# UNITED STATES
# NUCLEAR REGULATORY COMMISSION

**In the matter of:**

PROGRESS, STATUS & PLANS OF THE

INSTITUTE OF NUCLEAR POWER OPERATIONS

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UNITED STATES

NUCLEAR REGULATORY COMMISION

PUBLIC MEETING :

In the Matter of: :

PROGRESS, STATUS & PLANS OF :

THE INSTITUTE OF NUCLEAR :

POWER OPERATIONS :

Commissioner's Conference Room
1717 H Street, N.W.
Washington, D.C.

Tuesday, March 11, 1980

The Commission met, pursuant to notice, for a public meeting of the above entitled matter, at 10:00 a.m., BEFORE:

JOHN F. AHEARNE, CHAIRMAN

VICTOR GILINSKY, COMMISSIONER

RICHARD T. KENNEDY, COMMISSIONER

PETER A. BRADFORD, COMMISSIONER

LEONARD BICKWIT, COMMISSIONER

PRESENT:

MR. E. HANRAHAN

MR. W. LEE

MR. E. WILKINSON

MR. A.J. PFISTER

MR. J. SELBY

P R O C E E D I N G S

CHAIRMAN AHEARN: We have an interesting meeting scheduled this morning to meet with and hear from a relatively new organization in a nuclear power area. One of the major results of Three Mile Island and its aftermath reviews, was the formation of a group called INPO.

There has been a lot of interest expressed in that organization among other places amongst the Commissioners and they have graciously agreed to come this morning and talk to us about their organization.

Mr. Lee, we have seen you in a variety of roles. Good morning.

MR. LEE: Good morning, Mr. Chairman, Commissioner Kennedy, Mr. Bradford.

We have in full appreciated very much the opportunity to bring the Commission up to date insofar as imposed founding, staffing, its activities, progress and future schedules.

To begin with I would like to introduce first of all those at the table with me. I am William S. Lee, Chairman of the Board of INPO. To my right is John Selby, a director of INPO and a Member of its Boards Executive Committee and the Chairman and Chief Executive Officer of Consumers Power.

To my far left is Jack Pfister, General Manager of the Salt River Project in Phoenix, Arizona, currently serving as President of the American Public Power Association, a Member of teh Board and of the Executive Committee of INPO.

To my immediate left is Admiral E. P. Wilkinson, the President of INPO, with about whom I will have some remarks in a little while.

We have also with us this morning, Mr. William Gould, who is the President of Southern California Edison Company and a Member of the Board of INPO. We have Mr. Carl Andognini, who is manager of the Nuclear Operations Department of Boston Edison and a director of INPO.

We have Mr. Lelan Sillin, who is Chairman and Chief Executive Officer of Northeast Utilities and a director of INPO.

And, thus having introduced the Board Members present, let me review briefly the history of why INPO was founded.

It was in April and May of 1979 that it became clear to many of us in the industry that we had best establish a mechanism to help each other focus on safety. Mayor Culper and many others agree that we had equated safety with compliance with regulation.

We learned that is not so. So, we had took the initiative to establish a nationwide organization to help the industry achieve safety in the human factors area and those related to human factors.

This has been an industry response initiated in the -- albeit initiated with the industry through the unprecedented in its scope, and the determination and clout with which INPO can act.

It, of course, is based on a need that in our strong view and uncontested view in the industry,a need to which only the industry can respond.

It is tied to the President's charge in his December 7th statement where he said that industry should establish safety standards and monitor compliance. INPO will be doing that although we don't use some of the same phraseology as in that statement, for example, not standards but benchmarks of excellence, as you will hear shortly from Admiral Wilkinson.

INPO an advisory council of independent experts from across the nation in various disciplines to give us independent advice on our operations and our plants.

The Advisory Council includes Dr. Victor Bond, a physician from Brookhaven National Laboratory; Dr. Anne Briscoe, Director of Biochemistry Laboratory at

the Harlem Hospital Center, and she is also a fellow of the New York Academy of Sciences and the American Institute of Chemists; Dr. Robert Charpie, President of the Cabot Corporation in Boston; Charles Elmendorf, formerly with the American Telephone and telegraph Company and now a consultant with extensive experience in the communications industry; Patrick Haggerty, of Dallas, Texas, former Chairman of Texas Instruments and formerly a Member of the President's Commission on Investigation of the Accident at Three Mile Island; John Hamann, retired President of Detroit Edison; Dr. Edward R. Jones, of McDonnell Douglas Corporation, with 30 years of experience in the field of engineering psychology; Laura Keever, of Houston, Texas who is on the Advisory Committee on Nuclear Energy of the Texas Energy and Natural Resources Advisory Council, and on the Board of several Texas environmental organizations; Jerome Lederer, of Laguna Hills, California, a former director of safety for the National Aeronautics and Space Administration with a 50-year career in aviation and space safety.

