summaries. The lists are used by Quality Engineering and by our Inspection personnel to follow on corrective action.

The summaries are were used by quality assurance management to detect and analyze trends which may not be apparent during the conduct of our day to day activities. As we have explained earlier those are then passed along to our vice-president electric system. Finally, the quality assurance group has an audit coordinator who is responsible for assuring audits are performed for suppliers, contractors and PSI organizations involved in the projects. The audit coordinator may drain auditors from our inspection, quality engineering organization, consultants, or any source which

has qualified auditors. When audits of our contractors or suppliers result in adverse findings our quality engineering organization is provided this information so that they may be involved in evaluating the adequacy of corrective actions and needed changes to supplier or contractor procedures.

The next group in our Quality Systems organization I want to talk about is our QA Records group. This group is responsible for assuring the adequacy of supplier and contractor records which document the quality and conformance to specifications of equipment and structures. The QA records group is staffed with documentation inspectors who are now qualified to the same basic procedures as our other PSI inspectors. These documentation inspectors review records in accordance with check lists approved by our quality engineering organization.

Deficiencies found during this review are documented and sent to quality engineering for review, disposition and contact of contract or supplier and eventual correction or closeout. Quality Engineering, however, approves the disposition, but QA records assures that the correction is taken prior to accepting any of the records. Results of the supplier record reviews are also provided to our receipt inspection personnel to become a part of our receipt inspection and records on equipment. The QA records group also maintains files of supplier and contractor quality records, indexes the records into a microfilm records system and maintains logs to show records' status. The status information will be used to verify the readiness of plant systems for final construction test, ASME code stamping, and turn over systems to our operations staff.

And that brings us to our last group in our program systems organization and that is QA operations group.

This group has been formed early in the project to assure our company's planning for eventual station operation adequately takes into account quality assurance requirements. It is anticipated this group will report directly to the quality assurance manager at a later date near plant turnover and fuel load. The basic quality assurance program, and division of responsibilities for such things as turnover from construction to the station staff for preoperational testing, initial startup and rcr operation have been developed and preparation for detailed programming and procedures are under way. This has been accomplished by joint efforts and cooperation with project, our power production department which will eventually operate the station, our organization coordinating preoperational testing and the QA operations group.

Throughout our company's increasing efforts in preparation for operation observation of Marble Hill, the QA operations group will remain involved with review procedures related to quality assurance requirements - and this is already ongoing-training, which is already ongoing, participation in efforts to develop new programs affecting quality such as our about preoperational test program and finally surveillance of station and support organizations to assure quality requirements are met.

If there are no questions I would now like to introduce Mr. Charles Beckham who is our Manager of Quality Engineering.

Beckham

Thank you.

The PSI Quality Engineering section provides technical and quality reviews and quality planning for design, procurement, construction, inspection and testing activities. These quality engineering actions are conducted and documented in accordance with approved project manager procedures.

The Quality Engineering section is divided into five quality discipline areas mechanical, civil, electrical, welding NDE, and procurement. Each discipline area is headed by a superintendent who is responsible for all quality engineering matters within their respective discipline. As Manager of Quality Engineering my responsibilities include the supervision, coordination, and direction of the discipline superintendents to assure adequate organization and control of the Quality Engineering's function. Maintaining communications and coordination between discipline superintendents Quality Systems personnel, quality inspection and other PSI supplier or contractor organizations.

In the area of design control, quality engineering personnel, review engineering documents, such as, design criteria and specifications, to verify components to typical quality requirements. This review includes at a minimum a check for legibility, clarity, completeness, proper review and approval by the design and the contractors, acceptance and rejection criteria specified, including such reference as proper quality assurance standards and the applicable requirements of the design criteria.

Changes to engineering documents are reviewed and approved in the same manner. Procurement Quality Assurance personnel have the responsibility for reviewing and approving PSI generated purchase documents to assure that quality requirements are addressed. They also are responsible for the coordinating procurement-related interfaces and actions between other PSI personnel, suppliers, and contractors.

To assure that pre-award surveys and contractor or supply audits are performed as necessary, they maintain and approve suppliers and contractors' bids, they assure that quality assurance records and requirements are properly defined and provided to the Quality Inspection section. And then witness inspector programs have been developed, documented, and provided to the superintendent of inspection, including the applicable surveillance plans and check lists. Quality Engineering personnel are responsible for the preparation and review and approval of PSI surveillance results.

Surveillance plans and check lists are prepared by Quality Engineering for use by qualifying inspection personnel during source surveillance, receipt inspections, construction surveillance, construction testing and document review. They are responsible for witnessing inspection point programs which are based on the safety importance of items, the complexity of the fabrication-construction process and in which further processing cannot continue until authorized by QA personnel. This inspection and witness point program is included in procurement documents, surveillance and inspection plans and check lists.

Special processes such as welding, heat treatment, non-destructive examinations are controlled by contractors and suppliers to the utilization of procedures, equipment and personnel qualified in accordance with applicable code standards and specifications.

Quality Engineering personnel prepare, review and approve surveillance plans and check lists which are utilized to verify compliance to special process requirements.

PSI personnel performing non-destructive examinations are also qualified and certified by appropriate quality engineering personnel. Quality Engineering has the responsibility for assessment of significant conditions adverse to quality such as, malfunction, deficiencies, deviations, defective materials and items and other documented nonconformances received from Quality Inspection, Quality Systems and other PSI and contractor and supplier organizations. It is quality engineering's responsibility to evaluate nonconformances and obtain the technical disposition from project engineering to determine the adequacy of corrective action to assure the proper implementation of these required corrective measures. This determination is performed in accordance with approved project management procedures that delineate the responsibilities and required actions in PSI's quality assurance organization.

It's now my pleasure to introduce to you Mr. Jeff Roberts, Superintendent of Inspection.

Roberts

The PSI Quality Assurance inspection section consists of source surveillance, receipt inspection, contractor surveillance with each group headed by the Inspection Supervisor.

The responsibility of the Superintendent of Inspection who reports to the Quality Assurance Manager, entails the supervision of PSI activities relative to the performance of source surveillance, receipt inspection and contract surveillance. In discharging these responsibilities I assure that inspection and surveillance activities are performed by trained and qualified personnel in accordance with approved PSI project management procedures and that the inspection and check lists are approved by PSI Quality Engineering.

Inspection personnel are training to these check lists and procedures prior to their assignment in any inspection activities.

All personnel performing inspection or surveillance for PSI have the authority to stop further processing of any work they find to be nonconforming. Inspection and surveillance during the procurement phase consists of witnessing and/or verifying pre-established check points consisting of inspections, tests and review of supporting documentation. These surveillances are performed with check lists and plans provided by Quality Engineering, with the acceptance of criteria developed from specifications, codes, drawings and industry practices.

Source surveillance personnel are responsible for the performance of pre-award surveys to determine the suppliers capabilities to implement an effective quality assurance program prior to purchase order awards.

Source surveillance personnel also review contractor's quality assurance program using the check list reflecting PSI Quality commitments.

Receiving inspection is performed upon receipt safety-related items on the construction site. These items are inspected by qualified personnel using the approved check lists to determine their compliance with approved specifications and drawings.

Receiving inspection interfacing with PSI material control assists in identifying and maintaining the status and acceptability of items and assures that only accepted material is released for installation or further fabrication. Item not meeting established criteria will be documented on a nonconformance report and sent Quality Engineering for review, disposition, contact with supplier or contractors for corrective action, and closeout.

Receiving inspection personnel on a scheduled basis perform surveillance on storage and maintenance of items received by PSI and in the custody of contractors for PSI material control.

These surveillances verify that items are stored and maintained in accordance with approved storage and maintenance instructions. I am also

responsible for the control of the Public Service of Indiana measuring and test equipment program, including control of the issuance and use of instruments used for the final acceptance, the calibrating method, and frequencies. Site contractor surveillance is to be performed on contractors, installing, erecting, or fabricated items, components, or systems for PSI on these construction sites.

Surveillances are scheduled based on plans prepared by Quality Engineering, which include mandatory witness and hold points for which PSI must be notified before proceeding any further. Surveillances are performed by personnel in mechanical, civil, electrical, non-destructive examination disciplines trained and qualified in accordance with approved PSI project management procedures. Public Service of Indiana through the superintendent of inspection and surveillance of items, components and systems beginning in the manufacturer's plant, through receipt and storage, installation or erection and construction testing for turnover to the operating staff.

Stello

We'll get to the public portion where you can make any comments you want to make. It starts about 8:30.

Do you have anything else to cover?

PSI

No, Sir.

Stello

There are a couple of other areas that I wanted to try to hit that I don't think we've hit yet.

The first one we want to get into is the area we identified with the concrete's been problem, you have had some areas where you've had some voiding, and I noticed where you have marked up where you need to repair concrete and I notice some other areas which I understand you will chip out to confirm that those areas are O.K. I think I see as a general principle the question of voiding has been an awful lot of activity, and speaking now to the broader question which I understand you have with Stone and Webster to come in and look at the structures to confirm that they are sound.

PSI Speaker

The Portland Cement Association provided a microseismic examination of the structures and based upon that report Sargent and Lundy made the conclusion

Stello

What I wondered if you could describe a little bit, without taking too much time, all of what was looked at to reach that conclusion. Kind of summarize what they did.

Shields

I would like to have Mr. Burns, our Project Engineering Manager, make that description please.

Burns

The Portland Cement Association had a consultant by the name of Richard Muenow and he did study using an ultrasonic pulse-echo method for examining the volumetric acceptability of the concrete to determine that there are, that the structure was sound and that there was no internal voiding. The basic approach was a statistical approach. Areas were selected on essentially a random basis, highlighting particularly some of the more congested areas in terms of rebar and more difficult concrete placement areas. And the general conclusion of Sargent and Lundy was that the structural integrity of the concrete was substantiated.

Stello

When they were doing their surveys did they find any additional areas over those that had previously been identified where they found any additional voiding?

Burns

In addition to the surface areas.

Stello

Yes

Burns

The intent of the study was to verify that the surface defects that had been discovered and located did not extend into the interior and they did not find that there were any areas of internal voiding, as a result of the study.

Stello

You made a point there was no internal voiding, did they find any additional voiding of the surfaces. That's what I was driving at.

Burns

That is part of our construction verification program, which is currently ongoing and is described in the report that we submitted to you. We are in a 100% surface . . . we are in the process of doing a 100% surface examination of all the safety-related concrete surfaces and those areas are being marked and identified or they go through the plant.

Stello

Those are the marks I was referring to earlier. Have you gone and looked at any of the areas where you suspected you might have an improper patch and did you chip any of the concrete to see if you have any greater problems.

Burns

All areas that have been patched and are identified through our 100% examination of surfaces will be chipped out, will be repaired.

Shields

I think one thing you are getting at, the test equipment was calibrated by testing some of those areas that were patched and when the machine or device said they were defective, they were in fact defective. And when it said they were sound, they were, in fact, sound.

Stello

That is the point I was trying to make.

So that after you finished your survey you had indication from your test that you did have an area that was sound, you chipped it out and, lo and behold, that's what you had.

Did you take any core borings of concrete and do any tests on those

Shields

Say that again, I am sorry,

Stello

Did you take a sample, a core, a sample of the concrete?

Burns

Yes

Stello

You have done that

Burns

Yes

Stello

Did you find any more problems with any of it

Burns

No, we didn't.

Stello

All the core samples you took were sound

Burns

That is correct.

Stello

O.K.

Keppler

What is the impact of the recent finding by the National Board of the Stewart Mechanical fabrication shop. Applicable to the Marble Hill project.

Shields

I would like Mr. McMahon to address that.

McMahon

There are two parts to this - the National Board Survey identified some concerns with material delivered to the Marble Hill site.

There were twelve items involved based upon a preliminary review by our engineering quality assurance, our authorized inspector it has been determined that the items delivered to the site do in fact meet the code.

One of the 12 items that were still in their shop it was determined does not meet the code and it has been scrapped. The survey did identify, however, problems with their quality assurance program and the documentation in their shop and Stewart Mechanical is currently undergoing a complete review of their program and correction that program.

Now as far as the impact on the project at this particular time unless new problems develop we don't seem any affect on the project.

Keppler

O.K. Thank you. One additional point on your manual. My inspectors have expressed a concern to me that in rewriting your quality assurance manual that there may be inconsistencies between any the ASME requirements.

PSI

The two manuals have been reviewed to be sure that they are compatible. And we will have a continuing effort that whenever we have a need to revise one that's an automatic reason to take a look at the other one and see if the revision is required there and should be made. It is important to note that the two manuals are going to be or are being implemented by exactly the same project management procedure. We use the same form, and we will use the same qualified people and so I am certainly not aware of any inconsistencies in this area that exist now. When we first wrote the program because it preceded the project manual by a short period of time there were areas in the first draft that got slightly out of step and those to my knowledge have been corrected.

Keppler

Do you have any kind of cross-referencing index or anything of that nature to . . .

PSI

They are structured, they are both structured to the 18 criteria of 10 CFR 50 Appendix B. So that when you want to find something you find it in the same location in each of them. When we review them or change, we change or re-view them both to be sure that whatever we do to one will be done to the other if is appropriate to the other. There are some things that you do not have to do from the standpoint of the code that you do have to do from the standpoint of Appendix B. So it's important that we look at the both each time to be sure that we have equivalent sets. I think that the original fact that one preceded the other has been and should be now eliminated. Now they have come exactly in parallel.

PSI

One other comment to be made on that. I think that the remarks about the manual should be prefaced by the fact that there may be a short lag time between updating one. In other words in we see a need for the revision of the other manual. In the case of our ASME manual because it is required to be reviewed and approved by an independent authorized inspection agency that there is a lag time in obtaining that review and actually issuing out the revision of our ASME QA program.

NRC Speaker

I would like to ask Mr. Chiemeleski a question. You talked about training of inspectors. You have already to meeting the requirements of N45.2.6. Could you describe specifically how you will determine whether an inspector or when an inspector is qualified to perform what ever task you were training him for.

Chiemeleski

The criteria we use are the guides that were given in that standard and the endorsing regulatory guide. We require that personnel either fully meet the experience requirements or that in the cases where maybe someone doesn't totally meet the experience requirements he is not considered qualified by us unless it his lack of experience is supplemented with specific training and testing. We further minimize or have restricted the use of training as a supplement for experience so that for Level I individual cannot waive over a six months experience, for Level II not over a year and for Level III individuals they must fully meet these experience requirements.

As an example, all of our documentation inspectors were removed from qualification because many of them required in an area of six to three months additional experience to be qualified. They were all put through a minimum of 50 hours training and given a performance examination prior to them receiving qualification and then that qualification was restricted to only the subject area of that training.

NRC

How did you formulate the test to determine if the inspector is qualified?

PSI

That test was formulated by an individual consultant who has been assisting in that organization, who is experienced Level III individual and is experienced, I have his experience also because his qualifications were reviewed and he is also qualified based on his experience prior to formulating that test and administering.

NRC

Is the test reviewed and approved by the QA organization?

PSI

Yes, the test was reviewed and approved by our quality assurance manager and as I said, was prepared by a Level III individual. The test covers those practical knowledge in terms of actual samples and examples of work as well as theoretical knowledge.

NRC

Thank you

I would like to ask Mr. Beck a question. We talked about design control. I was concerned about how you were implementing those requirements in connection with your replication plans - in other words - what do you, how are you going to document that form of replication feature - -

PSI

Our quality assurance program requires that PSI only review the non-replicate design criteria and specifications - we have in practice and intend to continue to continue to review all design documents be they replicate or not,

Stello

It is 8:30 and I promised faithfully I want to get into the public comment period but before we break up, there are several pages of questions I understand that you had - most of which we didn't cover - I expect that you will be supplying us with responses.

PSI

I am sorry make your statement again

Stello

I understand that you have about 5 pages of questions in all which we didn't get to tonight. Do you have a copy of it?

PSI

No.

Stello

Do you have a copy?

Shields

I'm sorry, of the 22? Yes.

Stello

Do you have them?

Shields

Yes.

Stello

We are not going to try to get through all those tonight, I understand that you will respond to those questions

Shields

We hope that Mr. Norris' comments had covered most of them and we can certainly pick them up one at a time.

Stello

Now, I would like during the next several days to provide for me some sort of a timetable of what you think you have all the problems resolved as you see them to start whatever - particular activity is appropriate - we need to do this so that we can schedule our inspections and assure that many of the things that you described here today in words are actually turned out and implemented in terms of actual procedures and processes at the site - so that we are going to have an awful lot of inspection that we are going

to be involved with to assure ourselves that the commitments that you have made are in fact implemented.

Let me give you - is there anything else that you would like to conclude with - I will give you the last shot and then we will get on with the public meeting

Shields

I believe that we have nothing else at this time. We're available to respond to your questions.

Stello

Okay, and with that I guess we're at the point now where are ready to answer any questions or hear any comments that you may have - We are only going to be able to hear one person at a time so that if more than one talks, you're going to be talking to each other and not to us. I really would like to hear what you has to say - I would like each of you to raise your hand and I will try to identify you - come up to the microphone and state your name and make whatever comments or questions that you have.

Now, again let me reiterate what I asked you to do before - An awful lot of people here who have been very patient and I'm very glad the meeting has been very orderly, but we know they may have questions so those people who have questions on the subject of the meeting first - First, if you have a question and you ask me about waste or some other topic not related to it I am going

to put you off I'll answer the question and but you'll will have to kind of sit back and wait until those people who want to talk about the subject of this meeting go first. We'll get to them. But if that's the question you have, I'm going to say we will get to that later and move on to the people who came here for the purpose of this meeting.

Okay - Yes Sir.

Speaker

My name is John Nels and I'm from Kentucky Environmental Services out of Louisville. The question that I want to ask is that none of these criteria bear any relationship to some aspects of safety, that really have been almost ignored in this whole process so far. What I'm talking about specifically in this instance is tornado safety. The data that PSI has in terms of tornado safety for the design criteria which directly relates to this is totally worthless and any national weather bureau person will make that statement. The data that has been used for tornado safety was that of a thirteen year period 1955 to 1968, and it was done on the basis of one degree square period around Marble Hill. And I believe that the average incidence worked out to 1.1 per year. Well, now the national weather bureau will clearly states that no reliable tornado reporting data was available or no reliable methods were done before 1970. Furthermore, 1974 incidence of tornados completely voids the number validity of that anyway and again I must reiterate that here we're talking about safety at a point where this has already been ignored. The whole thing should

be shut down until this act until this question's fully addressed and until it is proven that it can meet these design criteria before we even think about meeting the present design criteria.

Stello

The plant is going to be designed so that it can be safely shut down and operated safely in the event of a tornado. It doesn't matter what the frequency is if they get a tornado every week that plant is going to have to be able to survive the tornado. That's the requirement independent of the frequency of occurrence of tornados in this area.

Speaker

All right but the data they used was over 300 miles per hour wind test speed now 300 mph I believe is the maximum forward velocity of a tornado that they think can occur. But within the tornado taking into account rotational velocity, it is theoretically possible to attain speed, much higher than 300 miles per hour. If you have rotational velocity within that tornado that translates to 150 mph and you have 250 mph forward movement then you have a 400 mph wind test speed. And we must also remember that a tornado is fully capable of generating car-sized missiles or larger. As large perhaps as trailers or locomotive engines, under the proper circumstances. As I have seen no assurance whatsoever that the containment structure is prepared to withstand that sort of generated missile.

Stello

Those specific missiles, those specific missiles that you were referring to are stated in the FSAR and oh, by the way, the tornado design criteria that

were put together were put together by the best minds in the country in this business. If my memory serves me right, it's 290 miles plus 70 rotational which is 360 miles per hour total.