Dr. Harold Lewis of Santa Barbara, California, a Member of the Physics Department of the University of California, Santa Barbara. He is former Chairman of the Risk Assessment Review Group of the Nuclear Regulatory Commission; Dr. Thomas Pigford, of Berkeley,

California, in nuclear engineering, he, too, is a past Member of the President's Commission on the Accident at Three Mile Island; Samuel Ross, of Indianapolis, Indiana, with R. W. Beck and Associates representing the reactor operations group of the American Nuclear Society; Dr. John Swartout, former Deputy Director of Oak Ridge National Laboratory; Dr. Gordon Wolman, Chairman of the Department of Geography and Environmental Engineering at John Hopkins University who has chaired a number of committees for the National Academy of Sciences and the National Research Council; and Dr. Bob Seamans, who is Dean of Engineering at the MIT, he has served in many important assignments including many in Government; in addition to those Members there will be other Members appointed in the near future, one of whom will be a Member of the Executive Committee of the National Association of Railroad Utility Commissioners.

Which brings me back to the President's memorandum where he asks that utility rate setting agencies are urged to allow the prompt recovery of safety expenditures.

That organization has agreed has agreed to provide a person for the Advisory Council of INPO.

Another new Member will be a person with financial background and a subsequent Member of the Advisory Council

will be a person with media communications background.

Going on with the President's statement, the President encouraged pervasive and knowledgable involvement by utility top management in seeking safe and reliable plant operation. This is the role of INPO. In May, the first printing workshop for utilities CEO's will be held by INPO in Atlanta directed to that end.

We are urged to demonstrate a commitment to safety that goes beyond mere compliance with regulation. Those words could have well been lifted from the first write up that developed of INPO that is the reason we exist.

The INPO and NSAC are asked to periodically inform this Commission and its Chairman, that is why we are here today. We have been asked to provide appropriate dialogue and communication with the Secretary of Energy which we have been and will continue to do.

The other urgings to INPO would be the training organization and each utility must be staffed by motivated, educationally qualified instructors that must be training for engineers and managers at a level higher than control room operators. INPO will be directing and has been directing vigorous attention to this area.

The INPO will be involved in criteria for

creditation of training programs. It will be having dialogue and hopefully obtain assistance for DOE with respect to the total manpower and training requirements of the nuclear utilities. And, of course, is heavily involved in urging utilities to work together to review and improve their internal training programs in accordance with the criteria being established.

We are here to pledge our continued cooperation with NRC as we both work together toward the objective of nuclear safety.

This has been a unique experience in the history of the electric utility industry in the United States. By unique I mean it is extraordinarily acumenental. I have never witnessed before such an enthusiastic and dedicated cooperation among the cooperatively owned, the publicly owned, and the invested owned utility.

They have merged together in this common undertaking with dedication and with enthusiasm and with money and with people.

We now clearly understand our interdependence one with the other across the nation with respect to safety. We understand our interdependence insofar as the ability of nuclear energy to make a contribution to this nation's energy supply.

We do have the independent input from the

Advisory Council we do also have a growing relationship with a new insurance group that had been formed by our industry and close ties with that group ultimately will be manifest in an arrangement whereby INPO will have certification responsibility for eligibility for the insurance or replacement power in the event of an accident.

Those are my introductory remarks and I would like to call on Admiral Wilkinson but first a brief work about Admiral Wilkinson.

We scoured this nation for talent. We looked at a 107 candidates for President of INPO. Excellence was our objective. We feel we found in Admiral Wilkinson not only an imminently capable individual but a distinguished American.

He is a graduate of San Diego College in Chemistry. He then entered the United States Navy gone in World War 11 in the Submarine Program. He was among the first persons selected to enter the Nuclear Program of our Navy and I think you know his background. He was personally involved in the design and the construction of the first prototype of the first seagoing reactor carrying vessel.

He was involved in the selection and training of the first crew, establishment of the first operating

procedures and the first Skipper of the USS Nautilus.

Admiral Wilkinson proceeded through the Navy's nuclear program where he became a Vice Admiral and after his retirement moved to California. There he was employed by a company and was, I will say it for you, was very happy in his employment, but he recognized the importance of safety to nuclear energy and the importance of nuclear energy to our nation.

Therefore, he answered our call to become president of INPO. It gives me pleasure to present to the Commission Mr. Eugene P. better known as Dennis Wilkinson.

Dennis?

MR. WILKINSON: Thank you, Bill, Mr. Chairman, gentlemen.

Bill Lee has conveyed this strength of industry's commitment to the institute. I am going to address the kind of commitment that I have describing INPO's basic role and how we are going about filling it.

First, the Executive Committee of our Board of Directors,the gentlemen, sitting here facing you, gave me guidance that was later reinterated by the Board of Directors that my first primary mission was excellence. Excellence in what we do, excellence in what we require of industry.

The next commitment they gave me was a sense of urgency to get along with the job. In a lifetime as an operator, at various levels as I grow older, there is one thing I learned, not to compromise standards.

Managements lines are to expect things to be a 100% perfect. Actually, you will never get a 100% performance but if your standard is 90%, you won't get 90%.

The thrust that I have had, the guidance from my Board of Directors is that our standard of performance should be of the highest. I like that guidance that I have been given to build INPO into a strong organization that will develop and maintain across the nuclear utility industry, the commitment to the highest possible levels of excellence in the safe operation of our nuclear power plants.

In that regard, there are two elements worth identifying. First, our mandate to achieve improvement in the overall level of safety for all plants. In that regard, we will be considering a broad range of elements involved in the safe operation of the plant.

As you know, some plants are operated better than others. My very manner of definition 50% or below average. If we do our job well, all plants will have

an opportunity to see some improvement in some phase of their operations.

The other basic element worth identifying is that we INPO should be able to help an individual utility. Some plants are ahead in the terms of the investment or training or people or whatever is required to achieve excellence, others will need more help.

INPO sees itself as not only defining levels of excellence but also as a service organization willing to lend support and assistance to any individual utility that needs it.

In support of our mission, industry has made a substantial commitment in both resources and people. INPO is starting with a 1980 budget of $11 million. That $11 million will allow us to cover certain startup costs, salaries per people, and leave funds over for certain consultant and contractural work that may be required.

INPO is now an adequate temporary quarters north of Atlanta. We have a commitment to 50,000 square feet of space which will be available in May.

My tough job will be to get staffed in time to make use of that space. Staffing is,with adequate professional people, is a tough job. In the interim, until we do get staffed with permanent people, I want to

identify the loan concept.

Industry is initially providing us with interim staffing of loan professionals experienced in the operation of the type plants that we are talking about.

I have asked in that long employees for the very best experienced operators for as long as they can be made available. Industry has responded well to that request for quality loan personnel.

We presently have 11 such loan people on board and 7 more will report in at Atlanta this month. In fact, in our substitution, in our replacement of those loan personnel with permanent employees, we are going to have to hunt to match in quality the type of people that we are being loaned.

That is where I and my temporary top loanees are concentrating on the problem of acquiring permanent personnel. I and the others have been interviewing saturdays, sundays, nights at the airport, whenever and wherever we can. We now have 36 personnel on board at INPO, as I said, 11 loan, 25 permanent personnel.

I would like to as fast as I can get to a maximum number of permanent personnel but I will always need some loaned personnel from industry.

We expect to end up with 6 evaluation teams,

professionals that will be the people that go out and look at the actual operation and performance of our plants.

I would like to have mostly permanent personnel in those evaluation teams but I would always like to have some loan personnel from industry, gentlemen with operating experience in our plants, loaned for a period of 1 to 2 years, if possible, and if each one of our evaluation teams has in it a loanee from industry and if that gentlemen has the opportunity to participate in the inspection and evaluation of plants, then, that, gentleman on loan from industry will learn a lot and will have been, it will help us do our job well in the evaluation but also,he will have been a good investment to his utility when he goes back with experience from having looked at the good and the bad in a lot of operating plants.

As a matter of fact, INPO's role has got to center around those regularly scheduled inspections and plant evaluations. Initially, they are going to help in developing the benchmarks of excellence, then, as time progresses, those inspections and evaluations will allow us to compare the performance of the plants against the benchmarks that have been developed. Those inspections and evaluations will provide the basis for ongoing improvement programs of the individual utilities.

Results of those evaluations should trigger joint company INPO effort to attain and maintain the best level of performance for each and every utility.

All INPO's technical divisions are criteria analysis division, our emergency preparedness division, our training division, our evaluation division, all of those divisions are going to participate in the inspections and evaluations, including me. Because, all of our technical personnel must have had the experience, must have been out in the plants, as we say they have got to have the experience of getting their fingernails dirty by looking at the actual performance in our operating plants.

Presently, we have two such evaluation teams formed. Professionals with operating experience, most of the members on thos teams are still loaned emplcyees, a few are permanent employees. I expect if we get our staffing done as we are endeavoring to do, to have 16 in operation by the end of the year.

Our initial inspection and evaluations were only calling pilot evaluations. Since we didn't start the first day, fully qualified to do that that we have to do. Since we are really learning and developing our standards of methodology, in those inspections and evaluations which will all be plant operationally oriented, we expect to

cover the following type areas, the management and organization of the utility we are looking at, including their ability to provide technical support.

We expect to look at their procedures, their documentation, their administration. We expect to look at their training and qualification system, at their actual plant operating practices, at their maintenance practices, at the utilities own inhouse system of audit of their performance and their quality assurance practices.

We expect to cover their emergency preparedness and their radiological controls. Then, we expect to look at the actual material condition of the plant and the actual qualification of operating personnel to operate the plant, routinely and in emergency situations.

CHAIRMAN AHEARNE: Do you intent to have criteria established for all of these areas for these teams?

MR. WILKINSON: Yes, sir. I am going to come to that in a minute, sir.

In the beginning, we have had one pilot evaluation. We are going to Farley for our second one starting next Monday. As I say, I have got two evaluation teams formed. In the beginning, those teams won't be very qualified.

In our initial looks, we are going to develop criteria and methodology of taking an inspection, looking at these general areas.

The first time we only call it a pilot and the next time we are going to call it a pilot and the next time. But, as soon as we can, we are going to start taking initial inspection and evaluations.

I have seen it from my Navy experience where we get people into these type inspection teams for maybe a three-year tour. By the time a team has been there the 19th time, they get a lot better. I, as I said, hope to have 16 working by the end of this calendar year, and I expect those teams, with mostly permanent personnel but I hope with 1 or 2 loanees as a part of the team will get really competent in taking these looks.

Now, those looks are going to help us develop the benchmarks of excellence. The benchmarks of excellence that we are going to develop are not going to be a minimum standard but are going to be that band of performance which represents the best of the performance of all the plants in the industry. Then, that benchmark of excellence, the best of all, will be what we considered our optimum standard and that will represent the best thinking and experience across the industry.