I don't want to debate the issue anymore. If you want more information on the subject there are an awful lot of people who work in the area and I'd advise you to get in touch with our office of Standards Development who can put you in touch with the people who work on these standards and can justify them, why they're what they are. And I suggest that you do that. I don't want to debate tornado design criteria. As I said before, we'll answer every question you ask. If you want that some more on that let's do it later. I want to get on with the subject of the meeting.

Speaker

May I just mention one quick point more?

Stello

Is it going to be on the subject of the meeting or some other subject.

Speaker

It's going to be related to tornado safety.

Stello

Well, let's do it later there are an awful lot of people who have been here a long time, too.

Speaker

First of all Mr. Stello -

It came to my attention in July of 1978 the subject of concrete - now this is very relevant with this meeting because it is the subject of concrete and it is material that has not been covered publicly by anybody that I have heard. Now I have been very patient. I've told a lot of people on this which can be verified. I've been very patient in waiting for the the FBI investigation and I find that the FBI investigation was going to be concluded two weeks after this hearing. This has to do with falsification of test records through American testing and the data which I received was highly specific hearsay evidence.

Okay.

Most of the people who are laughing are people who are building the plant and can move away unpleasant. I'm part of this community.

Okay - here's my question - okay it has come to me through sources that this information before the Justice Department and I am asking specifically why this hearing is being - taken just two weeks before the conclusion of the FBI investigation from which I have heard absolutely nothing.

I am quite certain the concrete's safe of the surface.

Okay - if you would like me to be a little bit more specific - now

it's been practically a year and a half since I have heard this information and okay there was three different test periods in which the concrete strength was verified - something like a seven day period, a twenty-eight day period and a ninety-day period. That's the best I can remember and my understanding was that the concrete passed - okay - failed the seven day, failed the twenty-eight day and passed the ninety day which to me would indicate that this concrete would not hold up under stress conditions in that it would be brittle. And

Okay - now - do you have response to that, please sir

Stello

The first part of your question which caused me to smile is the confidence with which you can state that the Justice Department and the FBI will conclude any investigation in any time certainty.

We've been trying very hard - we've been trying very hard to find out when they will be finished and all I am able to tell you is that their investigation is continuing. It's not finished. I don't know the source of your information but ours is from the FBI.

Speaker

I don't have as many contacts with the FBI as you, sir.

Stello

I'm sorry.

Speaker

I don't have as many contacts with the FBI as you

Stello

I can't hear you. I can't hear you.

Speaker

Now lets ... Can we both stick to the issue

Stello

The first question is why are we having this meeting when the FBI is going to conclude in two weeks -

I don't have any way of knowing that that is true. I know their investigation is on going. Why we are having this meeting is because I issued an order that stopped work at this site pending solution of nine specific issues. I'm trying to answer your question. And those nine issues are going to be evaluated by us to help make our own minds up that if these issues are resolved satisfactorily then we would be in a position to make a decision as to whether or not we can recommend to the Commission at this facility can be started up.

Whatever results the Federal Bureau of Investigation comes up with, whatever action the Justice Department comes up with, we will take into account in trying to reach our conclusions and decisions. At the moment I have no input, all I know is that that investigation is going forward.

Speaker

In other words, you can give us no reassurance at this time at this second public meeting in two years, in fact the only one, the only two that we have on this issue here in Madison. At this meeting you can give me no reassurance that the information that I received at that time is not correct.

Stello

I certainly can't speak to the FBI's view of it

Speaker

I'm not talking about the FBI

Stello

If you have specific questions about strength of concrete. I ...

Is anyone here who happened to have pursued concrete?

Speaker

I'll repeat that: Does anyone here know anything about concrete?

Stello

He says that there are test results on concrete that show that the concrete's improper. Have you reviewed and witnessed tests and stress you can speak for the strength of the concrete on a first-hand basis?

Hawkins

You refer to the 7 - the 28 - and the 90 day - only the 90 day is the acceptance. It's the same concrete batches that all three samples were taken from. It's the ninety-day that you are concerned about as far as acceptability of the concrete -

Speaker

Why are the others being taken?

Hawkins

Excuse me?

Speaker

Excuse me. Why are the other two taken?

Hawkins

I still can't hear.

Speaker

Why are the other two samples done then? And if they failed these two then why are the standards set at those times?

Hawkins

The seven and twenty-eight samples are taken for statistical control on the mixes themselves so they can redesign if they have to - if they are too far over design for cement content or cement ratio ...

that sort of thing - It's a control measure whereas the final acceptability of the concrete is based on the 90 day test. And that's what I think you should be interested in.

Speaker

Do you sir have any information that regardless of the applicability of the seven or twenty-eight day test that the ... any information was falsified by supervision level people in American testing.

Hawkins

I don't think it's proper at this time for us to comment on that because the investigation by the FBI is still under way and that might jeopardize that if we did it at this time.

Speaker

Given that that's the proper response to that question legally, if not morally, I would say that I would hope you would give us an opportunity in public to address this issue upon the outcome of the FBI investigation. That's my first question.

My second question would be dependent upon that issue and the third one I would ask probably Mr. Bishop of PSI if that would be possible. Mr. Bishop. It's my realistic viewpoint as an individual.

Are you Mr. Bishop?

Shields

Are you looking at me?

Speaker

Okay. I am sorry. I'm not familiar with you gentlemen. Thank you very much Mr. bishop.

Shielus

I am Mr. Shields. Mr. Bishop's our PR representative.

Speaker

Mr. Shields, okay, I am sorry, I apologize

Mr. Shields it's my belief that there is such a political trend in this country despite the need for this plant, despite the cost effectiveness of this plant

Stello

All right, all right. Hang on. We're going to speak on the issues that are the subject of this meeting.

Speaker

May I please interrupt?

Stello

You can finish it later - There are an awful lot of - let me have a show of

hands. How many of you people have a comment to make or ask questions? If you are the only one ...

Voice

I defer my question to Mr. Butler so he can talk for me.

Stello

He can talk about any other subject that he wants to except I want them in the order that people who have questions on the subject of this meeting who have waited here very patiently ...

Voice

He's talking intelligently ...

Speaker

I would think that probably procedurally the man is correct. So excuse me, allow me the floor later for this. I am going to yield to that, given that you

Stello

Absolutely. I'll stay here as long as you will.

Very good - okay - yes sir.

Now, again let me ask it so we don't get into a confrontation with each other I want them of the subject of the meeting.

Other questions, we've got no problem, we'll stay here all night if your wish.

Speaker

I just have one brief comment. I want to keep this just to safety okay?

There was a statement at the very beginning ...

Don't put your head in your hands. It will get better as time goes on. The PSI started out with a sentence that I would just like to comment on. It said they stopped safety-related work because and he said - quote - due to it's and other quality ... due to its, speaking of PSI, and other quality control programs let's begin this meeting on, with the truth - the truth is why we're all here - is because sworn affidavits by environmental and citizens groups have forced the situation. So let's begin with the truth.

Now, I would like to ask a safety related question and it's a very obvious question and I'm really wondering why you very intelligent and educated gentlemen didn't ask it. My high school debate team would have already asked this question by now and that question is this and it is very clear: "Why have we gotten to this point? - Why if the people at PSI were incompetent in building this plant up to this point - Why if they did not have the experts already in place has so much work been already done?

That's my question.

Speaker

My last question. I'm not going to give a speech and take up too much of your time - My last question though is a crucial question to all citizens on both sides of this issue. And there are both sides here tonight. And that is, who can we believe. I have a list here in a notebook and I'm going to read it all - but very briefly we have had contradictory statements from PSI on this issue. Mr. Hugh Barker in the Courier-Journal was quoted as saying this was "not safety related". The NRC then said the very next week it was - the very next day in fact - it was safety related - okay

Then we have statements such as - the voids have been properly patched
Hugh Barker, President of PSI.

The very next week he said - We are now correctly patching the voids in concrete.

With a long string of very contradictory statements from Public Service Indiana on this issue considering the very difficult and sincere problem that the NRC has had concerning safety-related problems. One is brought to mind, obviously, and it is Three Mile Island the very difficult statements coming out of there. Who will speak in case of safety-related accidents - Who can the public believe and why should we believe those people - I think that is the real question that almost everyone on both sides must ask.

Stello

I think you've got a - a very good question. I was at Three Mile Island for

Stello

I believe you had two questions - let me address them in the order in which you asked them.

The first question was - "Were issues raised related to concrete work here related to allegations by others and I believe the individual who comes to my mind is Mr. Cutshall. And the answer is "Yes, he did."

He made allegations and, in fact as I recall, we asked him to come with us to the plant and there were 19 particular areas where he said there were patches which were improper patches and to my recollection and someone correct me if I'm wrong, I think 18 of them turned out to be correct.

However, I would also like to point out that the NRC's been here too and we have found problems and had been seeing problems in the concrete area before anyone stepped forward. We found them in our inspection. We were pursuing them. Whether or not we would have taken the same action on the same date had Mr. Cutshall not come forward; I won't want to debate with you, but I am persuaded that we had seen a deterioration of the overall Quality Assurance Program at the site and we're not satisfied that the construction was continuing in a way that was satisfactory to us and we stopped it. And we are not going to let it start again until we are satisfied that when it starts again it is going to be adequate... And that's our job and that's what we are going to do.

a long time myself and I recognize the problems people had in terms of statements that were made by the NRC and statements that were made by the utility. And they are trying to understand the best they can understand what was going on. A very complex and difficult situation at Three Mile Island.

I don't know of the specific instances that you read, I am sure - - you are reading something that you read in the newspaper - And I won't argue that you read it correctly.

I wish I could stand here and give you a magic formula that somehow says to the people that they ought to have more confidence in your Government - and they ought to have more confidence in the NRC.

We've been through and are going through very difficult times about every Commission and group that has studied at the Three Mile Island accident and our agency has said things about our agency which have not been very complimentary.

I don't know if there is an easy answer that will cause you to have the respect and the confidence in the NRC that I know you should have. I know the people who work there, I know the dedication, I know the confidence and I know the belief that they have that the plants that we are regulating we're doing so that they are as safe as one can reasonably get them to be. It's going to take an awful ...

Voice

It's not safe enough. What is safe enough?

Stello

Let's hold it - Whoa - - remember what I said. If we get more than one of us talking ... and I've got the microphone you aren't going to hear any but each other. I want to try to conclude with ... it's going to be a very difficult time for the public to gain that confidence in the Government and in the NRC. All I can tell you is that it is unfortunate that I have to sit here as a member of this agency and ask you to have that confidence, when you have already told me you don't. But I think it's deserved and I think you should have it.

And all we can do is see that time will give you the basis for concluding, as I have, that you should have that confidence.

Will you state your name?

Speaker

My name is Wendall Barrie. I'm from Port Royal(?), Kentucky - which is not far enough away. My question is this sir.

Is your relationship with PSI collaborative or adversary?

Stello

I hate to have to pick between the two. You. I certainly don't believe we have any relationship with PSI other than as a regulator. We have a responsibility to assure that the plant that they would like to build is built for operating safely. And we have the unfortunate, sometimes responsibility, of taking on action that we had to take such as we did in August and stopped them from building the plant - but I guess that if I were deciding on the basis of that action

probably have to conclude that they didn't like us very much and we had kind of an adversary relationship.

Speaker

That was my understanding.

I would like to point out to you tonight that you have given a very definite impression that your relationship is collaborative.

You have asked a bunch of routine questions and received a bunch of routine answers and put on the witness stand the accused and nobody else and the opposing witnesses have got up to speak to you here you blast them to pieces - the two of them - right in the faces, two of them ... - three of them. You act if their questions are so damn ignorant ...

(Mixed Voices)

Stello

Well why don't you talk to me. I came here to listen to what you have to say. Why don't you talk to me?

Speaker

I'm getting ready to ... and I have been. What you put on is the people's theater. It doesn't address either the questions - the specific questions of the meeting or the questions that you just raised yourself and injected into the agenda and the question is trust.

I am here to hear what you had to say. I'm here to hear all of what you have to say - and the substance of what we've talked about here. I don't know if you understood all that we talked about, but the subject question of Quality Assurance and what needs to be done to have a good Quality Assurance program is the subject of this meeting. It's been the subject of a document that has been submitted to us. It has been the subject of I guess it's about four or five man-years of inspection that we've devoted to the facility to find out what particular status the facility is in.

I guess maybe your remarks too come from frustration and anger and I can understand that. I wish I had the easy answers so you wouldn't feel that anger and that frustration.

I hope that this meeting that we are having here tonight sitting here and doing our best to answer the questions or respond to any comments that you have had to make. I feel sincerely that sometimes we'll fall short. For that, I'm sorry. Yes sir.

Speaker

I would like to speak for myself, and I suspect I speak for quite a few others who are silent. There are many more vocal in their criticisms. But I want to thank you for the time that you are spending and the time that your colleagues are spending - the time that the staff of the PSI is spending to try and bring safety in our midst. In something that is necessary here in Indiana.

I want to thank you from the bottom of my heart for the time, the effort, the interest you are taking to see to it that things are safe. Thank you.

Now I'm going to tell you, sir that the impression the you give is that you're here to make a living. There are some of us here - who are here because this place - this country is our life -

(Mixed Voices)

There are some people here who are angry and who are scared because the story of PSI at Marble Hill so far - has been a public scandal - and the people who are scared and angry about that are looking for somebody to represent them and it is terribly disconcerting and terribly disturbing to have you who are supposed to be representing our interests here carry on this kind of charade.

Stello

Let me say that sometimes I too get angry. I get angry and frustrated that no matter how hard you try to do what's responsible we can never satisfy everyone. I know I can't. And sir, I am sincere when I tell you that I have got one job and only one job and yet I guess I am here to earn my pay. But my only job is reactor safety whether the Marble Hill Facility does or doesn't get built is not a concern to me. Only that if it is built and it is operated it is done so safely. I was not laughing at people who came up here for the sake of laughing. He said something because in the last instance and it was the name of an individual who had a name sign in front of him and I have to

apologize. I did not have to smile. I guess it's a little bit strange to be here and perhaps it relaxed me a bit and I should not have done that. I certainly apologize. I didn't intend to poke any fun.

Stello

Yes Ma'am - Go ahead.

Speaker

My name is Jean Edwards. I live in Louisville, Kentucky, which is not far enough away. I have a brief message from a person who is on the Board of Aldermen from Louisville. This is written by Sharon Wilbert. Dear Commissioners: I request that you stop construction on Marble Hill and other nuclear plants. It is imperative that the American people have answers to critical questions of quality and construction, safety procedures, disposal of wastes and cost feasibility. I respectfully urge that you address the welfare of our cities and posterity by performing your duties in such a manner as to insure that all of these questions have thorough and complete answers and that each concern have been satisfactorily addressed.

The question that I have to raise tonight has to do with the length of time that this plant will operate. Realizing that the plant can not possibly operate safely we realize also that the plant has a life term of perhaps 30 years. I would like for you tell us tonight what happens when the 30 years is up?

Stello

When the plant is used throughout its design life which typically is 30 to 40 years. At that point some basic decisions need to be made as to what to do with it.

The first thing that one can do and there has been a number of studies made looking at costs is to completely dismantle the plant, that is, tear it down and restore the site to its original form, remove all of the materials which have become radioactive either directly as a result of exposure to the neutrons in the core and have become activated by that process or have become contaminated with radioactive material. Those kinds of materials are shipped to disposal sites and buried. Other alternatives are also looked at since the particular site might be a useful site for the continued use of generating electricity. It is possible that in thirty to forty years that that might in fact be the case and that the facility might be partially dismantled or partially used and still the site used for the purpose of generating electricity. Those kinds of decisions are decisions that have to be made at the time that the plant is decommissioned but the technology for the dismantling and the disposal of the facility are already available.

Speaker

These inoperable plants cannot be dismantled or moved without monstrous expense and tremendous risk of exposure to radioactivity because of the tens of thousands of tons of steel and concrete in each plant that permeated with intense radiation. Scientists estimate that the radioactivity in each of these poisoned nuclear structures will be a threat to health for at least

200 years. This for centuries, perhaps forever, these abandoned radioactive hulks will remain where they are now being built.

Stello

I guess I don't want to debate with you. What I suggest is if you could write to us, we'll send you the results of the reports with studies that have been done, the costs have been documents and radioactive exposures. The results have been - Excuse me, someone has given me an announcement. There is a purple or maroon LeMans blocking a car. - Okay, Yes Ma'am.

Speaker

I would like to address Mr. Norris. I would like to know why you are the Acting Manager of Quality Assurance and not just the Manager?

Speaker

I'll be pleased to answer that one. I was hired to, brought in here as the someone to take over until the qualified person for PSI could be hired. That man has been hired. His name is Mr. Loren Ramsett. He will be taking over from me now that he is on the job. So that in a period - in a very short period of time as quickly as he is ready to take up and be managing the activities.

Speaker

May I ask you when you will be leaving here?

PSI Speaker

I wish I could also answer that. My wife is sitting back there. She wishes she

knew the answers, too. I will probably be leaving here somewhere within the next several months. Anticipating June or July. It depends entirely on how fast we move in this particular area.

Speaker

May I ask where the man who is replacing you is coming in here from.

PSI Speaker

Mr. Ramshead is from the Northwest. He has been in the Seattle area for the last several years. He is a very experienced man in the area of Quality Assurance. He has been Quality Assurance Manager on another, on two other sites. He is very qualified in the area of boiler and pressure vessel code. He is a graduate civil engineer, and a registered professional engineer.

Speaker

May I ask who recommended him to you or where you got his name?

PSI Speaker

Well, there are many of us who know Mr. Ramshead in the industry.

Speaker

Well some other questions; you give out a lot about, a ridiculous amount of numbers when you first started about how many people you have hired. May I ask how many of the management period are from this area and have not been brought in from outside a 50 mile radius that was designated evacuation area in case of an accident.

Shields

Your question is how many of these people come from outside of the 50 mile radius?

Speaker

Yes

Shields

Are you talking about those hired for PSI or I...

Speaker

The management that you hired that your were talking about when you first started talking 79 men, something like that. New people that you have hired for the program.

Shields

I'm sorry I can't give you the statistics on that.

Speaker

Would you make an educated guess?

Shields

No. I don't believe I will.

Speaker

I didn't think you would. Okay, another question that I have - You talked about when inspectors meet experience requirements. I want to know exactly

what those requirements are. You just talked about meeting requirements. You never say what the requirements are.

Shields

Well these requirements are well documented and I imagine Mr. Norris can quote most of them from memory. I'll give him an opportunity.

PSI Speaker

The requirements are first spelled out in a document called the American National Standards Institute N45.2.6 is required that inspectors be qualified in particular levels and they must be able to work to established, to perform the inspection level two people are required to establish the practices and set up the inspection and suspense people in that discipline. And level three people those who are capable of examining the level one and two people so they have to have capability beyond that. Our practical _____ is that the level three people are the ones who renew the various quality documents. The reason it's not easy to give you an easy question is that there are many different disciplines. There are civil, mechanical, electrical, adhesion control nondestructive testing. These very, this very many disciplines are the ones which one very specific, so to give you a good answer for all of them I would have to go through a long list of all of these requirements. Both of us would be here much longer than anyone wants to be. I'll be glad to refer these documents to you so that you can check them.

Stello

Allright. There are an awful lot of people...

Speaker

These are pertaining to statements made at this meeting...

Stello

I understand that. I was going to ask you how many more questions do you have. I see about 10 or 11 people standing behind you.