In scope, those benchmarks of excellence will cover all the areas I indicated that the evaluations are going to look at.

Those benchmarks are going to be developed one, from the inspections and the evaluations, but also from other sources. From our operational experiences from various incidents, and there have been certain incidents back in industry to the present time. Another source is going to be the licensee event reports, and I have been working this weekend with Dr. Zubronski of NSAC, working out the methodology of review and taken appropriate action on the LER's and who is responsible for what.

Because, those are a source of data to show in some cases some element that could be operationally better. We must be able to evolve lessons learned from all those sources and put those into our benchmarks of excellence. Then, those benchmarks of excellence will be the criteria by which we go back and actually look at the plants.

CHAIRMAN AHEARNE: How large is each one of these teams?

MR. WILKINSON: I beg your pardon?

CHAIRMAN AHEARNE: How large is each one of these teams that you will be sending out?

Approximately?

MR. WILKINSON: Approximately, 6 and I expect in the beginning to use 8.

CHAIRMAN AHEARNE: How long would you expect a team would spend at a plant?

MR. WILKINSON: Depending, but from 1 to 2 weeks.

I expect to, as I said, we all have to cut our teeth in these evaluations because I expect our top people to go and be a part of the evaluation of what the inspection showed.

COMMISSIONER GILINSKY: You may have covered this before, if you did I apologize, but what then happens with the results of this inspection?

MR. WILKINSON: That is a good question, and that is something we are still working out. Basically, that inspection is going to be of value to the utility that we had looked at. I expect to take the results of that inspection and evaluation to the top management of of the utility and say, "Here is what we have found. This is for your use", but we also expect that the results will be written, documented, there it is, part of the public record.

CHAIRMAN AHEARNE: Bill, I thought you had mentioned that one of the functions of INPO was to

maintain the insurance qualification. Do you see a tie in whether or not you would certify that insurance qualification a tie to these inspection?

MR. LEE: Ultimately, yes, sir.

MR. WILKINSON: One of INPO's divisions is our training and education division. We have certain personnel in that division that work but they are currently reviewing the existing industry training programs. That review will serve as a basis for a recommended program in all areas, in plant operations, in maintenance, and in technical support.

Are any recommended changes in present programs in place and different utilities, as I said, we are looking at them all, bumping one against the other.

Any recommended program changes will be based first on an analysis of the actual task to be performed and then an analysis of the course work required to develop the ability to cope with those tasks.

Once we laid out a basic framework, there is more than one way to make a landing, you put your rudder over 5° an hour, full or later on and get there either way, so , there is not one exact way. But, the individual utility must structure a program within the framework that we have laid out, which meets the

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end.

requirements in order for them to be accredited. For accreditation we are going to have to cover program management, organization of the training, the actual course content, and then strip the qualification.

Our training division will include planning to cover the following areas, an executive program, operational program, training of operators, and maintenance a technician program.

Another division at INPO is our emergency preparedness division.

CHAIRMAN AHEARNE: Before you move on to that, on the training, then, you have in mind setting up acceptable standards for INPO's accreditation which would range from senior management down to the maintenance worker. Is that correct?

MR. WILKINSON: Yes, sir, and I feel that there is an area there that needs to be looked at in the maintenance, in qualification of certain maintenance training.

CHAIRMAN AHEARNE: Do you have any target as to when you hope to have those requirements set up, one year, two years, too early to tell?

MR. WILKINSON: It is a little too early to tell yet, we are with a limited number of people working

on that at the present time. Like our benchmarks of excellence, I consider that that is not going to be a static answer but will be a continually evolving thing.

Back to the benchmarks of excellence for a minute. We are going to have a criteria laid out as we continue to analyze incidents, LER's, make visits, inspections and evaluations that is going to evolve.

I think the same look at training programs should result in an evolving standard there. I don't have a target date for finishing the first time through. I do have people working on it at the present.

Another technical division at INPO is our emergency preparedness division. They are working on a review of industry's model plans to provide timely and effective emergency response. INPO is going to look at that area in all our inspections and evaluation visits.

That is, that each individual plant has an effective plan in place for handling emergency. In that regard, INPO will develop and maintain inventories of emergency equipment, services, and technical personnel who could be available in an emergency and how to contact them.

CHAIRMAN AHEARNE: Would that be a formal

arrangement, then, that any plant could tap into?

MR. WILKINSON: Yes, and for example, it didn't turn out to be required but we already had a contact point with each utility. We had that information available and when the Crystal River Incident happened here on the 26th and some of us went down there on the 27th, that was one thing that I had in my pocket with me, the contact point in every utility that I could have gone through -- Duke, can you provide some technical expertise in this area?

CHAIRMAN AHEARNE: Is this pool of technical experts restricted to utility people or do you also have some involvment from the, for example, the vendors?

MR. WILKINSON: We expect to have the same thing across the entire industry. That is information on emergency equipment and also technical personnel.

That service, maintained in that central inventory, will be available to all plants at all times.

MR. LEE: Let me amplify at that point, that will not only be utilities but vendors, architect engineers, construction firms, national laboratories, DOE installations, or wherever the talent or the equipment exists, or the material exists.

INPO manages the inventory and recallibility,

if you will, of that resource, and make that available to each utility as they flash out their own indigenous emergency recovery plan.

Some will need more outside supplement than others. But, the specific outside supplementary resources will be identified for each individual utility and kept up to date on a real time basis under INPO's management.

COMMISSIONER GILINSKY: What do you mean when you say you are managing the resources and laboratories? Are you identifying resources?

MR. WILKINSON: Identifying persons who have talents or measurement instruments that are unique, this is our plan at the national laboratories.

COMMISSIONER GILINSKY: This is in cooperation, presumably, with the laboratory?

MR. LEE: Oh, yes.

MR. WILKINSON: Under those circumstances, we are all on the same team.

COMMISSIONER GILINSKY: What I am trying to get at is the laboratory would have agreed that certain people will be available for use in emergencies.

MR. LEE: We haven't crossed that bridge yet, Mr. Gilinsky, but my most recent experience was that they are.

MR. SELBY: Well, there have been indications such as the management, for example, of DOE. That has to be worked out in detail, but as far as we are concerned the framework, the attitude, the offer and the ability to work that out, has been made.

MR. LEE: The Under Secretary and two Assistant Secretaries of DOE have pledged this support. We are going to meet with them.

CHAIRMAN AHEARNE: Dennis, when you said you are going to be reviewing the emergency plans of the plants, is this primarily or solely focused upon emergency response of the plants itself, the owner of the plant, the licensee, and their operators, or are you also reviewing the offsite emergency plans, of the local goverments?

MR. WILKINSON: What I was talking about when I went to the -- when we go to our inspection and evaluation visits, it is to look at the former not the latter. But, we will evolve the expertise and some specialists there at INPO that would be happy to work with individual utilities to assist in their preparedness to coordinate emergency action with whatever, DOE, or Statum, agencies or whatever.

MR. LEE: A current commitment there is for

onsite recovery and onsite and offsite monitoring and some interface with the planning of emergency offsite. That interface is not clearly defined but our commitment is with the former as we develop resources we perhaps could be of more support to the broader scope.

COMMISSIONER GILINSKY: What I was trying to get at earlier was not whether DOE is willing to make his resources available to help out accidents which obviously there would be, but whether they are putting them at your disposal or would expect to manage them themselves in some way? That was my question.

MR. LEE: Our concept is that the owning utility is responsible for managing the recovery subject to certain regulation and monitoring and advice has happened at Three Mile Island.

DOE furnished a number of people there for monitoring, for waste handling, that were integrated into the organizational structure that was managing the recovery. This is the concept the way emergency recovery plans are being developed by each utility.

They don't have this expert in waste management, DOE has it, we want his name and serial number and want him periodically drilled with that utility, and he is on that organizational chart assuming DOE

agreement and his alternate is also on that organization chart and has been pre identified. If something happens, then it is a big waste management problem, this is your baby.

COMMISSIONER GILINSKY: Is that the sort of management concept that you understand DOE to have agreed to?

MR. LEE: We have not discussed it in as much detail with DOE as we are doing right now, so I can't say that.

MR. WILKINSON: In concept but not specific, and when you get to the specific, yes.

MR. LEE: I witnessed similar cooperation at Three Mile Island.

COMMISSIONER GILINSKY: I'm not questioning it, I am just trying to understand how you expect the thing to work and what sort of agreement you were under with DOE?

MR. WILKINSON: We have a model emergency recovery plan that has been developed and has been made available to every utility for that flashing out. We can certainly make copies of that model available.

COMMISSIONER GILINSKY: Useful.

MR. WILKINSON: I would like to continue

and say that I recognize the priority requirements of this although I don't have too many people in the emergency preparedness division at the present time, I do have two people that are working on development of this supporting information. So, we will have a first cut at it as quick as we can

I would like to talk a little bit about the general philosophy of INPO. Our general philosophy is not to -- yes, sir?

COMMISSIONER KENNEDY: Before you go on, you have run over the organization and its conceptual basis, how many people do you visualize this to be, by division, in round numbers?

MR. WILKINSON: In our first rough cut of an organization that was laid out, we had planned on 200 personnel of whom about 150 would be professionals and 50 support. We are going to find by experience over time whether that is adequate or not. That is our goal to get staff, too by the end of this year.

If INPO does its job and does it well, and I expect we will do out utmost to do that, I am sure, then, industry will provide whatever support is required to do the job. That is a first estimate and a first cut, and if that is not what is required, I am going to go

back to the Board of Directors and say, "I need a little different organizational structure, I need some more resources for this kind of contractural support, that is not enough people" I am not going to be a reticent about making that approach. I have confidence that the Board of Directors will give me the support I require. That has been every indication I have had so far.

COMMISSIONER BRADFORD: How is INPO funded?

MR. WILKINSON: INPO is funded by an assessment to all operating nuclear utilities in accordance with a formula.

We had an estimate of a budget requirement this year of $11 million so by a formula this resulted in an assessment to each utility. Let me see, there are some 64 people eligible to pay and I think as of today we had 54 put their money in.

MR. LEE: 54 had sent in the money, I have heard by telephone from others that it is coming and we have had no one turn us down.