Speaker

About two

Stello

Okay

Speaker

I am sorry I did not remember your name. I would like to know if these requirements that Mr. Norris is talking about. Do they come from the NRC? Are you the ones that set up the requirements and give them to the utility company?

Stello

As a general answer, yes.

Speaker

Okay I would like to know that when this plant is safely built and all of the mistakes that have been made are corrected - I know you are not going to make any more mistakes after all of that paper work you have gone to - okay

I want to know if this plant is so safe why are they going to install some kind of monitor in my home to monitor any radiation that might escape and who is going to pay for it.

Stello

I don't know which monitor you refer to..

Speaker

I'm referring to the monitoring system that's in the evacuation plan for a ten mile area because I live within that area.

Stello

But whose monitor are you going to get - are you going to get one from the NRC?

Speaker

That's what I want to know - who is going to pay for it?

Stello

Well, you tell me I don't know. We install monitors - I don't know if we plan to put one in your house - I don't believe we have any plans where we've laid out a map of the monitors here - I don't know whether or not PSI has done it. It might be the state and there are some local communities. I really don't know whose putting a monitor in your house, I suspect it's either a local agency, a state agency, a federal agency and it could be EPA, the NRC or it could be the licensee.

Voice

Why should we need monitors anyway?

Speaker

Yes

Stello

Well that's a good question. I think to suggest that nuclear plants are built risk-free. Well I'm certainly not going to sit here and tell you that. I don't know. I don't know of anything that is risk-free. I think it is very prudent and wise - since accidents can happen and have happened to put out the monitors to understand what can happen to the environment and be able to take appropriate protective measures so that people cannot be harmed. The possibility of an accident at any nuclear plant is not zero. The protective measures that one can take if there is an accident rely on the need to have intelligence from monitoring systems. These are extremely important in my view and should be incorporated. If for some reason you have the notion that anyone has ever told you that nuclear plants are risk-free - that's wrong - that's why we are there. Because there is a risk.

Speaker

Sir, then what you are saying to me is that they are not risk-free, but I should take your word that it is not going to be a big enough risk for me to worry about.

Stello

I don't know whether you want to take my word for it - I will tell you what I believe and than you can consider that in making what ever judgement you need to make.

Speaker

I think I have heard a lot of what you believe, sir, and I am sorry but you men are sitting up there in your fancy suits and you fly in your helicopters and (mixed voices)

Stello

I can't hear you

Speaker

I have to stay here - I have to live here the rest of my life and raise my children here--now can you hear me. I want to say unless it's risk-free, I don't want one.

Speaker

I hope that you understand that we think of you as what stands between us and something that is very dangerous. With that, I have a couple of yes or no questions for you. First of all is NRC going to document everything. All the quality tests that are being taken at PSI and if so if something goes wrong is the plant going to be closed down - That's my first question and my second question is - I have a beautiful 9 month old baby at home and I want you to tell me - if you can reassure me that this plant will be as

safe as any coal plant if it were put in here because this is coal country and if no, are you going to take the responsibility for having made a decision which puts all of our children in danger. That's all I want to know. I want reassurances that you are willing to bear the responsibility of a bad decision in this case.

Stello

There is no doubt in my mind nor I believe in anyone who works in our agency that that is their responsibility. And that's probably why they take their jobs very, very seriously. With respect to, can I tell you that the nuclear plants will be as safe as coal. I am not an expert. I was born and raised in coal country myself. And I know that coal is dangerous, too. I can tell you what I read as a layman. I can tell you what the studies say that I have the benefit of seeing. There are studies from the National Academy of Sciences - who have tried to wrestle with this question. The conclusions in the studies that I have seen, the studies that have been made in the laboratories suggest that coal-fired plants may in fact be less safe, significantly so.

Speaker

For the workers or the general public.

Stello

For the general public. Now I'm not going to sit here, because I'm not an expert in that area and defend those studies but that's what they say.

Speaker

What do they say about the risk of having an incident similar to Three Mile Island in this area with as poor construction we have already had documented.

Stello

Well, let me use what I only think is fair to use. We have approximately 500 reactor years of operating experience and we had a Three Mile Island. A very serious accident. The probability that an accident like Three Mile Island would occur here if I used the statistics that I just gave you is this one chance in 500. Now, let me go then to say if you had such an accident here what would happen to you. The studies and all of them that were done at Three Mile Island show that a total amount of radioactive material from the plant resulted in the exposure to the some two million people in the Harrisburg area of about 2,000-3,000 man-rem. The average exposure for those individuals was about $1\frac{1}{2}$ millirem. The maximum theoretical exposure which you could have gotten if you lived at the worst place at the site boundary would have been 83 millirem.

Turning those numbers into something that's more meaningful to all of us. The chances that you would die as a result of radiation received in the accident, if you received the maximum, would increase your chances to dying from cancer by 1 chance to 50,000.

Speaker

Does that include the radiation that is still going out or?

Stello

Yes ma'm

Speaker

Or just from the first time?

Stello

No that's all of it. Just let me finish my answer then if you want... The chance that you take of cancer with the risk that throughout your lifetime that you would die from cancer is 1 chance in 70. Adding the additional risk of one chance in 50,000 to the 1 chance in 70, is in my opinion, is not a significant health hazard. The average person - the 1.5 millirem-

That's about the amount of radiation that you allow your children to get by watching TV and those are conscious decisions we make. There is significantly less radiation than you would get by going for a routine physical being exposed to x-rays from your doctor, less than an airplane ride across the country. I just don't think that those, in my opinion are significant health hazards. If you did infact have a Three Mile accident here I guess I would like to give you my view that that's a very serious accident indeed. One which I believe we've made considerably more remote by the actions we've taken since then but even if you did it's the health hazard in terms of the exposure to radiation in my opinion, based on all the studies I have seen, based on all the commissions who have studied it, have concluded that the health hazard is not significant.

Speaker

I have only one last question - In your opinion has the NRC ever covered up a wrong doing in the building or constructing of a plant and, if so, is that going to happen here?

Stello

I can assure you that to the best of my ability to do the job which I am charged to do; I certainly will do everything possible that that accusations will never be made. Now I don't wish you to walk away saying that there won't be mistakes made at the plant, that there won't be things happen. The previous individual suggested there won't be mistakes. No there are going to be mistakes. And there are going to be problems. But to the best of our ability, they are going to be very visible and very public and everyone ought to be fully informed. I will do the best I can to make sure that that's in fact true.

Voice

Answer the question--She asked if there was a cover-up.

Stello

I am not aware of any and her last question was that ever going to happen here and my answer was not if I can do anything about it but to give her an answer with certainty that says no I would have to be clairvoyant. I just don't know that I could ever conclude that that accusation would not be. It won't be tolerated. I wouldn't be permitted. I will not be condoned. It will not be acceptable. But can I assure her that it will never ever happen. No.

Dattilo

My name is Tom Dattilo. I'm attorney for Save-the-Valley and I spoke to you earlier regarding the presentation of certain witnesses who have what we consider to be expertise to be offered. I would wish to offer these witnesses at this time subject to your regulations. And the issue to be addressed is the degree of confidence that the NRC can have in PSI's and subcontractors related quality control.

I would call Mr. Millard Hutchins. Sorry, Marion.

Stello

Pardon me. Is it. All you people waiting in line is it all right if he goes ahead and does this.

Voice

Yes.

Stello

O.K. Thanks.

Hutchins

My name is Marion Hutchins. I've worked as a quality control inspector for Ryan Industry of Louisville, Kentucky.

Voice

Louder.

Stello

I can't hear you and the people in the back can't hear you. Can you get a bit closer to the mike and speak up.

Hutchins

My name is Marion Hutchins. I worked as a quality control inspector for Ryan Industries of Louisville, Kentucky, from May 69 to August 78. In November 63 to March 30 of 79 I worked as a quality control inspector for Cherny Contractor Corporation, a subcontractor to PSI at Marble Hill.

My job as a quality control inspector at Marble Hill included receipt inspection of safety-related material and components and surveillance of storage of the same safety components. In my term at Marble Hill I was not impressed with the qualifications of the quality control people who worked for Cherny or PSI. I worked as a Level II inspector under another Level II supervisor that had less experience than I. I personally observed improper storage of safety-related material and components, mainly, large assorted safety valves some of which were motorized.

I further observed from January 17, 79 to February 19, 79 the specific Fahrenheit temperature readings in Area 45 Marble Hill warehouse was supposed to store safety-related material and components under a controlled environment.

Stello

Excuse me. You are either going to have to get a little bit closer to mike, speak a little louder and, if you please, a bit slower. We're having a

great deal of difficulty hearing you.

Hutchins

I worked as a Level II inspector under another Level II inspector who had less experience than I. I personally observed improper storage of safety category material mainly large assorted safety valves some of which was motorized. I further observed from January 17, 79 to February 1979 the specific Fahrenheit temperature readings in Area A, in Area 45 in Marble Hill warehouse. And that was supposed to store safety category material and components under a controlled environment. The environment was not controlled according to the standards of ANSI. In my capacity as a quality control inspector I personally advised my supervisor at Cherny that Area 45 did not meet the requirements of ANSI and that the safety category material and components stored therein were in danger of moisture, heat and cold deterioration. I further personally observed improper storage of valves outside Area 45 warehouse at Marble Hill and advised my supervisor of same. At no time was I aware that my complaint regarding improper storage of equipment was taken care of. It is my opinion that any valves stored in this Area 45 or the surrounding area may possibly be nothing more valuable than salvage due to moisture condensation. I am saying that there may be a grave problem regarding any existing valves and related safety components that were under the quality control jurisdiction of Cherny Corporation. I feel that certain documentations of supervisor's records may need to be observed more closely until it can be ascertained the level of utmost competence by the NRC. It is my opinion that the March 5, 1980

to do receipt inspection of safety-category material and components request of PSI is tragically presumptuous and subject to a much further and intensive inquisition.

Dattilo

Mr. Fred Hauck, engineer.

Hauck

My name is Fred Hauck. I am an industrial and environmental engineer with 25 years experience. I have worked for and with the Kentuckiana Regional Planning Agency, Paddlewheel Alliance and the Save the Valley. It's difficult for me to understand why I cannot address two gut - issues, one of which concerns the very poor economics attending the possible building of the facility. The other concerns PSI's tremendous current overcapacity. I'll add my remarks to matters of the safety of the concrete repairs. Save the Valley was informed just last Friday that Public Service Indiana had still not submitted the procedures for repairing the hundreds of already identified honeycombed areas. Further, according to NRC's Jerry Wilson, the NRC is not satisfied that the 95 percent confidence level for locating these voids has been reached. In view of all of this how can Save the Valley be assured that this tedious repair work will be done properly. That's my first question. On matters of safety is nuclear energy's corrosion problem been solved. Surry No. 1 and Surry No. 2, Virginia Electric Power Company's Westinghouse Units at Norfolk, Virginia, have recently replaced all steam generators at a cost of nearly \$100 million. Radiation-caused corroded generator tubing is

listed as the probable cause of failure. The nuclear industry knows so little about this problem that DOE is shipping a 220 radioactive generator 3,000 miles to Battelle Northwest for study. Will Marble Hill if it is ever finished, provide further education for DOE.

Three Mile Island and General Public Utility auditors Cooper and Labbring now list as contingencies \$1.1 billion capital costs plus many uninsured cleanup and damage claims. They infer that these costs could bankrupt GPU unless they can be passed on to ratepayers. Have PSI ratepayers and stockholders considered these possibilities. Save the Valley urges PSI to cut their losses now. Abandon what has clearly become an albatross around PSI's financial neck and an impending danger to all the residents of this entire region.

Stello

You raised some questions. Do you want to go and make all your comments - or do you want questions answered or what.

Dattilo

It is possible that Professor Cassaro could extend on that:

Stello

All right.

Cassaro

Mike Cassaro professor of civil engineering at the University of Louisville, the national champions of basketball. I would like to address the subject of quality of concrete. Work at the Marble Hill plant was suspended mainly because of questionable quality control of concrete work. In order to prove the structural integrity of in-place concrete at Marble Hill PSI has conducted an examination of the concrete. The examination was performed for PSI by S and L Engineers. These people are gathered here and they are concerned about the adequacy of the in-place concrete to meet the design requirements. They are justified in their concerns because deficient strength can result in serious problems for the people in this area. They have raised four questions which may be answered in part by the S and L report.

First to what extent did poor quality concrete find its way into safety related construction at Marble Hill.

Second, what was the effective loss of concrete strength associated with work that has been performed.

Third, what is the resulting structural deficiency, if any

And fourth, is repair possible or must defective concrete be removed.

They feel that a report or a copy of a report from S & L will help to determine the answers to some of these questions. And they further would like to

have a local engineer, that is an engineer in Indiana, Southern Indiana, or Northern Kentucky, competent and qualified to study that report.

Dattilo

Did you want these two gentlemen back here to ask them some questions? They are available for you.

Stello

Well, I guess several questions have been raised to us. If you want to hold off and try to come back to them. Did you want answers to them or what. The last suggestion I was kind of intrigued with is the possibility of someone from the local community looking at some of the concrete repair work, the basis for it, and I'd like to pursue that a little. I think that the suggestion - - -

Dattilo

As far as an engineer is concerned.

Stello

Sure.

Dattilo

Well we would appreciate your response.

Stello

I said I think it's a suggestion. I would like to pursue. I'm trying to find out how can I pursue it. With you?

Dattilo

Yes, sir.

Stello

Later? Well, why don't we (end of tape)

Subsequent to the start of the PSI receipts inspection

Dattilo

on the nuclear site to study the concrete. I was told by the NRC, in my capacity as Save-the-Valley attorney, that it was necessary that I ask Public Service of Indiana. I did so. I was denied that right. It is my request, again, to you as a body, if you will take control and jurisdiction to tell me that I have a right to place someone there on that site to check the concrete independently, rather than one that is paid for Public Service of Indiana.

Stello

Before we take up too much time, I was trying to ask our attorney whether there was reason that if we had someone who was qualified in this area if there was a reason that we could bring him in with us and as part of our inspection. And as a general answer, the answer I'm getting from him is that he doesn't think there is anything that would prohibit us from doing it. What I'd like to do is to sit down and understand what your proposal is, and if you want to do that right now, let's do it right now. What's the proposal? Or get together a bit later.

Dattilo

We would like to speak with Dr. Cassaro who may be competent and qualified to do that, rather than take further time. But I would like to sit down with the NRC....

Stello

Be happy to do that. Be happy to do it. Be it right now, or later, or whenever.

Dattilo

We will discontinue the rest of our program on this basis and allow the rest of the public to speak. Thank you.

Stello

No, don't. Please don't. I'd rather you continue. I'd like to hear what you have to say. I found the last comment very intriguing and I'd like to hear the rest.

Dattilo

I will go ahead further and say that it's been my experience that sometimes I've received much cooperation and other times I would say it's less than much cooperation in this particular matter. It has always been my intent as a representative of Save-the-Valley that the people of Save-the-Valley and the people of Madison understand what is going on. Now I'm not sure whether this public meeting is doing that or not, I don't wish to comment any further on that. I do wish to know that the NRC will be completely open, will do their own investigation, rather than possibly relying on the investigation of courageous affiants who have supplied their information to me, and to other members of Save-the-Valley and to certain members of the Paddlewheel Alliance, so, Sir, all I want to know at this time is, is it possible that we can get together and can have everything free and open and have no more continuing closed door meetins between PSI and the NRC. And I did not say that destructively, because I'm trying to be constructive in this particular situation. It's that there are an awful lot of closed door meetings going on.

We do not receive the reports. Save-the-Valley is a recognized intervener, and we don't receive a lot of reports. We've never received the report from Portland. Cement. I've asked Mr. James Foster for that particular report, and possibly he has tried to get it, but I have never received it. If we had these reports we could be more specific in this particular meeting tonight. Other than that.

Stello

Pardon me. Okay, I'm just having some technicalities being explained to me. The technicality being that the FSAR hasn't been submitted, there has been no notice of hearing and the service list isn't generated but we're just getting an arrangement where we'll find a way to get you on the service list and get you copies of the documents.

Dattilo

No, I am on the service list, but I am not receiving....

Stello

You just explained to me why. (Pause). We'll find a way to get you copies of all the documents. Okay?

Dattilo

Thank you very much.

Stello

Yes, Sir:

Speaker

My name is Pete Tashon. I'm from Bloomington, with the Paddlewheel Alliance and I have a question followed by a brief statement. The question which didn't seem to cause anybody to even wonder is that during the hearing process previous to this, someone from PSI said that one reactor was 25% complete and the other was 7.5% complete when work was halted in August. And now, one of them is 30% complete and the other one is 8.2% complete. I thought that work was halted.

Stello

Well, I was over here today myself and things that I noticed that had work continuing on are non-safety related structures such as the forced draft cooling towers for cooling condenser water, which is not a safety related system. That kind of construction activity is permitted to continue.

Speaker

It was all non-safety related?

Stello

Non-safety related equipment.

Speaker

Okay, I just have this brief statement to read. This document, which is the subject of this hearing tonight, is impressive, slick and glossy. Much

like everything we have seen from PSI about Marble Hill since it's conception. And like the previous materials spewed out by Public Service It is untrustworthy. All the flow charts and all the bureaucratic organization in the world cannot compensate for incompetence. No amount of improvement in management will rectify inferior construction already in place. In light of PSI's records to date, it is utterly astounding that the NRC would expect PSI to objectively inspect the existing construction. That is like assigning the fox to look in on the chickens. Just having PSI inspect themselves. Well, first of all, they severely limited the scope of the inspection. Page 3-A2, says "Installed components cannot be fully inspected for all characteristics identified for re-verification. Consequently, samples will be taken from warehouse quantities, laydown areas and items stored in places not installed. And under the subheading "Scope" on page 3, "in order to prove the structural integrity of in place concrete at Marble Hill, a nondestructive examination of the concrete was performed on a statistical basis." This is astounding. They are speculating about the overall soundness of concrete work on the basis of random sampling. This same random sampling technique was applied throughout the inspection process to surface concrete, reinforcing steel, structural steel, pipings and hangers, welds and cadwelds. It is not the least bit reassuring to know that these random samples are all of 95% statistically reliable. Are these guys kidding? It only takes one wooden four by four left inside the concrete from wall to wall to make the containment building unsafe. Once that they have limited the scope of the inspection to a random sampling of the visible components, it is not difficult to imagine how they conduct that inspection. Why, visually, of course.