MR. WILKINSON: No one.

MR. SELBY: In 1979, for example, but we did this through the Three Mile Island Committee. Every utility that had a nuclear commitment contributed.

We expected that in this activity.

MR. LEE: This includes not only those with operating plants but those with construction permits on which construction has started on safety related structures, that sort of triggered their interest in getting the plant to operate.

They started thinking about training and at that point they are eligible to become members of INPO and no one has turned us down.

COMMISSIONER BRADFORD: Would that include utilities that owned pieces of nuclear units?

MR. LEE: Licensee is the member responsible for collecting the money and he can collect it from his co-owners, which is fine. The co-owners are also eligible to be members of INPO and have a voice in its claim.

Under that fee that is paid to the licensee.

COMMISSIONER BRADFORD: So that the budget setting process would essentially be that you would go to the Board and if they agreed with you they would change the assessment formula accordingly and then the members would pay up.

MR. WILKINSON: Not the formula but the --

CHAIRMAN AHEARNE: Amount that comes out of the formula.

MR. WILKINSON: Yes, but the total amount.

COMMISSIONER BRADFORD: Some number in the formula.

MR. LEE: Simply the formula is this. 1. will join the club, 1. per site, 1/2. per unit, you total up the national points divide that into $11 million and that is the value per point, $39 thousand a point or thereabouts.

CHAIRMAN AHEARNE: Nothing to do with the size of the plant?

MR. LEE: No, except there is one exception, plants 100 megawatts and less are treated specially, that is getting to small to carry the full burden.

MR. WILKINSON: So, there could end up as more plants are operational or improved or whatever total number of points different or there can be a change in the budget. Instead of $39 thousand per point one unit, would be more or less. So far, as Mr. Lee says, no one has.

COMMISSIONER BRADFORD: Does membership in INPO carry with it automatically the right to participate in the insurance fund or is that a separate matter based on separate assessments?

MR. LEE: Do you want to speak on that?

MR. PFISTER: All right. The insurance is a

separate matter entirely. There will be a industry created offshore insurance company which will provide insurance for our extra expense insurance to the people that purchase it.

The purchasers of that insurance will all be members of INPO but not every member of INPO may necessarily purchase the insurance.

COMMISSIONER BRADFORD: When will that insurance be available?

MR. PFISTER: There is a requirement that there be a commitment, a minimum commitment and they anticipate that that minimum commitment will be achieved in April of this year.

MR. WILKINSON: Probably May or June.

Membership in the insurance will not initially require membership at INPO for having being looked at by INPO. Continued participation will in some way probably require it.

MR. LEE: Conceptually INPO and NEIL, Nuclear Energy Insurance Limited.

CHAIRMAN AHEARNE: I guess I am confused, I thought that you said that to be in the insurance, you had to be a member of INPO but John I thought you said you didn't have to be.

MR. SELBY: Well, sir, the initial membership does not require the continued membership, as we move on, will.

MR. LEE: Membership in the insurance pool, coincidentally, everyone is joining INPO for its loot.

MR. PFISTER: And that is the reason why I answered the question the way I did.

COMMISSIONER BRADFORD: Can you give me a sense of the costs involved? How much one pays for a particular amount of coverage?

MR. LEE: Yes, this is not under INPO's pervue however, you understand, that is why we can. But, the coverage begins 6 months after an accident and has paid seeming of $2 million a week for one year and $1 million a week for the second year for replacement power.

COMMISSIONER BRADFORD: But, for the first 6 months the utility is on its own.

MR. LEE: That is correct.

MR. LEE: The premium is currently estimated at $1.7 million per unit per year. It is of course subject to state utility commission approval to participate in the insurance. That is going on now in many states and some of it will be resolved in April and if somebody gave a more realistic estimate it might be May

or June before it becomes effective.

COMMISSIONER KENNEDY: This is aimed entirely at replacement power costs?

MR. LEE: Yes, sir.

COMMISSIONER GILINSKY: Where is the decision going to be made on whether the utility can continue its insurance in view of the results of INPO inspections?

Is that going to be made by the insurance pool, and does that presume some sort of grade that results from the inspection?

MR. PFISTER: The decision to continue insurance will be made by the insurance company and they have not finalized exactly what will be involved, what all will be involved in that determination. It may involve, for example, their own inspections. T

The other nuclear insurance agencies have their own inspection teams and it may well evolve that NEIL may have its own inspection team also.

COMMISSIONER GILINSKY: You mean apart from INPO?

MR. PFISTER: Yes.

COMMISSIONER GILINSKY: I see, I guess I understood the tie to be closer than it is now.

I thought the two were closely linked in fact,

The reason for the inspections is to determine eligibility for the insurance pool.

MR. LEE: INPO is responsible for human factors aspects as they relate to safety. Adequate fire protection or something is not INPO. The matter of sprinklers, is not an INPO function.

COMMISSIONER GILINSKY: So, this is really something that stands on its own, as I understand it, now, the incoactivity.

MR. LEE: Yes, but NEIL has agreed with INPO in concept to make a tie the appropriate time in the future. We are not conversed in details with what else NEIL may have done.

With or without that time, we are satisfied that every utility will be very highly motivated to conform with INPO's recommendation for improvements.

Your reaction will effect the ability to finance, it will effect many other things. We are not concerned about having exactly what the size of the stick is. The stick is that.

CHAIRMAN AHEARNE: But, wasn't it -- I had sort of the same impression that Vic had. I thought that the original concept of INPO was to be tied more explicitly to that insurance and that if INPO --

MR. WILKINSON: I think in the early discussions, that is correct. You could certainly gather that. My concept is that INPO really was separate. The purpose of INPO was to improve the operating capability of the whole industry.

Also, to identify through this inspection route, weaknesses that anybody had and provide a mechanism by which they could be strengthened. Now, further when we got into the question of how are you really going to give INPO clout, as we got into the insurance we talked about tying it quite directly together but I think that in the order of things INPO came first and then the insurance tied second. INPO was not formed for the purpose of providing an inspection mechanism for the insurance organization.

Now, as we got into the details of it, there are some difficulties legally in terms of requiring that you be a member of INPO in order to get the insurance, is what the lawyers tell us.

And so as I say the initial requirement is not there. What we are going to have to do to develop out of this the mechanism by which the objective that we originally had. Because, I as a member of the insurance company, am paying a premium and subject to a retrospective

premium in the event of an accident, want to be sure that my colleagues are just as good as I am, to protect my own self.

So, mechanism is there and that has to be worked out, but as I say the initial requirement was not put in because it is illegal advice.

MR. PFISTER: Fundamentally there is an anti-trust issue that needs to be carefully resolved to avoid any anti-trust implications.

COMMISSIONER BRADFORD. Is any plant that is out of service for 6 months continuously then eligible or does it have to be a TMI type situation? Humble Bay and Indian Point 1 come to mind.

MR. WILKINSON: Are you speaking of insurance?

COMMISSIONER BRADFORD: Yes.

MR. WILKINSON: They would not be eligible.

MR. SELBY: It has to be an accident involving the nuclear portions of the plant.

COMMISSIONER BRADFORD: Involving the nuclear portions of the plant?

MR. SELBY: Yes.

MR. LEE: The only purpose of this is to soften the impact on consumers of higher electric bills should there be another accident.

COMMISSIONER BRADFORD: I guess what took me aback a little was the 6 month provision. I take it that was somehow the best you could get, but that is a whale of a deductable. It is like having $300,000. in automobile coverage $200,000 deductible.

MR. WILKINSON: We may change it later.

MR. SELBY: It is but you have to have a pretty high deductible on this one in order to make the premium at all reasonable.

I think the thinking is that most utilities have borrowing capacity and if the bankers and so forth see this future stream coming in to protect, then they are going to be willing to cover the early time problem.

CHAIRMAN AHEARNE: This is the catastrophic?

MR. SELBY: Yes. It does give the Commissions and the utilities an opportunity without the pressure of immediate time to resolve the problem on long termness.

COMMISSIONER KENNEDY: Turbine damage which will drive a plant down, force a plant down for some weeks or months doesn't qualify?

MR. LEE: No, for two reasons, one it is turbine damage and two, it is not more than 6 months.

If it is more than 6 months till, it is turbine damage for replacement power. We also carry certain

property damage here and some public liability insurance.

MR. WILKINSON: These gentlemen are all more knowledgable than I in the insurance aspect. I would think that the insurance consortium or whatever it would in dealing with its individual utilities, that it is insuring would like to have an arrangement where they have made available to them the results of INPO's evaluations.

Now, I can see a difference in feeling to the very good question you asked as to whether that is pass fail or in some way rated ABC.

Eventually, INPO will be able to do it either way. We would hope in the beginning especially to only say this is something you need to take action on if for insurance purposes later, the utilities themselves want us to evaluate to a great thing for insurance purposes.

I am going to ask us, I would imagine you could have mixed feelings in the utility industry in that regard. Some people probably think they are better than others. That is not my circuit at the present time. I think that will leave all over time and I think your question was a very pertinent one.

COMMISSIONER BRADFORD: You probably have mixed feelings in the insurance business as well.

MR. WILKINSON: Let me go on talking INPO. Our general philosophy is not to lay out the management of the plans here. Our philosophy in our inspection evaluation, is to develop the information with which industry can help themselves.

I would like to say that I have visited 10 sites now, and I have talked to some management people and I have crawled through more than 10 holes. It appears to me from those preliminary visits an opportunity to look at some large plants, to talk at some of the people that are running them, it appears to me that across the industry that people are very knowledgable on all their technical problems. If they have pipe cracking problem, everybody knows it. If they have a problem with the steam generator, everybody knows it.

It doesn't seem to me that there is quite as much information in the industry from site to site, from plant to plant, as to operational considerations. I would think that each utility would be interested in a good idea of a way of controlling maintenance or operation.

If Duke is doing somenthing smarter than somebody else, I would think that that information would be of value to someone else.

If someone else was doing something smarter than

Duke, I know, Bill --

CHAIRMAN AHEARNE: Now, you are overstepping things. (Laughter)

MR. WILKINSON: --would like to know. I certainly know that INPO will perform a function for acting as a catalyst for an exchange of information, for a cross fertilization of operational information across the industry, both good and bad.

If there is something that someone is doing that is very clever, then that information I think everyone would be happy to steal my idea. Or, if somebody ran across something bad, then everybody should say watch this one, lets don't make that mistake also.