Cadwells will only be checked visually, as will piping and hangerwelds, structural and reinforcing steel and concrete surfaces. Steel containment liners and tanks were inspected by subjecting their less than reliable weld records to yet another random statistical sampling. It does not appear that any systematic effort was made to identify and repair internal flaws other than the perfunctory random samplings. It is little surprise that the random samples in the surface inspections, that PSI was reassured about the quality of the construction to date. It is so great to know the ominous implications of PSI's insistence, even now that existing construction is not unimpeachable "requisite quality" or "acceptable" or "satisfies existing standards". The upshot is this: Everything is rosy, just like PSI has insisted all along. PSI has forfeited the privilege of inspecting themselves. It is the NRC's responsibility to conduct an objective, comprehensive inspection of the existing construction. And no permission to resume construction should be granted until that is completed. Furthermore, a complete review of the entire project is required, The assumptions under which this plant was first initiated ten years ago or so, are no longer valid. Potential new standards regarding the proximity of a nuclear plant to a large population area will have a direct bearing on Marble Hill. The statistics upon which the economic feasibility and projected need for the plant are based, are no longer valid. This plant should be submitted to a referendum of the people living within a certain radius of the plant. More cost-effective alternatives should be evaluated. A moratorium on continued construction of the plant should be imposed until all aspects of the nuclear fuel cycle and nuclear energy production are resolved. The feasibility of conversion to coal should be

seriously considered. Completion of this plant should never even be considered until the growth in electrical demand makes it essential. Regarding that electrical demand, when PSI was first contemplating Marble Hill, it used an estimated 12.5% growth annually as a rate of electrical consumption over the ensuing ten years to justify construction. Even for those times it was a highly unrealistic figure. By the time the NRC hearings were held. In January, 1977, they had adjusted that figure to 8.6% in annual growth for a decade. Since receiving a permit, they have revised their estimate down in consumption each year: 7.18% in June, 1978, 6% in January, 1979. Nevertheless, growth in consumption has never exceeded 5%, and for several years since 1973 has been as low as 3% or less. Unfortunately, since PSI is entrusted with keeping the records, one must rely on the figures provided by them. According to a blurb on the August 8 edition of the Herald-Telephone, PSI set a record power output during the heat wave of 1979, with the peak load of 3,500 megawatts. This exceeded the June, 1978 record peak of 3,381 megawatts by 119, or only 2.96% in fourteen months. Just recently, last week, American Electric Power Company, realizing that the reduction in consumption, or growth in consumption reduced their need for more electricity, has delayed the implementation of two plants that they're constructing, one in Indiana at Rockport, and one in Illinois, because they have only a 3.6% annual growth in electrical consumption. It is about time that you stop being atomic energy collaborators and start behaving like the Nuclear Regulatory Commission. You can either shut down this death trap before it costs the public another dime, or we will do everything we can to stop it for you. And that would be a lot less pleasant for everyone involved.

Sen. Kendall

Unfortunately, I am a politician. My name is Mike Kendall. I'm a State Senator. I'm a State Senator from District 47, which is an adjoining area of seven counties and I am a member of the State Nuclear Energy Study Committee. I contacted Mr. Williams and Mr. Keppler and Mr. Wilson about appearing this evening, and prefer in exchange for questions. I had the understanding there was to be - was going to be no testimony. So, I would just like to preserve for the record the rights to submit that testimony per our agreement in writing prior to the final decision along with documentary evidence. Thanks. I'd like to ask one question of you, Mr. Stello, before proceeding with some questions I'd like to ask of Mr. Shields of PSI: There is, I think a certain amount of misconception in the public that the only shield between the NR--uh--between them and PSI and plant, is the NRC. Isn't it true that the state, as does all states, and this state through the code of boiler and pressure vessels, also has an independent oversight of all the safety related equipment at Marble Hill through their adoption of the ASME Code, independent of whatever the NRC does?

Stello

With respect to ASME.

Sen. Kendall

Section III

Stello

ASME equipment, I think it be, and the answer is yes, they're looking at it as an independent party. They have to have their approval.

Sen. Kendall

And is it true that the state boards....

Stello

Let me clarify that

It might not be understood by everyone. These are mechanical components, for example, and would not include concrete work, and rebar that kind of structure material.

Sen. Kendall

And isn't it true that the state inspection under ASME Section 3, is the entire code, whereas the NRC has adopted parts of it and implemented parts of it. But the states as a whole have ratified the entire code.

Stello

If my memory serves me right, I believe the entire ASME Code has been adopted as a requirement by our regulations. That's my understanding. I will correct the record if I'm wrong. But I think it's in Section 50.55(a).

Sen. Kendall

I'd like to ask, I'd like to ask Mr. Shields a question concerning the Management Analysis Corporation report, and the commitment to phase out the Management Analysis Corporation as temporary help. Have you, have you begun recruiting employees to take the place of Management Analysis Corporation personnel?

Shields

As we indicated earlier, us, yes we have. We have on board. Several of those people, and especially in the quality assurance area we have on board our own quality assurance manager Mr. Warren Ramshead, quality engineering manager Mr. Charles Bech. We have other quality engineering, uh, superintendents that are coming on board, and want to be on board April 15. We are actively recruiting the project director at this time, and other areas are being recruited also.

Sen. Kendall

When did you begin that recruiting process?

Shields

Several weeks ago, several months ago.

Sgt. Kendall

Could you be specific.

Shields

Well, that process began in....

Sen. Kendall

Recruiting replacements for Management Analysis Corporation personnel?

Shields

Efforts were started in the identification of people - those efforts starting in November and December.

Sen. Kendall

Could you tell us when public Service of Indiana first learned that they did not have an N-certificate.

Shields

The answer is we never claimed to hold N-certification.

Sen. Kendall

Well, when did you first realize that you didn't have N-certificate. and responsible people thought you needed an N-certificate?

Shields

We have never claimed to hold an N-certification. The code requirements relative to certification at best are not clear. We made a determination in the order of October, 1978 that we would pursue being certified as an N-certificate holder.

Sen. Kendall

Well, when did you first start hearing either from Mr. Hodges or other subcontractors, that you needed an N-certificate?

A few problems related to these activities. There were some questions raised, perhaps as early as 1976. Now, whether the resolution of those require an N-certification or other compliance with the code is still not, uh, is subject to interpretation.

Sen. Kendall

Could you tell us when you first became aware of a letter of July 14, of 1977, from Stewart Mechanical Enterprises, Inc. to Frank Hodges, quality assurance manager, that PSI did not have a completing, uh, complying N-certificate them ?

Shields

I'm not sure of your question. When I personally became cognizant of that?

Sen. Kendall

Yes.

Shields

No, I can't tell you when I personally became cognizant of that.

Sen. Kendall

Do you recall becoming cognizant of that sometime between July 14, 1977 to October of 1978?

Shields

Not me personally, no.

Sen. Kendall

During that intervening year and a half you never personally became aware of that?

Shields

I don't recall.

Sen. Kendall

You don't recall Mr. Hodges transmitting that information to you through the minutes of the regular monthly meeting? With a memorandum directed to all management personnel of Public Service of Indiana?

Shields

I don't recall specifically, no.

Sen. Kendall

Are you aware of a letter of June of 1978, from Stewart Mechanical advising Public Service of Indiana that they were unable to receive and install certain types of piping because you were not in compliance with the ASME Code at that time?

Shields

I don't remember the specific uh, uh, that coming to my knowledge, I don't remember that coming to me. I do recall the disposition of that, if you want to go into that.

Sen. Kendall

Well, did Mr. Voyht and Mr. Hodges advise you when they were receiving all this correspondence from Stewart Mechanical saying that you weren't conforming to the ASME Code, and you needed an N-certificate?

Shields

I do not recall specifically.

Sen. Kendall

Were you in any way involved with the safety assurance program during those months?

Shields

Not the quality assurance program, no, sir.

Sen. Kendall

Would you as the vice president of the corporation normally have been involved in that sort of questioning?

Shields

If it might have come to the attention of the quality assurance review committee, I might have, but I don't recall specifically.

Senator

Are you aware, again, I'd like to ask you if you're aware of any memorandums from Hodges directed to all of the officers of the corporation from Bareker down, including you, concerning this problem of N - certification?

Shields

I do not recall.

Senator

Are you aware of the NRC's conclusion of their stop work order that the problem was that the management was not responding to Mr. Hodges' complaints?

Shields

You mean - As far as their inspection reports, they may well have come to that conclusion.

Senator

Well, would you care to comment on whether or not that was a valid conclusion? And if so, what changes have taken place in the personnel of management as opposed to more functionaries to change that attitude?

Shields

As I have indicated, the quality assurance manager is now located on the site, reports directly to upper management, to me, and so does the

project management organization. There is a monthly report prepared by the quality assurance manager identifying such problems and indicating what directive action has been taken or needs to be taken.

Senator

Well, let me rephrase the question, because my question is: What changes have taken place in the management at PSI as opposed to the lower level personnel in response to this. Now referring specifically to the appendix entitled Notice of Violation Docket No. 50-546, addressed to Public Service of Indiana, and all officers of the corporation, which was appended later to the stop work order from the Nuclear Regulatory Commission. And on page 3, cited the reasons for the failure of the quality assurance programs. "7. Failure of corporate management to recognize the need to be more responsive to site quality assurance, quality control manning requests." What changes have taken place in management of Public Service of Indiana to indicate that we can rely on that management will recognize the need, as opposed to the paperwork.

Shields

There was a process whereby such requests were directed to the Manning Committee, if you will. That committee has been abolished so the requests go directly to the responsible managers and they are honored when they come to me and look for my approval. Now then you do not require any additional corporate justifications or approval.

Senator

Well, who did it go to before?

Shields

They were directed, as I say, to the head and then went to a manning group which evaluated and further passed on

Senator

If I follow the gist of your answer, your saying that Hodges complaints were not reaching you, or the management. And I'd like to know who the intermediate management personnel were who weren't forwarding these problems on.

Shields

Well, I think that's a good question, because it doesn't exist right now. That part of the problem has been solved.

Senator

Well, have they been fired, or just moved around?

Shields

They are not in a position where they respond to management requests, approved them or otherwise evaluate them.

Senator

Who were the personnel insulating the management from Hodges?

Shields

I'm sorry I didn't understand your question.

Senator

Who were the personnel insulating the management from Hodges?

Shields

Mr. Hodges is not in that line of responsibility now for him to determine the requirement, or the qualifications of the personnel.

Senator

My question was past tense. Who were the management between, who were the personnel between management and Hodges insulating them from those reports?

Shields

Mr. Hodges reported to a Dr. Coughlin, who reported to the senior vice president, who reported to the president and chief executive officer.

Senator

Who is the senior vice president he reported to?

Shields

Mr. Renny Patton.

Senator

Pardon me?

Shields

Mr. Renny Patton.

Senator

Patton. Is this Mr. Patton still with PSI?

Shields

Yes, he is.

Senator

And what position does he hold?

Shields

Assistant to the President and Chief Executive Officer.

Senator

Is that a promotion, or a lateral movement?

Shields

I would not characterize it.

Senator

I'd like to, I'd like to ask you one question before I turn over this report, briefly, which is: Would you welcome a state legislative investigation of the sufficiency of the state oversight under the ASME Code, under Section 3, of the Indiana Code, Title 22.

Shields

Say it again, I'm sorry.

Senator

Would you welcome the state legislature looking into whether or not the board of boiler and pressure vessels is adequately staffed and has an adequate affirmative program of inspection. To document the state's role in quality assurance management.

Shields

I think we found that organization operating very well and I think the legislature has to speak for itself.

Senator

One of the finest representatives in the organization I've had to deal with, and I've always found him to be and very fine representative and very honest. I'm sure he's paid very well to make sure that the legislature does speak with some assistance in your direction. I want to turn your attention to page roman numeral 3-H-4 of the Brown report.

Shields

3-H-4, I'm sorry.

Senator

3-4-H-4. Would I be reading this correctly under item 4.a. to say that we can rely on the, PSI will, will be inspected by the ASME to make sure that

their implementation plan is adequate. But the ASME is going to look over your plan before you go ahead with your final permit pursuant to your certificate. ASME is going to look over your plan to make sure it's accurate before you go ahead.

Shields

They've already looked over our plan. That's the basis on which they issued the interim letter. The next step is for them to look over the implementation of that program and that entails working to that program, and it is our intention that working to that program be coincidental with the NRC's permission to continue that activity.

Senator

Is Nutech helping you write your plan and helping you implement your plan, Nutech....

Shields

They assisted us in preparing the ASME quality assurance manual. They will assist us also in the implementing procedures relevant to that manual.

Senator

What is the relationship of the National Board of Boiler and Pressure Vessels to the ASME and their code.

Shields

It is an inspection arm, if you will, it is, it is not part of the ASME.

It is an association made up of the individual states chief inspectors.

Senator

Do their memberships overlap

Shields

No they do not.

Senator

Who is the president of Nutech

Shields

Who is the president of Nutech?

Senator

Yes.

Shields

I believe his name is

Senator

Okay, what is the relationship of Mr. Reedy with

Shields

Mr. Reedy works for Mr.

Senator

And what is the relationship of Mr. Reedy to PSI?

Shields

Mr. Reedy is a consultant the Nutech organization as a consultant. Mr. Reedy has worked with PSI.

Senator

And what does he work with PSI on?

Shields

ASME matters.

Senator

And what is Mr. Reedy's relationship to the National Board on Boiler and Pressure Vessels?

Shields

He has no relationship to the National Board of Boiler and Pressure Vessel Inspectors.

Senator

What is his relationship to the ASME?

Shields

He serves, as do many industry people, on a committee of ASME, as a matter of fact he chairs Section 3 of the ASME.

Senator

I'd like to direct your attention to the next page of the program concerning the implementation of fourteen items included in the ASME Code. And to take one as an example, you saw PSI. this is item roman numeral 4, is reviewing the documentation of the code work PSI has performed in the past, and assured that the requirements of PSI - ASME quality assurance program have been met. Any variance from the quality assurance program will be corrected in accordance with that program. I assume that is referring to the material that was listed as nonconforming when the National Board issued a citation in November.

Shields

It goes far beyond that.

Senator

O.K.

Shields

It goes to review of all the material that has been received relative to the ASME Code to make sure that it does fit the program. If it does not, it will be so identified in nonconforming, and will be made to conform or will be removed.

Senator

Is it your understanding that the problem will be resolved by either documentation or replacement of all nonconforming parts before there is a resumption of work.

Shields

No, it is not.....before resumption of work.

Senator

Will PSI be willing to wait for that problem to be corrected, and approved by the NRC, before granting the resumption of work? Safety related work.

Shields

I don't think that's a necessary requirement at all.

Senator

I said, would PSI be willing to wait until those problems have been resolved and approved by the NRC before resuming safety-related construction?

Shields

Well, certain requirements are going to have to be approved by the NRC.

Senator

Would you be willing to wait?

Shields

I think that's a needless expense. It doesn't add to, or detract from quality.

Senator

On question. When I have -- two questions -- when did Wabash Valley Association purchase interest in the Marble Hill project?

Shields

They gave a letter of intent in 19--The first indication was about 1976 and the date they made their first payment was, I can't recall. It was in, uh,

Senator

To the best of your recollection.

Shields

The formal contracts were submitted as part of the licensing process which was in 1976, uh, 1977.

Senator

1977. When did you first advise Wabash Valley Power Association that you were in nonconformance with the ASME Code concerning N - certification.

Shields

I don't know. They may have read it all in the papers before I did.

Senator

It is my understanding that you first determined you needed certification in October of 1978. So my question is: When did the management of PSI first let Wabash Valley Power Association know they were in nonconformance with the ASME Code, state law, and NRC regulations, concerning their lack of N - certification.

Shields

Senator, it's a long and laborious interpretation of whether or not N - certification is required by code and law. We have elected to do that, and we fully intend to do it to remove any doubt about meeting ASME requirements.

Senator

On accepting your date of October, 1978, the purpose of this question, and I'll ask it again, when did PSI notify Wabash Valley Power Association that they were in nonconformance with federal and state regulations concerning N - certification.

Shields

You mean that Wabash Valley was in nonconformance?

Senator

No, you know what I mean.

Shields

O.K. you ask for an answer. I can't give you an answer, I don't recall the date. or if I did

Senator

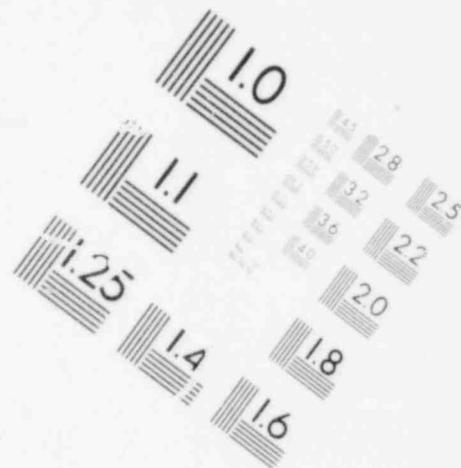
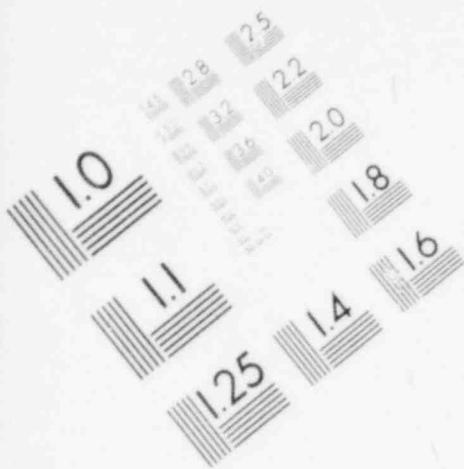
I like to thank the Committee for the time. And I appreciate your taking the time to come here to have the hearing locally. And thank you.

Stello

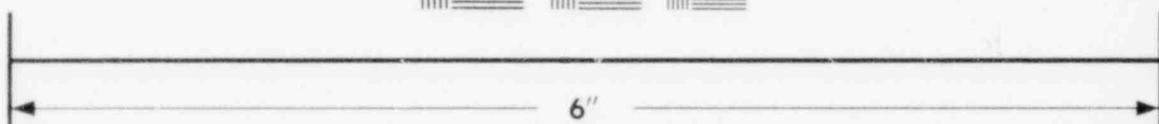
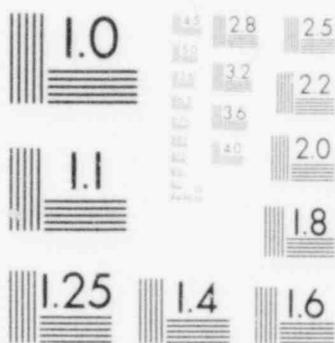
Go ahead, please.

my name is Rose . I live in New Albany, Indiana. And I'm with an organization called Citizens Alliance for Safe Energy. That group directed me to come tonight and make a statement representing their views. We are here before the NRC again, to express our frustrations with the way things are. We're here and we are speaking to you, but we have a very deep concern and a great anxiety that though you appear to be listening, you are not really hearing what the members are saying to you. You try to take advantage of the means of communication with you that we have available to us. We're not convinced that this evening's meeting is going to do us any good. So I'll . It's always educational to look at motives that people have for the causes that they advocate. We all know that PSI motives here tonight, include one of financial profits. They expect to make money operating Marble Hill. The people who are here in opposition have no financial gains in mind. In fact, most of us are spending far more than we can afford. We are here to express our concern about Marble Hill, about PSI, about nuclear power in general, and about what we perceive to be a real threat to the safety of ourselves, our families, our environment, and the future, PSI cannot properly care for and maintain and build with building materials that they have on their site. How are we to believe that they will then be able to care for and operate safely, the highly complicated, technological piece of machinery that is a completed nuclear power plant. There have been changes in personnel at PSI. We understand that is one of the things you may have done to satisfy your requirements. But being

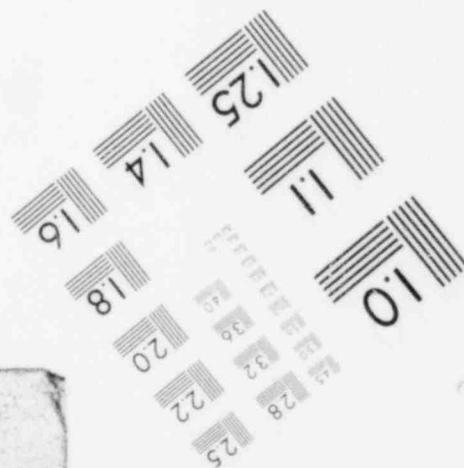
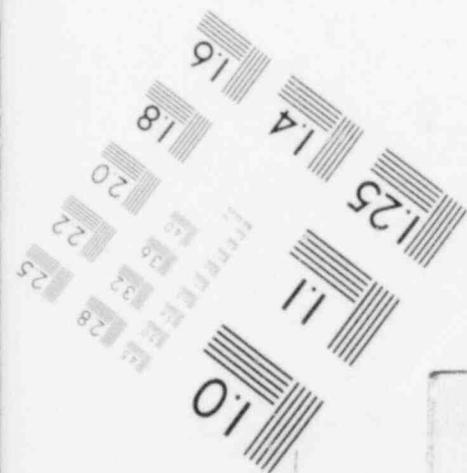
human and having learned already that there is question, or reason, I should say, to doubt some of their public statements. We now find it hard to trust what they say, particularly when there was a record of continuing violations in different areas of the construction. We have seen PSI's chief executive, Hugh Barker's voice stating publicly that he is the person at PSI who has the ultimate responsibility for Marble Hill. Then we have heard that Mr. Hodges is gone from his position, that Mr. Stevens is gone from his position, Dr. Coughlin is gone from his position, he is no longer visible in any field. But Mr. Barker is still firmly in place. Why is he still on the top? If the responsibility for Marble Hill's building and operations is ultimately his, then does not a good corporation ensure that top executives face that responsibility? Does it not follow that this is the responsibility for violations, also? In consecutive weeks, you've heard previous to tonight, Mr. Barker reversed his accounts of work on the concrete portion of Marble Hill. One week he said patches had been properly taken care of, and the following week he said they would be pounded out (as he said they would). Now I'm not sure what kind of credibility he expects with these kinds of statements made in public. We strongly feel that Mr. Barker should be removed from his office, and that there will be no credibility in PSI until that happens. We are aware that the FBI investigation has taken place, that it has been conducted. We learned tonight that the results of it have not been made available to you, apparently. We feel that construction cannot be resumed at Marble Hill until at least that investigation results are made public. In fact, we believe that there are so many problems in the construction of this plant, and in its quality assurance program, that



**IMAGE EVALUATION
TEST TARGET (MT-3)**



MICROCOPY RESOLUTION TEST CHART



we're skeptical that it could ever be built, that it could be.....

By that we mean, completed in a manner that it could safely function. We hereby state our conviction that existing work must be taken back to zero. To ground level or below, I don't know where they started. And done over again, before we can believe that that construction is safe, and properly done. I really wish that I could say that I feel assured, by these gentlemen from PSI, by their attempt at the work being done, and the work that is contemplated being done at Marble Hill, and that that construction will be safe as they say. But you have to understand that we have become very suspicious people. After seeing so many misleading statements, and half truths, and outright lies exposed during our own lifetime, now PSI is being forced to play catch up in an area that we think that they should have been taking care of all along. We continue to question the credibility of PSI, and of the plans and instructions that you have set up are no good at all to any of us, if they are not adequately and properly implemented. Now, where is our recourse? Normally, we could turn to their elected politicians. We're in the Ninth Congressional District. Mr. Hamilton, our own U. S. Representative, was not invited when there were hearings in the U. S. Congress on Marble Hill. It was up to Congressman Joel Deckart from the Eighth District. Marble Hill is located in the Ninth District. We would like to have recourse to our congressman, but apparently, we do not, so we're back here, at the NRC meetings. I understand that this is not a formal hearing. I understand that this is a public meeting, and we appreciate the fact that we are allowed to come here and express our opinions publicly. However, I would make a request that you have some of this statement, some of these statement, some of this testimony done under oath if you're going

to do it again. We would like to have the statements from Public Service of Indiana particularly done under oath. You must understand, all of us have been watching television for the last three days. We've been watching the people from Pennsylvania, protesting the NRC. And watching the NRC Commission looking very impassive at times. We've been wondering if you are really hearing the concern that people have. What we want you to understand, is how deep that concern is, and how much it is growing, about the safety of Marble Hill, particularly here. We are going to try to convince you that the people do not want construction to be resumed at this time. We're trying to avoid learning the Three Mile Island lesson the hard way. Thank you.

Speaker

Sue Stocks, Westport, Kentucky, instructor in geology. Back to ground level, and back to concrete I would like a number from this side if possible. As you know, this part of Indiana and Kentucky sits on the edge of a major fault zone. Fault zones are notorious for causing untidy little events like earthquakes. Earthquakes, concrete breaks, pipes break, all sorts of complications. This particular fault zone is not terribly active at this time in magnitude, but it ranks with its sister, the San Andreas Fault in strength. The fault, when active, has caused the Mississippi River to back up, it has stopped pendulum clocks in Philadelphia, it has caused church bells to ring in South Carolina. My question is, in relation to this, what number on the Richter Scale is the concrete work designed to?

PSI Speaker

You have to bear with me on that. I am not a geologist. or a seismologist.

but our plants are designed to a seismic acceleration level safe shutdown earthquake of acceleration of 0.2 g's. This corresponds on what I think is called the Modified Mercals Index to an intensity.

Speaker

Pardon me, but to the Mercal's Index is based on damage, so if you have a major earthquake, and if there's no building there, of course it ranks very low on the scale. I specifically required the Richter scale which measures intensity.

Answer

If you could convert that to the Richter scale it would come in at approximately five.

Speaker

Come in at approximately 5. This is not going to allow us to sleep much better at night. I hope that you will improve on it. Thank you.

Speaker

Hi, it's me again, and I have a question to ask specifically to PSI. I have heard what I consider to be a very serious allegation concerning PSI from someone whom I consider a reliable source, and whom I believe both PSI and NRC consider reliable. This allegation is that PSI has violated the principle of the stop work order. I would like PSI to tell the truth about this, if you can tell the truth. Isn't it true that PSI, during the stop work period, has pre-assembled safety-related components off-site?

Shields

Contractors supplying material to PSI have constructed safety-related items. The stop work pertains to those activities on site, of installation, material receipt inspection, and all those safety related items on site. The order does not pertain to the manufacturers of those materials, off-site.

Speaker

Yes, but isn't this preassembly more than would normally go on? Is this not more assembly that would normally be done on-site?

Shields

Not that I'm aware of, no, Sir.

Speaker

This is the information that I have received.

Shields

I'm not aware of that, and I don't believe that that's true.

Speaker

I consider it a very reliable source.

Shields

I would suggest that you communicate, I would communicate your concern to the NRC, and make them aware of this.

Speaker

First of all, I'd just like to say that it is my understanding that a concrete structure

Stello

Could you state your name, please?

Speaker

Martha Hill, I live in Oldham County, Kentucky, which is within twenty miles of Marble Hill as the crow and the radiation flies and I would like to say that it is my understanding that a concrete structure, such as Marble Hill, that will have to withstand tons of pressure, water pressure, excuse me, must be a continuous pour of concrete, rather than a patch job. Which means that PSI would have to start from scratch with a continuous pour. Truck after truck after truck with continual concrete pouring rather than a patch job. But I can see from this meeting tonight that you all are going to insist that patch job you've done is sufficient. Am I correct? That the patch job is going to withstand....

Stello

I don't know what you mean by continuous pour of concrete.

Speaker

Okay, are you familiar with the Hoover Dam? The Hoover Dam is a continual pour of concrete. It was not stopped and started and stopped and

started and air bubbles patched. It was a continual pour so that it could withstand pressure.

Stello

I would say that I'm not familiar with the concrete pouring at Hoover Dam. But I'd be absolutely amazed that they didn't have any voiding in that concrete.

Speaker

Check it out. Also.

Speaker

I'm saying that I have a reliable source who pours concrete for a living and now that Indiana has a right to the Ohio River, which definitely was a political victory for Public Service of Indiana, is there going to be a public hearing for PSI to tell us how safe the nuclear waste water that they're going to be dumping into our waste, our drinking water

Stello

Yes.

Speaker

There is going to be a public hearing on that?

Stello

Yes. There already was one. There will be another one. We have requested Excuse me..... The one at the operating license is not mandatory. If there is a request, there would be one. But whether there is one or there is not, that analysis is required, and will be prepared.

Speaker

Are you saying, though, that if someone requests a public hearing on that that you will comply

Stello

At the operating license stage.

Speaker

And also, with the respect to my remark on monitoring, before, what I was trying to say was that if we didn't have Marble Hill we wouldn't have to be monitoring the air that we breathe, and the water that we drink for possible radioactivity.

Speaker

My name is Terry Brailers, and I live in Oldham County, and my parents have property in Oldham County, and it's been pretty much estimated if there is an accident, that property value return would be around three cents on the dollar. So I've got a lot to lose here. Okay? My parents have a lot to lose here. Now, what I want to ask Mr. Shields, especially, PSI in general,

how many times have you all been caught lying? Can you give me an answer for that, first?

Shields

Well, in the first place, I don't know that PSI has ever lied. I would like to explain, and I would like to address, also, that I am a God-fearing person and my answer and my response would not be any different whether I was put under oath or as I have spoken here tonight.

Speaker

Well, being a God-fearing person I want you to know you can go to hell for lying, same as you can for stealing. Now I want to know, it's been reported in the Courier Journal that you've been knowingly buying defective hardware from, I believe, Pinkney Mechanical, who were subcontracted, and I would like to know what you're going to do about replacing that stuff.

Shields

We indicated before all the materials that have been received will be confirmed as to compliance with the NRC and code, the ASME regulations. Anything that cannot will be removed and not used.

Speaker

All right, also reported in the Courier Journal, several of those cooling pipe hangers have already been installed in the concrete. Are you going to rip them out, throw them away, and start over? Or are you just going to patch it up and keep on going?

Shields

The review by authorized inspector and other people inspecting that and reviewing the documentation relative to the code, the indications are that those items all meet the code, and as Mr. McMahon indicated earlier there was one item which is still in the shop which did not ().

Speaker

One item, my, my, my. The Courier Journal says you've got some of this stuff over here and some on site in the concrete. You're caught lying again, and then you turn around and ask us to trust you? How would you get someone--how would you get your PR people to cover that up? That is safety-related, and you say it's safe. And I won't, I can't buy that.

Speaker

My name is Gretchen and I'm from Beddington, Indiana. North of Seymour. And I was wondering what you're going to do with all the garbage after you're done playing around down here? The waste.

Shields

The waste disposal issue is something that is of concern to many people. No question about that. It is something that it is not within PSI's power to correct. It is within the power of the United States government and we have to develop the policy (mixed voices).

Speaker

Who is going to clean up Maxey Flats?

Shields

I'm sorry

Speaker

Who is paying for Maxey Flats?

Shields

I can't answer that question.

Speaker

Taxpayers. I don't want it. (Mixed voices).

Make sure you know what to do with the garbage before you make it.

Shields

....from nuclear power generation is also very applicable to the weapons program, and it's been with us for many years, and the bulk of the problem rests with that.

Speaker

But I'm not for the weapons either, I The second thing I wanted to say was I don't appreciate getting your propaganda in my mail once a month.

Speaker

And now, for what I hope is a refreshing change of pace - My name is Doug Goddy, I live in Madison as I have for three years. Since I came to work for Public Service. I'm a construction engineer at Marble Hill. I have family down here, and that seems to be a point for some to stress and I do have a question I'm going to put to the NRC here, but first as many others have done, I'd like to make a few observations. I've lost a lot of respect, tonight, for the anti-nuclear movement. I've never been to one of these meetings before, and I hadn't realized how much basic ignorance they have. That's been amazing . . .

constant misdirection of the questions. But, that question aside, okay, I'll try to speak a little louder. That question aside, I'd like to commend well . . . I'd like to commend, the NRC for the job they've been doing. They're in a tough spot, and with that preamble, I'm going to attack them again, just a little bit. The problems we've had at Marble Hill, which were considerable problems, but in any project at all that you undertake, you do some work, you evaluate the work, you fix what's wrong with it, you go on. Which is what we're trying to do. And it seems that this whole shutdown, my reaction to is it really kind of overkill, more than necessary and brought on, perhaps, by the, by the way, the political way that the evidence is . . . normal channels, and also by the political climate of the times. This--how, how is NRC affected by the political climate, are you, do you really look over your shoulder, at what people are saying that way, and say ah, well, we better really get tough on Marble Hill. TMI just happened, and we're under a lot of public scrutiny. Or do you really look at exactly what the problem is, and try to take no more tougher action than is really required to correct it?

Stello

Well, the decision, ultimately, to shut down Marble Hill was mine, so I guess I can speak kind of personally to it. There were a number of problems indicating that the quality assurance program was not functioning as it should. You recall that there were earlier occasions where it was necessary that stop concrete pouring and construction activity. The intensity of the problems that were being identified through the spring and early summer, and then receiving the report from the National Boiler Pressure Vessel Inspectors, suggested to me there was a need to stop the construction work, and examine the very fundamental question of the adequacy of the quality assurance program, and not permit construction to start up again until those issues were resolved.

A portion of the meeting, at this point lasting about 15 minutes, could not be transcribed because a later portion of the meeting was inadvertently recorded over that part of the tape recording.

Stello

Have been looked at and has been found to be ruptured. I think you need to look at both the work he has done and the work of others who have looked at his work. I think you ought to base your judgement on the basis of the whole record. Excuse me, I didn't hear you.

Speaker

A couple questions for PSI. I suppose, you know, I heard this confirmatory order and all the things that came out in the media shortly after that, it was my understanding that PSI top management was going to be more and more taking part in this plant. I'm just curious as to where is president Barker tonight?

Shields

To the best of my knowledge, he had a meeting in Lafayette, Indiana. And it was not planned that he be here tonight.

Speaker

Okay, I find it interesting that he's the one that avails himself to the media continually but is apparently afraid to avail himself to the public and to the NRC. Another question, what has happened to the vice president of Nuclear of PSI. Dr. Coughlin I believe is his name.

Shields

Dr. Coughlin reports to me as a technical consultant at this time.

Speaker

Okay, is it not true that two years ago that he had your present position as far as Marble Hill is concerned?

Shields

No, that is not true.

Speaker

Okay, what position did he hold, what responsibility did he hold at the time?

Shields

Vice President of Nuclear. He had environmental responsibilities, responsibility for the quality assurance program, and for fuel management. He did not have any responsibilities in the project management area.

Speaker

He has no responsibilities in quality assurance today, now?

Shields

No he does not.

Speaker

You would call that a demotion?

Shields

A shift in responsibilities.

Speaker

A shift in responsibilities. Okay, is he still under the title Vice President of Nuclear?

Shields

No he is not.

Speaker

What is his title now?

Shields

He's a technical consultant.

Speaker

As a consultant is he on PSI staff?

Shields

Yes, he is.

Speaker

What has happened to Frank Hodges?

Shields

Frank Hodges is functioning as quality superintendent, quality engineer and procurement director.

Speaker

Okay, that's a change in position since the hearings in November, too, correct?

Shields

That's correct.

Speaker

Is that a demotion?

Shields

It is again change of responsibilities.

Speaker

Okay, relating to the same thing about President Barker as far as PSI, PSI, if the Nuclear Regulatory Commission, the commissioners themselves are going to make a decision on this, why are they not here tonight?

Stello

It is clearly not possible for the Nuclear Regulatory Commission to fly the commissioners to attend every such meeting such as this, throughout the country. Physically it is not possible. There are meetings going on on just about every nuclear plant. Last week I attended two meetings up in Pennsylvania, while there were two other meetings that were in Pennsylvania, senior officials from the Commission represented them. I don't believe it would be possible for them to conduct the business of

every such meeting. However, they have made it clear to me, that the results of this meeting as well as my views and recommendations would be reviewed by them before a decision on restarting Marble Hill was made.

Speaker

Okay, without a court reporter here it's going to be kind of difficult for them to really know the results of this meeting, is it not?

Stello

No, we're taping the meeting. We, unfortunately, didn't have the reporter here with us. Excuse me, do you know where he is?

Thornburg

No, I don't know where the court reporter is, but if there is any responsibility for him not being here, it is probably mine, in that I make the arrangements for one to be here, I expected him to be here, I confirmed it with a memorandum, and he wasn't here, and I'll find out why he wasn't here when we get back to Washington.

Speaker

Okay, well, it's that you're so anxious to get a hold of the mike Mr. Thornburg, I'd like to ask you one question, specifically. I know that you're aware of the document that shows that concrete testing, the one document that I think was referred to earlier, the seven, twenty-eight and ninety day test. You have seen the document, to the best of my knowledge, and I just wondered how you would respond to that document. You have not seen the document that showed a test failure. That did not occur in a congressional Office in late June.

Thornburg

I was not shown any document. The document was read to me. I was not shown any document, and I still haven't seen it. I've asked the regional office to investigate that matter, but I was not provided with the document.

Speaker

Mr. Strasma, from the NRC, has indicated to me in conversations on the phone, "that the NRC is skeptical of PSI's ability to build a safe nuclear plant." How does PSI stack up in relationship to other nuclear utilities?

Stello

We don't have any formal ranking that would give me a way in which to answer your question. Ranking from one to nine, there were some earlier studies done, which I can let you have, where various utilities were looked at from different points of view by three different consultants, which intended to give a little bit of that flavor. I don't even know if Marble Hill is included in that survey. I don't think it was. There would be no way in which I could answer the question.

Speaker

Say on a scale from one to ten.

Stello

To my knowledge, I'm not even sure it's possible.

Speaker

Can I ask you if you concurred with Mr. Strasma's remarks that you're skeptical are you, are you personally skeptical of PSI's ability to build a safe nuclear plant?

Stello

I would go a lot stronger than skeptical. I decided that an order was necessary for the construction to be stopped until it was fixed. I would use a word, I guess, stronger than skeptical as unsatisfied.

Speaker

The testing that, the sample testing of the concrete work in place that is going on is being sampled and tested by a gentlemen named Minoy. From reading the inspection reports that had to do, this was in October or early November, that had to do with this particular type or testing, I got the impression that this was a brand new machine a brand new machine, a prototype that had never really been used before, and that the only person that knew how to use this was Mr. Minoy himself. Is this a new machine, how can you be satisfied that the concrete testing is sufficient to protect the health and safety of the people of this area, and finally, is it regular for the NRC to allow an untested test to determine whether or not a concrete structure is

Hawkins

Your question dealing with the acceptability of the method he used, it is something that we looked at, it's basically the same nondestructive method.

Speaker

What's your name again?

Hawkins

Hawkins. It's basically the same nondestructive method used on metal, except a different frequency. We looked at it very carefully, and it had been used in the industry before, it's not prototype. Based on that, we

Speaker

Where? Can you document that for me?

Hawkins

I believe it was used several times, one time, I believe, was at a project in Texas, and another one

Speaker

The name of the project?

Hawkins

South Texas Project, and the other Waterford.

Speaker

What were, what were the events surrounding that to cause the test to have

Hawkins

Basically the same thing that you find here at Marble Hill. They wanted to do some type of nondestructive examination on the concrete to verify that the concrete was structurally sound.

Speaker

Okay, what, what is a good statistical basis for sampling. You know, with the knowkedge that one place that lacks the necessary structural integrity could be the place leaked immese amounts of radiation, what kind of sampling basis did you use? A hundred cubic feet of concrete, a thousand cubic feet of concrete.

Hawkins

I'm working on my memory now, several months ago, the study was completed in November, I believe, November 20. As I recall, the sampling method was based on a statistical sample, okay, which has to do with something that I'm not that familiar with. Our people that are familiar with the statistics part of it are not here, and they did address it at that time, and found to was acceptable. I believe they took sixty areas, typical areas throughout the plant at different types of concrete, in other words varying difficulties or varying difficulties of placement of concrete, or congestion of steel, that sort of thing. They evaluated those areas and concluded, and I might add that we reviewed their reports, watched them implement their procedures and do the test results and actual coring and we also concluded along with them, that the based on the statistics, statistical sample of the acceptability of the in place concrete is there, beyond what the code requires.

Speaker

Okay, that's nice that we have no statistical accidents. I have a real drawback in what I heard, I don't know what the gentleman's name is

there in the back row that was talking a while ago to PSI, but he said, and I have it on tape, and I wrote the quote down as close as I could, "the intent of the Portland Cement study the intent of the study, was to show that the external voiding did not go into the interior. Now that seems like it's built in bias to the study, that that is indeed the way the study was conducted. If the NRC allows construction to continue, and the faults of the past that PSI had also continue, is there ever a time when the NRC will permanently stop construction of this apparently incompetent utility.

Stello

We clearly would not allow the plant to be constructed the way that it was constructed in the past, that's why we stopped it. If on the advice I received earlier, I want to emphasize if, when construction were to be permitted to continue, it would be with our belief that the problems of the past no longer existed, and with the commitment, that we would monitor the activities to assure ourselves that that fact is the case. If it ever turns out not to be the case, then obviously we'll come to the same conclusion we came to in the past. Not to allow them to continue construction.

Speaker

And shut it down again, until they promise you to do a good job again, is that, you know, like is there--permanent is the operative word in my question. Is there ever a time when you'll say we've had enough of this utility, we aren't going to let them construct this plant. If they continue at their present posture.

Stello

I guess if we would conclude that the problems they had were not fixable, that is that they constituted as a company could not build a nuclear plant safely, then I guess we would have to come to the conclusion that we wouldn't allow them to build it.

Speaker

Glad to hear that. I don't have any more questions. I do have one last statement. In retrospect, I mentioned in a hearing two years ago, in that hearing I was kind of upset because all my friends had come, taken a day off school, and wasn't allowed the public participation that's supposed to be allowed people in in NRC proceedings. And I spoke at that point of the NRC meaning the nuclear regulatory circus. Well, in the past two years, I've studied I've studied a lot about the NRC, and I've kept my eye on PSI, and other nuclear industries around, in particular, Babcock and Wilcox, who twenty miles from my home in Evansville, constructed the Three Mile Island reactors. I've come to the conclusion that it's not the nuclear regulatory circus any more, and it's a sick joke, and our lives are the punchline.

Stello

I wonder if I might interrupt to ask a few questions, I know the hour is late, and I'm not worried about it. We're not going home. Don't get excited. But I, I'd like to take back with me, I guess, some understanding or awareness of the benefit of such a meeting. I know it gives us an opportunity to hear what you have to say, which we're very interested in,

and want to do, but I wondered, from your point of view. You're taxpayers, like I am. We come here, you're paying for it, believe it or not. Is it worthwhile, are these meetings good? Should we not have them anymore?

Voice

No matter what we say, or what happens, you have not listened, we cannot change it. We have no self-determination.

Voice

All it's good for is to give a vent to our anger at you, that's about all it amounts to.

Voice

One benefit derived from these meetings, is to allow people who do not know the details and facts to express their emotions. The majority of the people in this area are solidly in favor.

Stello

Now look, remember what we said before, you get more than one talking at a time, and you can hear each other great, but I can't hear anybody. One at a time.

Voice

I have two thousand signatures I gathered in two weeks time. It is not a solid people for it. It took us two weeks to gather two thousand signatures and they are still coming in. And it will do us no good, it's a rural area. So what, if we have a hundred fifty thousand, it will make no effect, because we have no self-determination.

Stello

Alright. Okay, let's get back to, let's get back to, I'm sorry, I should have done what I did. You people have waited a long time, and I guess if anyone wants to say anything the proper place to do it is, be patient with me, and wait in line with them. I made another mistake. Who ever asked me if I make mistakes? Where is he? Here's another one.

Speaker

My name is Jerry Bessinger, I live in Henry County, Kentucky about 25 miles from here. And I've been sitting listening all evening, and I've had little better than ten-years service with a federal agency, regulatory agency. In fact, I in that agency. And consequently I have a tendency to identify with you all, and your plight, I've been in even similar situations. And it's been grieving me. It started early, that it's really been grieving contempt, in which you're held. You're here now, receiving this contempt your brothers in your agency are all over the country. And say, GSA is probably the only agency right now with a worse public image than the NRC. Your credibility has suffered, a lot of things. But the big problem is the personal contempt in which you're held, and this bothers me. And not only is it, are the people who are frustrated and venting their anger, I think that's understandable, I don't think that bothers you. But you don't have a mirror out here. You can't see what we see right now. And gentlemen, on this side you look just like what you are. Just like all those people that I've known and had good relationships for very many years. You are like professional federal bureaucrats. Now on this side we have people with little better look than you have and

make three times as much money as you do that are holding you in contempt, and it's hard to stomach, and I'll give you some examples. Mr. Stello, you didn't do it once, you asked at least twice that I remember, and perhaps three times, will they please not read by rote their prepared statements and just summarize and get on. And each time they very nicely smiled and said yes, sir, we'll do that, and then continued to read verbatim. So you gave up. Now they did that to you. You remember that? Sure, you remember. I'll give you, I'll give you another example. No, I don't need a response. I'll give you another example. There was a question from this gentlemen. It was what was level of experience of the employees. And they gave you an answer. They said that it has risen from 168 combined years of experience to 302, if I remember, you may correct me, it's very close to that. Now, the previous question was asked by Mr. Stello to a Mr. Shields, I believe, was how many additional employees they would have. Now you clarified this question on years of experience, and they responded and narrowed it down to quality assurance employees. The numbers of quality assurance employees rose from 40 to 78. That's almost double, as as the level of experience rose, from 168 to a little better than 300, almost doubled. But, see, he didn't answer your question. Your question related to the level and the experience the individuals have, not how many bodies. They didn't add experience, they added bodies. But as they have been generating buzz words and not answering your question, they didn't answer your questions again, and again, and again. You'd ask a question, and they'd answer something else. The level of experience went down from 4.2 years average experience down to 4.1 years average experience even though they increased the number of bodies almost 100%. Are you following

me, because this was your question. It wasn't your question. Maybe I, maybe I missed. I don't know maybe it was the fellow on one side or the other, but I was almost sure it was your question about years of level of experience. But the point of it is that answer was accepted. As reliable it was surrounded by buzz words just like all the others. This is contempt. It's contempt for your position and your responsibilities. Now, what can you as an agency do about it? So long as you're in a position of coming for--people want these in a proven power plant. You don't make the decision, but make the recommendation. You've got the evidence, your commissioners do not. They depend upon you. Where you've got Three Mile Islands and Browns Ferry's and all these situations, its, your credibility that's suffering. You all are in a box, now how can you gain some credibility? Not by throwing some innocent to the wolves, but where you've got a situation like this one, where you've got documentation all over your files, you know what Marble Hill's like, much better than any of us. And you've got a chance, you know, you just nail one and then you get to make, bring the rest of them in line, and you get the rest of them built safely as the industry needs. But if you don't nail one, then all the rest of them are going to continue to cut corners, too, and your credibility's going to suffer, and you're going to catch hell from the public, and all the press you're going to get. You've got the goods on this one, and you know you got it. Is this making sense I'm talking about the preservation of your agency, now. You understand what I'm saying? You're an enforcement agency. You know what it is, you've got, you know, you've got to lock that up once in a while. Not slap his hands, not give him probated sentence. You've got to put him away. Now, it isn't the time. And this is just one plant, that's not very far along, that is shoddily built. You've got an opportunity. Thank you.

Speaker

My name is Sarah Lynn Cunningham, I'm from Louisville, Kentucky, and if I've been in this battle for a long time. There's some things that I still lack and one of those is an environmental impact statement from Marble Hill. The Louisville Paddlewheel Alliance is sent a single copy to share. It fell apart years ago, and nobody has been able to supply us with another copy. I wanted to know, is there anybody here that I could give my card to that will see to it that we get a usable copy? OK. I'm also wanting to know, I haven't figured this out in all these years, who does the NRC answer to?

Stello

It's an independent agency that has oversight committees in Congress that have that responsibility.

Speaker

Under what law is that authority given to you. Under what law was that authority given to you?

Stello

The Atomic Energy Act of 1954 and the Energy Reorganization Act of 1975.

Speaker

Is there someone that can give me a copy of those laws?

Stello

Well, give your card to the same gentlemen that raised his hand before he is now charged with the responsibility to get copies of those, too.

Speaker

Thank you. All right, I'm willing to look it up. I'm willing to look it up myself if you'll write down that nice long name for me. Thank you. I'm also wanting to know who did the sink hole preparation for the job site. Both reactors sit on top of sink holes. Who was it that fixed the sink holes so that it would be a proper site for a reactor? What company did the consulting work? I can't hear you. I want to know what company, who did the consulting work, and who carried that out?

PSI Speaker

The consulting work for the site was done by Sargent and Lundy engineers and Dames and Moore who is also a consultant on the effort, I think.

Speaker

Thank you. Is there anybody amongst you all that's willing to stand up and tell us how much you make a year?

Stello

All of us.

Speaker

Well, let's do it please.

Stello

I make \$50,103. What's my what? When I come here, I think I get \$35 a day. That includes my hotel room, my laundry, my food, my telephone calls, and everything else. And as a rule, at the end of the year, I get a little more back from the government because I file my income tax, and don't usually cover my expenses. Mr. Keppler, you only make as much the same money as I make? Mr. Thornburg, makes the same money as I make, you have any objections? It's a public document.

Speaker

That's the reason I asked.

Stello

Do you really want this information?

Speaker

Well, normally I wouldn't ask someone what they made, but since you're all public officials I think it's appropriate that we know since we're all here on our time anyway.

Stello

I hope you understand, we're here on our time, too.

Speaker

But this is your job.

Stello

I'm sorry, I'm not required to work at this hour. I work eight hours a day and that's all I have to work if I wanted to be one

of those faceless bureaucrats. And this meeting would start at 8 o'clock in the morning. We are here on our own time, and we ain't going to get paid any overtime.

Speaker

My point is that your salaries depended upon the perpetuation of nuclear power, and we aren't in the same position, and since we're funding that salary to you, I think it's appropriate that we know what kind of dollar amounts we're talking about.

Stello

You can get the salary of everyone in the government, if you want.

Speaker

I think the group here would probably like to hear it right now.

(voices away from microphone)

Why don't you stand up here, and if you have no objection, just tell it.

I'm sorry, I must make the same, he can't make more than I do.

(voices away from microphone)

Speaker

Could I get the same information from Public Service of Indiana since the consumers are paying their money?

Shields

Certain of ours are also a matter of public record on file with the Public Service Commission.

Speaker

I understand that.

Shields

Mine is \$70,000.

Speaker

Could we have it now, face to face, person to person?

Voice

Let's put an end to this. This is insulting.

Stello

I think the gentlemen is right. I can't really see that this meeting will serve any purpose by your wanting to know their salaries. Write the company a letter. You might even be infringing on people's Privacy Act and I think you would want your privacy respected as much as you want to respect others. So let's call it quits. We're public servants and I guess it's OK for you to poke some fun at us. Maybe we're paid for that and the others aren't.

Speaker

I mean to poke no fun. I mean to make a point and the point's been made. I'm willing to rest that and go on to something else.

Speaker

Does James Couglin currently hold a position where he has to deal with environmental issues?

Shields

No ma'm.

Speaker

Thank you. I spoke to Robert Pollard. He used to work for the NRC and he told me that you all had to come up with some sort of a design criteria for how far apart you are going to space electrical wiring on the different safety systems of a nuclear power plant. Now if you want to quibble about the story, let me know and I'll drop it. But I. He told me that there were seven people who, from Westinghouse, GE and IEEE and one NRC man and they sat down to say that five feet apart to separate the wiring was sufficient and after that time the criteria was taken to a supervisory body of 50 more people, basically the same type of affiliation, and some of them said that five feet was too close, some of them said that five feet was too far, that still left five feet in the middle so that's what they wrote the standards with and that the plant's are being built that way. Now afterwards the NRC did some testing and found out that five feet was insufficient. I am wanting to know is Marble Hill going to be built that way. With five feet between the safety electrical wiring.

Stello

You got most of the story where I think I probably wouldn't want to argue with you but you've got part of it that I'm not sure whether what you said I can accept or not. What the NRC learned in the Browns Ferry fire is that the spacing in the cable trays although they are somewhat different than the numbers you used weren't good enough to prevent a fire from spreading from division to division. And what the NRC required not only at Marble Hill but at every operating plant is a fire protection system that would cause either fire systems to prevent fires or barriers or some other

means from a fire spreading from one cable tray and causing damage to another such that the plant could not be safely shut down. Those same requirements are now imposed on Marble Hill. And Marble Hill will be required to do what I just said.

Speaker

I've been in engineering school for six years and I don't know what you've just said. And I'm not sure if I just don't understand your words. Is it five feet apart. Is it more or is it less. I don't understand what you are telling me.

Stello

Distance by itself is not the answer.

Speaker

The design is going to be changed instead?

Stello

You have to put in a system that will prevent a fire from one cable tray from affecting the other cable tray such that you can always shut the plant down. There are a variety of ways that you can do that. You can take the cable trays that are in one system close to that one and move them. You can put in barriers so that the fire can't go from one to the other. You can put in fire suppression systems, sprays. All of these are used to assure that that distance will not create a problem with respect to the fire getting from one place to the other.

Speaker

OK. My last point or question or whatever is to Mr. Shields. He said he was a God-fearing man and I think that we can throw out all the engineering and technical criteria out the window and discuss this issue on the God-fearing morality issue. To me it is not moral for a given generation or segment of society and time to generate nuclear waste that they do not know how to deal with and leave it for the next generation. And that to me is a social injustice and I want to know that you can, if you are really a God-fearing man, sidestep that issue and push it off on the government when you started the problem.

Stello

Let me. Mr. Shields tried to answer that question once before and I guess I just didn't have a shot at it. I think I'd like one. Since I am probably both bigger and speak louder than he, I guess I'll go first. Nuclear waste became a problem with the birth of nuclear energy, which probably is one of the reasons it cause much of the problems that it does. It was born in violence. I guess it kind of got wrapped in some kind of a cloak of secrecy because of the need not to proliferate information about nuclear power to other nations so that they wouldn't have the weapons system. And that created a bit of a problem. But nevertheless it's now known that they have a considerable amount of waste and most of the waste that exists today was generated as a result of our weapons program. Just let me finish. Then we can go back and you can ask me your question. What is also not known or widely known that a considerable amount of waste is generated as a result of the diagnostic and therapeutic uses of nuclear

materials in hospitals for example. My recollection is that somewhere between -- if someone has a better number, let me know -- thirty to fifty percent of the waste, the low level waste is coming from those sources at the present time. Could you hold your hand over the microphone. Thank you. The commercial nuclear reactors are also generating waste and will continue to do so. At one point in the development of nuclear power it was thought that the proper thing to do with the waste was to (end of tape)

Speaker

The most important concern to us, I am quoting to you directly from Mr. Barker We know of no safety deficiencies in the design of Construction of Marble Hill. The date of that statement again I repeat to you is April 3, 1979. Would you like to make comments:

Shields

I said that there were some nonconforming conditions identical and they were addressed at the time. Apparently they were addressed sufficiently. And Mr. Barker spoke as he understood the situation at that time. There's no question about it.

Speaker

There was no safety deficiencies in the Construction of Marble Hill on April 3, 1979, and you said that in March the management was advised of this?

Shields

Mam, what I am trying to say is that any time there is a honeycomb appears in a concrete pour it is a nonconforming condition until it is addressed and patched or sufficiently repaired. That was on going and met to the best of our knowledge at that time and the requirements of the specifications and so on and it turned out later that was not being done as we thought it was being done properly.

Speaker

I would like to ask Mr. Stello then when you become aware of construction deficiencies at Marble Hill?

Speaker

My question again was, I would like to ask you when the Nuclear Regulatory Commission became aware of Construction deficiencies at Marble Hill?

Stello

Oh, I think that items of nonconformance were being identified in March and probably even earlier than that I suspect.

Speaker

But the President of Public Service of Indiana was not aware of it on April 3.

Stello

Well, I wasn't finished with my answer. There were inspections back in March or April, where there were items of nonconformance. Item of nonconformance does not mean that there is some tremendous safety problem. If my memory serves me right, typically about one of two inspections of ours are going to find items of noncompliance. That's normal. Now when we really started to realize the fundamental breakdown of QA or at least I started to perceive it and sense it I would put the time for me about May, end of May and the beginning of June when I first started to be concerned.

Speaker

When Mr. Cutshall made his affidavits.

Stello

I don't know if there where ever aware of that affidavit at the time. I think the thing that stood out for me was the letter from the National Board of Boiler and Pressure Vessel Inspectors. The voiding and the concrete problems had already started to come out of investigation and inspection reports.

Speaker

But the National Board of Boiler and Pressure Vessel Inspectors made their report on July 14, 1977.

Stello

I think that that was probably the issue that was. No it was 1979.

Speaker

It was said that this was taken from Frank Hodges' statement to the House Subcommittee and it said that the National Board of

Stello

Will you hold for a minute and let me look to make sure I have the date of that letter correctly.

July 25, 1979, was the date of the letter.

Speaker

Well, Frank Hodges made the statement in his statement before the House Subcommittee in November 1979 and he said the National Board of Boiler

and Pressure Vessel Inspectors released a report November 12 that PSI was cited for noncompliance as early as July 14, 1977, but it has not yet provided comprehensive and responsible corrective action released the report November 12 that PSI was cited of noncompliance as early as July 14, 1977 but had not yet to provide comprehensive and responsible corrective action.

Stello

The letter that I am referring to is the one that created the sense of urgency about the need to take action. That's the letter I just referred to

Shields

Mrs. the Board letter I think was drafted in June, July, the 10th or 12th, it was sent sometime later on, that letter referred to correspondence as early as 1977. Their letter was issued in 1979.

Stello

The letter I am referring to is the July 25th letter is the letter that documented their inspection activities on June 12-14, 1979.

Speaker

All I am saying is somewhere in July of 1977 they must of had wind of it somehow according to Frank Hodges who was that time Superintendent of Public Services Quality Assurance program.

Stello

Mam - I guess what I am trying to tell you is what created the sensitivity for me. If you ask me the question that would be the answer I read in that letter it was additional thing that kind of got to the point where we just have to do something. We had too many things happening that were not satisfactory.

Speaker

Mr. Shields could you tell me why something wasn't done since July 1977.

Shields

Mam, I just want to clear it for the record that the National Board was not involved in 1977. Notwithstanding how you interpret Mr. Hodges remarks to the subcommittee that the National Board in their report issued in July 1979 refers to correspondence earlier and that's, I don't have anything else to say except there was a total question raised at that time that was addressed at that time.

Speaker

Well, I just have to agree with Mr. Stello's comments earlier about in which he said that you can. Repeat that that make all the reviews you want to make of and make all regulation you want to and manufacture as much paper as you want to make but the issue is that you will do what you propose to do, that is the issue and I couldn't agree with Mr. Stello more when what he means by what Mr. Shields has said we are dedicated to quality, anything else doesn't make any sense except a dedication to quality. Do you remember making that statement Mr. Shields.

Shields

Absolutely.

Speaker

All right, now why were you not dedicated to quality when you started this plant.

Shields

We were dedicated to quality when we started the plant.

Speaker

So, you're dedicated to quality the same way now as you were before. Is that right?

Shields

We have not differed in that dedication. We have addressed the problems of building to it rather squarely, straight on, and we feel the resources that one going to see that it is in place.

Speaker

I submit that your dedication, the same dedication that you have now as what you had before was not enough dedication and I wonder why then, Mr. Hodges had to ask for nineteen employees as the quality assistant on the staff and six months later he applied for permitted him to hire six inspectors. Now is that the dedication of quality, Mr. Shields?

Shields

However, his request was interpreted there was no less a dedication, however, the breakdown occurred and it did, and we have addressed those problems and they are not a factor any longer.

Speaker

Of course, I am a person who sat through the Nuclear Regulatory Commission hearing in 1977 and I heard Public Service of Indiana attorney and Hugh Barker himself state over and over again that they would provide nothing but the best quality that they would tolerate nothing but the finest and my question is what is the difference between what you are saying now and what you said then.

Stello

I'll answer that . . . us . . .

Speaker

You were there at the Nuclear Regulatory Commission hearing. I sat there and saw Mrs. Bowers and her two assistants.

Stello

What's different then and now is us. We issued them an order that said we weren't satisfied with what they were doing and to stop. Before they can start, if they start, they're going to have to do it differently than they have done it in the past.

Speaker

Well, but you have not gotten rid of all the past mistakes have you? They have not leveled the plant, the safety-related areas to zero and started over.

Stello

Nor do I believe that that is necessary or does anyone who I know that has looked at the problem feel that it is necessary.

Speaker

Well, I am not an engineer and I would be happy if you would get an outside engineer to allow him to go and inspect that plant, I think that would be a very fine thing and I readily endorse your commitment to Save the Valley do that kind of thing. Thank You.

Speaker

My name is Bonnie and I am from Louisville. I have a number of questions. The first one is: If it is you who makes the decision between how it was being done then and how it is being done now, then we ought to nationalize energy and let the government do it and be fully responsible and cut the profit level and the profit motive that hurried construction and ignores safety-related measures.

Stello

Would you expect the government to do better?

Speaker

No, the old adage that anything the government takes over will be done as the post office is done doesn't hold water. It should be able to do it.

Stello

I just poked a little fun at myself. Maybe it is right and maybe it is not. I don't know that I'm ready yet as a citizen of this country to say that I want to start taking steps for socializing our energy and medicine and what have you. I just don't think that - I am prepared to do that.

Speaker

Just briefly I want to address why I find myself a normally very civil person I come here and find myself not being able to control myself in making rude comments to various things that went on on stage. It's not characteristic. I don't like the situation that pulls it out. I don't like holding a group of men who are supposed to be regulations and responsible for my safety in contempt and I do not at all hold any one of you personally in contempt. You made the joking difference about being the potency or volume of radiation, saying that does it matter if it can kill you a little and kill you a lot and I would say no it doesn't matter if it can kill you a little or kill you a lot. It can kill you and I think the President's decision not to make breeder reactors was based on very sound reasons. It was the thought of proliferation, of waste material that can be used by terrorists and I don't think I could fault the government policy.

Stello

I don't want to leave you with the thought that I think that Presidents decision was not sound. One thing that makes me kind of frightened is that the thought of proliferation of Nuclear Weapons throughout the world and I think that everything we can do as a country will lead the rest of the world because we can we ought to try to avoid the spread of Nuclear weapons, that to me is something that worries me a great deal. I hope I didn't leave you with the impression that I do not agree with that decision, that the decision not to go with reprocessing, I was making a point because of that decision it created a complication with in terms of making decisions on waste. That was the reason in making it. The second comment, I mean I wasn't joking. If you have a awful a lot of waste you have literally thousands of cubic feet of material that needs to be safely disposed of, the potency level does not necessarily give you a way from the problem, you must deal with it. That's high level waste, that is a different problem than our low level waste but all of it needs to be safety disposed of that's the point I was making and I sincerely believe that I hope we don't decide, well, the specific activity is somewhat lower than specific activity of other waste and we'll decide to draw the line and we will only handle the waste of certain specific activity. Not only do I believe we have to handle all of the high level waste, we also must handle very effectively, more effectively than we are now, the low-level waste which is far below any question or issue of any specific activity.

Speaker

I understood you to - I don't need to respond so I'm just explaining - I

understood you to imply that the President had thwarted our safety system or safety valves that had we gone ahead with the breeder reactor we could quite easily and readily have disposed of this mass amounts of stuff that will be radioactive for hundreds of thousands of years and I resent the attitude well, well you also said . . .

Stello

Wait, I am trying to explain something to you, there are two issues, the issue of reprocessing. You don't have to have breeder program to get into reprocessing. You can reprocess fuel from light water reactors. A breeder program is a different issue but with the breeder program reprocessing becomes a must. You can have the reprocessing system, if you will, with light water reactors without the breeder but you can't have a breeder program without reprocessing. Is that distinction clear. It is very important.

Speaker

Yes.

Then, do I understand you to say then that we are currently capable of reprocessing waste in a way which is not dangerous and that the President was wrong in saying we should not reprocess.

Stello

Let me take your question part at a time. You used some words which are creating problems. Reprocessing, reprocessing fuels, that is taking the fuel from a reactor and taking the fissionable material from it - - plutonium

and U-235 - out of it and somehow reusing it. reprocessing. There is a plant now, Barnwell, which would commercial process fuel. These are plants in operation today. We have not allowed Barnwell to be used for that purpose but there are plants in France and other countries which are reprocessing fuel. There are plants in this country which are part of the weapons program reprocess fuel. Reprocessing can, is and was done. Question. What to do with the waste now. Well, the waste that you have today when you take the fuel out is in the fuel, it's in spent fuel.

Question

What do you do with it? Should I try to dispose of it in a geological formation so that it is irretrievably lost forever. That was the next philosophical question I raised when I said I could come to an easy, quick answer saying that I would quickly come to the decision saying lets do it irretrievably. Now the next question are there techniques available to classify and immobilize this kind of waste to put it into such things as geological formations. Yes. The President has outlined a program to do that we have not moved nearly as fast as I think we could have and should have, but I think I can explain why. I think the process has gone as slow as it has.

Speaker

O.K. I personally from what I do know, and from what I have read, I didn't know there was a safe way of reprocessing even if you bury it in the center of the earth you have no guarantee. . .

I would also like to just point out that you said that that reserving or keeping or conserving shall I say this waste is one of the largest potential sources of energy ever, that it could potentially create more energy than we've ever had. I would suggest that it could also create more destruction than has ever been known. And I think at the very simplest level and at the risk of sounding simple-minded which I don't think it is that is one of my major concerns just that more or less scientific faith in a nuclear sort of God or something that seems to be expressed by people such as yourself that sooner or later someone is going to come along and be able to do something about it. That upsets me very deeply, I have a fourteen year old daughter, who sooner or later is going to my age and your age and is going to have to live on this earth along with millions and millions of other people. I just raise a moral objection to putting future generations under that kind of moral and psycholocial and even physical stress, but I also have questions and one is that bothers me quite a lot that we are relying on you as a group to regulate Marble Hill, in particular, since it's why we are here, to regulate Three Mile Island, etc. knowing that human error does exist well the argument is that you are so regulated and so careful that no human error will happen and yet. . . some human error caused your own court reporter not to show up tonight, I realize that is a minor thing but it is any example of human error does happen. You say you are taping the meeting, and I will take your word for it, although I don't see a tape recorder. I notice that nobody is taking any notes of anything of what anyone of us is saying and I know you're scientists and we're the public but we're not fools. And it is a little bit offensive to me to see person after person standing here before you talking and no one hears them out to even write words down as if you'll check into any mention

of the situation.

Stello

Let me clarify the point, Jan.

Would you pick up our tape recorder and show me that you really have one.

There is a tape recorder taping.

Speaker

O.K. I told you I believed you.

Stello

I hope you are taping.

That is another human error. I hope you turned it on.

Let me address that point because I think I can make an very important point.

I think you can very quickly with respect the human error, mechanical error or any other kind of problem of the facility if you immediately if you get into this question of is there a risk to Nuclear Power and again, all I can say, is yes there is a risk to Nuclear Power and I guess if I take off my Regulatory hat

and let me come down there for a minute with you. I would have to ask myself the next question. Tell me what there is it a risk about and I guess I a little bit and I know you're from a coal mining area here and so am I. I've seen what coal mining can do. My father-in-law was killed by - in a mine and my father was covered in the mines and I've had cousins who were

killed. I have a awful lot of very good friends who can't hardly walk across the street with asthma. I don't know how much we know about whether pollutants from the coal plants are doing it and all plants and cars. There's an awful lot of concern back further east with acid rain. I've read some things recently about the acid rain up in the Adirondacks. Two or three hundred lakes no longer have any fish.

Speaker

You know. . . .

Stello

Let me finish, I am trying to make a point. When it comes to the question of risk, risk of Nuclear Power for not having it - what we need and what our problems are in the future generation is indeed a very profound sociological question that goes way beyond anything that I feel comfortable or confident that I can possibly address and I know that there is not nearly enough time to do it. But they are the real questions? Are there enough resources. Do we really need nuclear? Are there other alternatives? How about on a national scale or international scale. What are the real answers. Very difficult questions. The government, although what I understand that most people look at government with askance. There isn't the trust in it. But nevertheless, believe it or not, it's your government who very much in a real way made those decisions every day. Your President, your Congress, your government officials are doing it. They are charged with that responsibility. They have to decide. I pray and I hope like you do that God guides them so the wisdom of their decisions is our deep prayer.

Speaker

You see you have a loophole. You believe that God is going to reach down and take care of me. Since you admit that you can't but it's too big a question for you to ask or answer. Or for me to. But I can ask it. But I don't think some divine force is going to jump out of the sky and save me from nuclear radiation at Marble Hill. Also, there is a growing interest, if perhaps not proof at this time in the increase in cancer caused by low level radiation, which the NRC seems to take extremely lightly. If you are adequate representatives are the NRC and is it therefore possible that venting as suggested at Three Mile Island would be. Certainly as a immediate risk as having in our area where one mines and burns coal.

Stello

Look, I had to make a recommendation to those people and that happens to be the part of the country in which I was born and raised. That's my family. My friends. My classmates. My relatives. And I told them that in my judgment the best thing to do in that plant was to vent that krypton.

The worst possible exposure you could get from the full venting is a tenth of a millirem. That is the worst that people can get, that is less worse radiation than you can get from a coal-fired plant from the effluents from coal-fired plants put out more radiation than that, you get more radiation than that from letting your children watch TV, you get thousands of times more than that from by just going to the doctor and getting some x-rays.

Speaker

Is it true that that radiation could be vented into the other reactor, the one that now not contaminated. It is true that that serious an option, that that leakage, that radiation instead of being vented into the atmosphere and could be routed into the other clean reactors.

Stello

Into the other reactor?

Speaker

Yes, or containment chamber or whatever.

Stello

Well, I don't think I would want to recommend that to anyone.

Speaker

Why?

Stello

Well, because you would have to put in about 10 times the volume of air to exhaust it from Unit 2; that would mean 10 times the volume in Unit 1 and you know PV equals NRT , perfect gas law, and then the pressure is going to go way up, now supposing something else happens then all that gas is going to leak out of all at the same time in an uncontrolled way. Why do I have to take that risk?

Speaker

Well, I just heard that it has been suggested as a viable alternative but it wasn't being considered because it would make the other one ...

Stello

Well, I certainly wouldn't want to go on record saying that is was very viable.

Speaker

OK.

Stello

OK.

Speaker

My final question, well I have two, do you have, do you receive, now we all know of your opinion the respective salaries of each one of you.

Stello

Does anyone want to pass the hat around for us. With thirty-five dollars a day, so we can have some breakfast tomorrow.

Speaker

What I would like to know is do any of your receive any income based on other nuclear related work; are you consultants to nuclear industry, in any way do you have any income based in any way that is related to nuclear energy except

Stello

We are prevented by law from doing that.

Speaker

Then the final one, I heard on a National Public Radio Broadcast or talk show of some sort about Three Mile Island an apparent nuclear expert suggests that the safety record of the nuclear industry is not nearly as high as the early TVA, etc. because it would require individual private corporations and companies

to take the lead in research and spend more money on their own coming up with safer systems that no individual company was willing to do that because they would have to bear the burden of generating research that and other private companies would derive benefit from without having to spend the money to do it, and he suggested that this went a great long way in the lack of safety-related security, etc., than we have now, is that true? Is it true that the nuclear industry could build far safer plants and do far more safety-related research but they won't because of money is my big question.

Stello

One of our studies on the agency and the way it has done business - the Regovin Report - raised that question as to whether the other agencies that regulate, for example, for example, the commissions that set the allowed rate for the utilities, as to whether or not that did in some way influence the amount of safety equipment that the utilities may or may not put in. They raise the question as the concern and as an issue that we have committed to look at as to whether there is that potential or not. At least you could see that there is the potential for that incentive being here. Do you understand my answer?

Speaker

Yes, I do. Just one more quick question. Do you have any idea what the profit ratio will for PSI? Or perhaps I should ask PSI. How much percentage per year of profit do you anticipate making on Marble Hill?

Stello

If it's allowed to resume construction; if it's allowed to operate. Taking the advice of ...

PSI Speaker

And if the Public Service Commission allows it in the rate base. Our overall rate of return would be 10 to 11 percent range.

Speaker

Do you know what that would be in millions, billions, surely not just hundreds of thousands.

PSI

Ten percent of the net value of the dollars invested in the plant.

Speaker

OK, I understand that, how would you say that transmit into money, with the hundreds of thousands, millions, billions? What would it be?

PSI

Well, as you know the plant was initially estimated at about 1.8. 10 percent of 1.8. That amount is needed as the profit outlay to pay to the people who invested their money to build the plant.

Speaker

You mean you have to make back the 1.8 billion first? Is that what you are saying?

PSI

I am sorry I can't hear you.

Speaker

Are you saying you have to make your initial 1.8 million dollars investment?

PSI

Certainly, over the life of that plant.

Speaker

OK, that is not what I am asking. So I can assume you will make at least two billion dollars and more than that now since prices have gone up. What I want to know do you intend to make two - do you intend to make that in one year?

PSI

No Madam.

Speaker

Alright, Alright. Can you give me in terms of dollars what you think the profit will be say on year fifteen of the plant's operation after you have paid all the building costs?

PSI

If the plant lasts for thirty years we assume it costs two billion to start off with and at the end of fifteen years it is half depreciated and our overall rate of return is 10% then I guess, what do I have, 10 percent, a

hundred million. That would be the amount of money that I take in after paying all operating expenses. What we have left to pay to the shareholders or investors in our company initially to build the plant.

Stello

OK, we have one more individual. No I don't know. Could we make them a little bit shorter, please.

Speaker

I was going to be very short until I heard your statement about coal and acid rain and I've read quite a bit on that and I

Stello

I take my statements back.

I'll be happy to. I am not an expert in that area and I wouldn't like to leave you with the impression that I am very knowledgeable in the area. I just told you as a layman from where I stood those are the things that I have read about and understood, so it that's what you're going to address, I take them all way.

Speaker

OK, My name is Scott -- and I am from Oldham County, Kentucky. I will digress a moment. My cousin ... I don't know. This debate about coal against nuclear

really upsets me because I also have friends who live out west that are Indians and they're involved in mining out there. And it seems that their side of the nuclear issue rarely is brought out and I'm not going to take up all your time. But you know when the coal versus nuclear issue comes up and also the acid rain, a lot of the acid rain, a lot of the acid rains are produced in the Ohio River Valley and they flow up the Valley and settle up in New York, the Adirondacks, and all that. That's probably what you've read about it. And you might insult these people about that. Public Service of Indiana ...

Well, what I came up to ask you all about is, one - I want to know who is going to make the decision?

Stello

I've answered that. The Commissioners.

Speaker

The Commission, alright. Is one of the people here? Can we hold responsible to be in constant contact? There are real hard problems. I've called Atlanta and then I was told to call Chicago. I've called Washington. I've had a real hard problem in the past dealing with the NRC. I'm glad you are all busy. So am I. And I want one person out of this group to say when I call them, I'll get called back and I'll get the information I need.

Voice

Have him call me?

Speaker

Is he the one? And he's not even sitting up there?

Voice

I'm smarter than they are.

Speaker

He's the one that makes the decision, right? So he's the person to contact.

The other thing I want to talk to you all about is, I guess I don't have anything to say to Public Service of Indiana. I don't personally dislike any of the people. The problem we have over in Oldham County isn't that our utility rates are going to go up. We're concerned about evacuation with Marble Hill and probably our first question is going to be who is going to pay for it? The evacuation plans for the Marble Hill Nuclear Power Plant because I know in Oldham County we have got 35,000 citizens. Most of them live within 20 miles of Marble Hill. We've got a men's and women's prison. We've got two prisons and a Mental Health Facility. All within 20 miles of Marble Hill. Your taking as I understand it - and I have read quite a few documents on evacuation. We would have something like one to three hours in a Class 9 accident and possibly maybe even two days. Most of the NRC documents I have seen make reference that we have something like - in a 50 mile area maybe 2 days. But hypothetically if you do have an accident. We've got 35,000 people who have got to be gotten out. It happens. I could come up with quite a few scenarios.

I don't know how many of you people live around here when there are snows.
The roads close down. I like to know who is going to pay for that.
But,

Stello

Responsibility for evacuation is the state's responsibility.

Speaker

Kentucky is going to have to pay for ...

Stello

Individual states are responsible for evacuation planning. You notice I avoided the question of paying. I'm talking about responsibility and authority. Who pays is not an issue that I feel at all prepared to address. I suspect that the Price-Anderson issue raises into it and the government ought to be picking up part of the tab. I really don't know the answer.

OK. What my concern is we have been made aware of some recent - I'm getting off the point here and I'll try to be real quick about it. - 10 mile radius if the local government doesn't file an evacuation plan then the plant won't get an operator's license. We've been in contact with you all and we've heard that that is possibly going through. That proposal. NRC proposal. And we've gone to our fiscal court over in Oldham County and the state government and the question we're always hit with and we don't know the

answer, when we call the NRC they don't seem. You don't, the PR people. They don't know the answer. Who's going to pay for these evacuation plans. In Indiana and in Kentucky. You all don't know who is going to pay for that yet.

Because for thirty five thousand people we are talking about an expensive plan.

Stello

I've already said. I said I don't know the answer.

Speaker

Who does?

Voice

Either the state of local government or the utility. Or all of them.

Speaker

So the utility will have to pick up. Well I know Oldham County is not going to. And I doubt very seriously Kentucky will.

Stello

He's asking who pays for the evacuation of the people. The plan, I know who pays for that. The states do it. It's under the auspices of FEMA.

Speaker

OK, we also want to clear up what's the chain of command. Who makes the first phone call. Let's say there's an accident at Marble Hill, because I think you are going to find out that there is a real credibility problem and again I'm not addressing one individual who is sitting over here, but most of the people especially, in Oldham County, the people who live close by, there's a lack of trust. There is a real problem here. They don't know trust Public Service of Indiana to make the first phone call that is who we hear is going to make it and I don't know if you all get our newspapers down here but they were caught cold handed trying to cover up the concrete mess down there at Marble Hill. Just caught. It was obvious. They started calling everybody communists. Tried every maneuver in the world. For them from underneath their their own responsibility that they blew it. So we have real credibility problem. Who would make the first phone call when there is an accident at Marble Hill? And I did say when. I didn't mean there will be one.

Stello

If and when the plant is licensed there will be an emergency plan. In that emergency plan it will document which local and state officials are to be notified and under what conditions should they be notified. We already have on record a regulation that sets forth twelve specific conditions for which they were also that they will have to immediately notify, excuse me, four of them are immediate and the others are later, the Nuclear Regulatory Commission using our hot line. Each and every operating nuclear plant will have in the

control room a hot line which all the necessary to reach the NRC is to pick up the phone and it automatically rings and is responded to in Washington.

Speaker

PSI does make the first phone call. There will be an NRC person in the reactor, or around the reactor. Excuse me. OK, there won't be an NRC person at Marble Hill.

Stello

There may be or may not be.

We have a resident inspector who will be at the site. Whether he would or wouldn't be here at the time, I don't really know. If there is anything that goes on, our resident inspectors are immediately notified and can get to the plant. Since they live here it's usually a matter of minutes.

Speaker

Well, I'll sum up. I'm not. I've seen some very intelligent people come up here and try to tell you all and explaining to you all to communicate to the Nuclear Regulatory Commission. We feel that the people that live here feel very serious - I can't say how serious - situation it is at Marble Hill. I guess I will just have to let it go at that. We hope that, and a lot of people their future as to where they live will depend on the decision you all come up with. I will not encourage a person under 25 to move into this

area if you allow them to go ahead with the plant. And I think especially again over in Oldham County that the fastest growing county in Kentucky. I think we are going to see, we're going to have real problems if the plant is allowed to go through. That's all I have to say. Thank you.

(Mixed Voices)

Speaker

I have an idea I would like to introduce. OK, this is late and we have been talking about the same questions, requirements, simple the people - OK, I am A Vietnam war veteran. I was in combat with Vietnam and I see, I have seen an actual cases of genocide. OK, so you know, I know these policies you are talking about can have real implications and the, it bothers me tremendously the question that bothers you in terms of what we do with waste, I think that is a very deep philisophical question. Now, I am going to recognize the reality of the situation. You're probably going to walk out of here tonight and come to the decision that the plant will be continued to be built. Alright in terms of the real policy, I think that is going to happen, I don't want it to happen I hope it doesn't happen. I think that we have many other alternatives and I am sorry that the type of ----- states exists that puts the power to make these decisions in the hands of so few who are so far from the public forum. I noticed we only have just one elected official speak here tonight. And that disturbs me immensely because it is the same process by which the wrong decisions were made prior to Vietnam and we all committed mass murder there

and the viewpoint of a person who is in the field is much different from the viewpoint from the person who is in a bomber. OK. And I think maybe that same philosophy is at work here and, OK, this all leads me to a proposal which I don't think anyone here has come any place close to envisioning and I think it well takes into account most of the viewpoints that are here, OK. If Marble Hill is built, I suggest that it not be put in operation. I know you are all laughing at me. It's based on international economic and security policies.

1. The United States right now relies on Middle Eastern aid for a large part of our economy and when threatened the idea is to immediately jump in and defend that interest so that the United States not shut down and, concurrently, we have questions of whether this plant of actually necessary in terms of, in terms of lowering amounts of, lowering increases in needed electricity. The economy is not doing very well, and it doesn't look like it is going to increase the way it has been over the next few years, the way it did for a long time. It's just a different society. It's a post-industrial society now, then where this puts us is that, let's say, that the world cut off from Middle Eastern aid we would have a stand by reserve at Marble Hill. We don't put plant in operation until it is absolutely necessary. Now the way is funded. Now it is paid for. I know there are a lot of people who have an interest in ...(flaw in tape)

So, what we are saying is that we are sinking a huge amount of money in the defense policy that are ludicrous, so why not put, why not budget the money

from the defense department through the energy department to buy this plant down here. Basically. OK, I know you're going to say that that's nationalization. We had to nationalize Chrysler. I think that the economic theory involved is one which this country is going through a price that is being paid for past mistakes, you know, i.e., Vietnam. We were in a position for some time of taking leadership after the World War II, in this world and using resources that nobody else has access to and we blew it because what we did was to sink all our money into defending against all these devils we thought were going to come over here and take everything away from us. We built a wall in front of us and left every other direction exposed and so now so we don't really have that much left. So - I promise to be brief - and I'm also going to, I have these ideas written down, I just want you to be aware of them and it the proposal will be, number one, paid for through the Energy Department, and, number two, is payable to the ratepayers because the ratepayers should, of course, pay for higher cost of energy, and number three, stockholders should probably get a return on something like three of four percent on their investment. The idea being with inflation it is going to have to be held down somehow, somewhere and its got to start with the industries, with the agencies which will be placed in my system where the risk is least. That is sound economic theory. OK, so I just want to point to you these ideas. They're something much different than anything I have ever heard anybody else put forward and I would ask that you bear it in mind because it could very easily become a real political issue I think. I hope you haven't misjudged the intent of the extent of, the depth of the feeling, not only the feeling,

but the real fear, the just fear, which is among the people who have spoken here tonight. We have gotten somewhat roudy at times. I think we have probably misrepresented your position sometimes, especially the NRC but at the same time, you know, this is our life and when we talk about our problem being a homeowner, we're talking about, you know, the Three Mile Island came within one or two hours of the whole area being uninhabitable for a long time, you know. A real melt down. Excuse me. Are you laughing at me back there? With the blue tie. Are you laughing at me? How much do you make a year? No really, I am serious, now I am trying to make a point, if you're here, if you are on stage to listen, you're on stage to participate.

Stello

I don't think the gentlemen in the back row has heard yo yet.

Speaker

OK. I'm done. It's just that it bothers me when something like that happens.

Stello

I think they were talking to each other. They still haven't heard what you said.

Speaker

OK. I do want to thank all of you for being here.

Stello

OK. There was one other gentlemen who wanted to say something to the licensee.
Where are you?

Speaker

I do resent being cut off as I am saying I'm leaving. Thank you.

Speaker

My name is T. W. Grant from Switzer County, Indiana. I want to thank you all for coming here tonight. And giving me the opportunity to speak. This is quality control to the Marble Hill people. I feel qualified to speak because I am a sandhog, if you know what that is. I build the storm sewers 30 feet underneath the ground. I know about the quality control. You have a problem of analyzing your concrete before it's poured. No matter how well you vibrate it will leave honeycombs. Any cement finisher knows this. There will be honeycombs no matter how well you vibrate. Whether they're large or not. There will be honeycombs. Thank you.

Stello

There was a gentlemen who wanted to ask someone from PSI a question.

Speaker

It has become clear to me that we have some common experience here. I used to live on a hill overlooking Three Mile Island and as a matter of fact I was

in York, Pennsylvania at the time of the Three Mile Island crisis. I know you are familiar with that area. It was actually Three Mile Island opened my eyes to the boondoggle associated with nuclear power. What I saw there was that Three Mile Island the plan for the plant were railroaded through. It was placed on a Island in the middle of the river, where it could flood. It was forty miles up stream from Peach Bottom where any radioactive water released by Three Mile Island would go into the Peach Bottom cooling system. But it's really more up river from Chesapeake Bay which supports a very economically important fishing industry which could be ruined by radioactive releases from Three Mile Island. It is located so that its evaporative plumes would interfere with the operation of the airport there. It was located eleven miles away from Harrisburg. You can see it from downtown Harrisburg, and Harrisburg is the state capital of one the most populated and economical important states in the country. There is significant citizen opposition. The fact that it was allowed to go there, is a very significant indication that maybe we should not have faith in the NRC. And I think we should really have to think about that but I wanted to do a few quick statistics here. First of all on the waste disposal program the President's Interagency Review Group Report (28817) reports that 728817 stated very clearly that it would not be feasible to have an effective, safe storage site stored side for nuclear plant generating waste until at least 1992 and in the meantime these waste will be stored on site at the storage ponds. You know you will have very very high level, highest level radioactive fuel rods stored on site on the storage ponds where they are a security threat among other things. And

this is something. This is the major points I was concerned about is that the tornados. I do not know how these storage ponds will be capped but if there is any way at all for a tornado to remove that cap of those, I think there may very well be a way, for the tornado is very effective at sucking up water from any water surface it contacts. And it could broadcast that highly radioactive water very highly radioactive water into the air. Also, I know there has been concern in years past the possibility of displacing a reactor vessel within the containment structure. I believe there was a report on torus rings and there has been some concern that a sudden jarring of the containment structure or an earthquake could displace the structure so that the cooling water inlet pipes would be sheared, which would be an inevitable meltdown because there would be no way to cool the system. Also, I know there has been concern in the past with sparger failure and I don't know what the status of that is. But there were severe problems with vibration induced sparger failure and also with corrosion problems with these. Can you answer those concerns?

Stello

I think we spoke to each and every one of them if you think we missed one, pick one which you think we missed, and I'll try to grab it.

Speaker

Well, OK. What measures have been taken in the past few years with these cooling spargers in the reactors?

Stello

A cooling sparger inside the reactor vessel?

Speaker

Right. Feedwater spargers. I'm sorry I didn't mean to say cooling spargers.
Feedwater spargers. In the cooling system.

Stello

You mean in BWRs. Sparger in the annulus. Is that what you mean?

Speaker

Well, several years ago three top engineers from General Electric resigned
and part of their statement of resigning was that this was a very dangerous
situation

(End of Tape)

Speaker

Do you feel that we have a reasonable guarantee that there will not be future failure to unforeseen circumstances?

Stello

I never have...

Oh, they're only present in boiling water reactors? Okay, that's something I did not understand. Well, what about the possibility of the reactor vessel displacement to sheer off cooling inlet pipes? I mean, is there absolutely no way that it could be ...

Are we talking about the problem that was raised by the GE individuals?

Speaker

Right

Stello

That's a problem that's a result of the loads from the pressure suppression system, which the plants have been designed for, but that does not apply at all to Marble Hill.

Speaker

Okay, but still, you know, if, say, the New Madrid fault did become reactive.

Stello

I'm sorry, I can't hear you.

Speaker

If the New Madrid fault did become active again, and there was an earthquake here that could shake Marble Hill, the reactor, the reactors there, would there not still be a possibility that there could be enough stress inducive to movement of the reactor vessel to actually sheer the cooling water in the pipe?

Stello

Well, the plant is designed to take into account the earthquake load. Now, are you asking me, is it possible for a load to be bigger than the load for which we designed it, such that pipes could fail? The answer is always yes. You can always assume a load bigger than the one that you design for.

Speaker

What I've been understanding there, though, was that the earthquake design criteria was for the containment structure, and not specifically to the plumbing inside.

Stello

It does apply to the plumbing.

Speaker

Okay, well I misunderstood that, then. Well, alright, I do also have to make a very strong point, and this is a point which has not been adequately addressed anyway. And that is the issue of radioactive water released into the Ohio River, contaminating the water supplies of LaGrange and Louisville.

Now, PSI has said under normal operating conditions, there will be sufficient water mixing by the time it reaches Louisville, so the mixing will be, will produce acceptable levels of radiation. But in that same document they did not mention the water inlet of LaGrange, which is very close to the plant, and the very mud concerns me, but it also concerns me if Marble Hill wound up releasing 300,000, half million gallons in a very short period of time, which nuclear power plants have been known to do. You know, we're going to have some significant levels of radiation, perhaps, in our drinking water in Louisville and LaGrange, depending on how radioactive this water release was, and then what are we going to do about that?

Stello

Well, the issues of discharging radioactive water in the river have been addressed in the Environmental Statement and in the application, with respect to potential hazards. And the consequences of them have been analyzed and presented in those documents. Now, I don't know if you're postulating something beyond what's there, and if you are, I'm not able to understand what you're postulating, what you're asking to be analyzed. What you have described is already been analyzed. Are you going beyond.

Speaker

Well, the document I'm familiar with.

Stello

Let me ask you, have you read the Environmental Report?

Speaker

I saw the initial environmental impact statement.

Stello

Did you, you read, the licensee's Environmental Report?

Speaker

I think this is something I haven't seen. I have.

Stello

Okay, the applications, the FSAR. The kind of information you're asking for are presented in those documents.

Speaker

I'm almost sure that that was the document I have seen, and I would like to get a copy of it.

Stello

They're in the library. They're, that's kind of big stuff to reproduce. You're talking about a very large volume of documents.

Speaker

Well, I must very sincerely doubt, though, that the mechanics of the water flow in the river could, could be safe. As in, you know, large scale radioactive release situation. I just cannot understand how that could possibly be, because the Ohio River does go through very low flow periods.

I mean, it's been know to go extremely low in the past, so that any radioactive water release would be extremely significant, would accumulate in bottom sediments, in aquatic life and so forth, and I don't think that any assessment could really be adequate because it would be a serious problem.

Stello

We're going to pass each other in the night. If you'd read those documents, to go beyond those, I can, maybe we could communicate. You can talk about the accidents that are already there, I just commend it to your reading.

OK?

Speaker

My name is Donald Copeland, I live here in Madison. I'm neither a scientist, nor an engineer. I don't know nothing about nuclear energy, and I don't pretend to know, except I'm mad about it, and I don't care who knows it. There is being demonstrations on this Congress. The millions of people demonstrated against nuclear power. Am I right? Did you hear me?

Stello

I'm trying to decide how to answer the question. Millions of people

Speaker

have demonstrated against, have demonstrated against nuclear power in California.

Stello

Well, I guess if you add up every demonstration that there has ever been against nuclear power.

Speaker

Have they been talking to you any? I mean, do they say anything to you? I mean, a million people is a lot of people concerned. Now that's only a drop in the bucket of 200 million people, or 210 million people, whatever it is here in the United States. But that it's a representation of what is going on in the United States. Now this

Stello

Let me try to help if I can, maybe. I'm trying to recall the last poll that they had on nuclear power, and I've kind of remember bout 68% were for nuclear power and 27% were against nuclear power.

Speaker

I don't know whose poll

Stello

This is the Harris poll I'm referring to. Now since Three Mile Island, they've taken some additional polls, and I believe they're, the numbers have come down, that is that the number opposed to the number for nuclear power got closer together. In the fifties and thirties, I think. About two to one.

Speaker

But, but nuclear power has serious concerns to something over a million people. Right here in this area, Louisville, New Orleans, Clarksville, Jeffersonville, Madison, Hannore, Scottsburg, Chelsea. You name it, there's a lot of little towns scattered around, concerns something over a million people. And I know there are pros and cons in the bunch but here tonight, I haven't heard anybody here say, except Public Service of Indiana, say that they was for nuclear power in the area. Most of them has been against nuclear power, as well as myself. Cause I don't know nothing about nuclear power, except, I've been in the hospitals, and I know what what cancer is. My mother died with leukemia. My aunt died of leukemia, my elder brother died with the cancer, and if there's any chance of what-so-ever of nuclear power causing cancers, it should never be. If you could go to the hospitals, like Children's Hospital in Louisville, and see the babies down there with leukemia. So to the Wylie Hospital in Indianapolis you'd see the babies with leukemia. Go down to St. Judes Hospital in Memphis, Tennessee, and see the babies with leukemia. You would surely say a lot about do we want to put something more in the air that may or may not cause cancer to our babies. I thank you, and I appreciate your listening to me. I hope I haven't insulted anybody, and if I do I'm sorry.

Stello

I'm awful glad that you've been patient enough to wait in here this long with us to have a chance to talk, and I think it's commendable that people will stay around. I think it demonstrates that there is really an

interest. Thank you. So long and thank you again.

Speaker

I have a question and to two brief statements, and then I want to get out of here just like everybody does. Despite what they say about Dr. Sternglasse's studies being erroneous, he didn't do what any of you, or myself, are capable of doing. And decided to look at vital statistics concerning the Harrisburg area after Three Mile Island, and he found something very interesting in those vital statistics. He found that mothers that were pregnant in the second trimester during March 28 and the days after that, that babies born to those mothers, that the infant mortality in those babies rose to over 600%. Now these are vital statistics, this doesn't have anything to do with fancy extrapolations or subjective analyses, etc. These are vital statistics, from Harrisburg. And another thing that people really don't mention when they talk about figures as the eighty three millirem that you cited was released is that there's a difference between cosmic radiation and radiation from radionuclides such as iodine-131, strontium-90. There's a difference in the biological effectiveness that the radiation has from internal versus external, both. The radiation that was received from Three Mile Island consisted not only of external radiation, but what was subsequently taken internally from the food source. Now granted some isotopes of iodine-131 are short-lived, isotopes of iodine, not iodine-131. Other isotopes are short-lived, how-so-ever, there were substantial quantities of iodine-131 that weren't tested in Harrisburg. And there's a difference between what that will do internally versus externally. I think you know, I don't have to go into this. The other thing I want to talk about is nuclear, nuclear power and how the government's role in the development of nuclear power. I'd like to point out that none of us would

be here tonight if it weren't for government involvement in our whole energy picture. Nuclear power isn't out growth of government policy lock, stock and barrel. That nuclear power would not exist without the promotion that has gone before via government. The government, back in the late forties, when this whole thing was coming about, you know, was an out-growth of the weapons program. Government wanted to find peaceful uses for the atom, you know. We had Eisenhower with his Atoms for Peace program, and other things going on, and the government wanted the public utilities to get involved with nuclear power. They wanted to have peaceful use for the atom. They basically said to the industry, we will take the initiative if you don't. The industry, however, was not ready to do so because they could not get these plants insured. Subsequently, the Price Anderson Act was passed, I believe it was in '56, because insurance companies would not insure nuclear power plants. What the Price Anderson Act did, was limit the liability to a specific utility, to an amount of 560 million. The rest gets paid by the people in this room, the taxpayers. People say the government picks up the tab. They forget where the government gets the money from. It's myself and others. I would urge that this act be repealed. The whole structure of energy in this country is so far removed from the free market system, it's un-American, basically. This country was founded on free market, free enterprise, and what you've got now are utilities that have guaranteed rates of return on their equity, all sorts of tax investment credits, barriers to entry, no competition. That's totally, it's un-American, want for lack of another word. I can't go along with this. I urge that government take a different, remove itself completely from the energy picture, and the Price Anderson Act be repealed immediately. Thank you.

Speaker

I'm Glen Hesberger, Jefferson County citizen. And let's assume that PSI builds a plant, puts it in operation, it malfunctions, and goes into a big meltdown that would include the evacuation of quite an area. What plans are there for the people to be reimbursed for their property or whatever if they can't go back in there under a complete meltdown.

Stello

The gentlemen that was just the previous speaker was talking about the government guarantees on the Price Anderson Act, that guarantees that certain funds become available to pay for such types of events.

Speaker

To pay for the property?

Stello

I don't know what the total liability. The utilities are required to pay and buy insurance, and then in addition the government, through Price Anderson, has put in additional funds to cover for such kinds of eventualities.

Speaker

For whatever loss might occur.

Stello

Whatever loss might occur. That's the amount to which you are, for which they are liable for. And now, well, with that I think we'll conclude. I really appreciate. Someone else want to say something.

Speaker

Mr. Stello isn't it true that the NRC has never denied granting a license to build a nuclear power plant?

Stello

I can't hear you.

Speaker

Isn't it true that the NRC has never denied granting a license to build a nuclear power plant?

Stello

That is not a true statement.

Speaker

Can you give me an example?

Stello

Let's see. Malibu, Rowens Wood, Greene county, there's another one in Philiadelphia. There are a number of examples.

Speaker

For what reasons?

Stello

Unacceptable sites.

Speaker

In terms of population, geology.

Stello

Both.

Speaker

Thank you. You asked earlier what we get out of these meetings. We have no other place to go to air our grievances about the future of industry. There's no legislative or judicial thing that we can do. We can't vote on it. We don't like it, and this is all we've got, so this is what we do. And until you present something else, we'll continue to come here until one o'clock at night, and we won't rest as the gentlemen from PSI have been doing, for the last, the last hour sleeping off and on. Thank you.

Stello

Let me then get the last shot in saying I really appreciate, no, don't bother to, going to tell you that I came here to listen, and I did listen. You've already told me that I won't listen, so, but I did it. And I'll pass your concerns on, and, to the Commission. I appreciate the time and effort that this took on your part, and I can tell you that we're committed to do more of this, because I think that that the net result is very positive, and we're just going to keep it up.