So, I think that INPO will be of value in that regard.

We talked about INPO's status and plans, I personally realize the complex nature of the relations in the nuclear utility industry between regulators, the regulated, and those with supporting roles.

I know that I at INPO need to evolve the most effective way to work within that complex framework. I would like to take this opportunity to express an eagerness on INPO's part to develop a close, working relationship with the NRC. Not only with the leadership

but also the working groups that are concerned with the safe operating practices and procedures.

I know I need to develop working level contacts and information exchange and we will be working on that. Actually INPO's product should be of value to the NRC.

If we are successful in our mission which we expect to be, we should really assist NRC in discharging your responsibilities.

In that regard, INPO will be responsive to the President's mandate to periodically inform the Chairman of the NRC and the Oversite Committee of our objectives, milestones, progress, and of our overall evaluation of the nuclear utility industry performance.

I would like to say that we have been told from every level to turn out excellent results take time to develop.

Since INPO started there has been a constant pressure to do this or that all at once in a high speed. Some demands I recognize represented diversion from our primary mission to increase the standards of excellence of operation of our plants.

I want to build and build well and concentrate on that primary goal and I intend to do that. In that regard, I would like to say I appreciate the support

I have had from INPO' Board of Directors, as you know 6 of them are here today. It is interesting to me to note that everyone of those 6 gentlemen here today has one or more contacts with me personally assuring me of support and then emphasizing the urgency of getting on with the job.

Let me say this, we are saying that INPO expects to produce results which will be of value to NRC. To that end we solicit cooperation, nice working relations with the Staff in what we are doing. Having said that, let me say, we also solicit critical constructive comments of what we are not doing or what we could be doing and better.

I understand Bill Lee has a final statement he would like to make.

CHAIRMAN AHEARNE: Before he gets to it, could I ask him another question?

Back inbedded in what you said, Dennis, you mentioned that your evaluation results, you would expect to make public. So you do expect that when you do an evaluation of a plant, that you would make that public?

MR. LEE: Let's say the INPO were reported to the utility, each utility will decide whether to

make it public. Every utility that I have talked with said, yes ,we will make it public.

COMMISSIONER BRADFORD: What, those of you who are utility executive, how do you view the prospect of INPO inspecting against its set of benchmarks, NRC inspectors inspecting against NRC regulations and criteria I suppose is inevitable at some point will come a time when there are two sets of inspectors wandering through plant at the same time, each inspecting against criteria which one hopes will be consistent but which inevitably are going to be at least different?

MR. LEE: A definition one is an acceptable standard. INPO is trying to achieve this benchmark of excellence.

COMMISSIONER KENNEDY: Which in your definition is higher?

MR. LEE: Yes.

CHAIRMAN AHEARNE: One worries when there order is reversed.

MR. LEE: It would be the best of all that is found in all plants, but then we will be bettered more by input from NASA experience, or Navy experience, SAT experience, educational accreditation institution experience, that is all right, but help us draw this envelope a band

of excellence.

Ultimately, Commissioner Bradford, as INPO cuts the mustard what we say we will, then you in turn have an opportunity to look at INPO measure its effectiveness and make a decision as to whether your inspector should audit INPO and the licensees conformance with INPO benchmarks and be fully adequate to reach your minimum standards.

You do that, wit ASME code, because ASME code has proved its method, and you can accept it as meeting the necessary standards.

INPO someday may be in that same category but it is not our purpose but our purpose is it is with or without you, we are going to do all we can to assure safety. If you someday examine INPO's results and say, that is really top drawer, then you the Commissioners may feel that INPO accreditation or certification on a human factors point of view meet your requirements.

Those that don't meet INPO you will have to apply your criteria to. Just as those that don't build something by ASME code, you have to apply your criteria to today.

MR. WILKINSON: One other element of the question you asked, I would hope that routine look we wouldn't both be at the sametime.

If you have a problem as happened a week or so down at Crystal River, then, and a request was made to INPO to participate in no look. Obviously, there are going to be representing both organizations, looking into things at the same. But, just for routine evalution visit, I would hope that you wouldn't have to do that.

COMMISSIONER BRADFORD: Let me tell you what concerns me, is that in the human factors area, intuitively it seems to me that it is not going to be as easy to apply in practice as it is to stay with the principle that you hoped would be benchmarks, will be higher than the basic regulatory criteria.

One thing to talk about air emissions and water emissions and say that set is more stringent than another because those are reducable to numbers. What you are really talking about here are operating practices of one sort ofr another and I hope it works out as you suggest but it seems to me that inevitably in some cases we are going to talking about operating practices that may be better or may be worse but they are different. Keeping the regulatory framework in mind with what you perceive to be say, better lines of authority, better control room practices, different people perhaps present in the control room, it is going to take some doing.

MR. WILKINSON: That is a good question, part of the question here is trying to describe in general terms. We have been making, as you know the Navy background, we have been making these kinds of works that are planned in the Navy for many, many, many years.

I helped set up the teams that do this in the Navy back when we set up the formal teams.

Admiral Rickors group did it from the beginning and then we set up formal teams in the Navy back in about 66. We are trying to talk about this kind of thing in general terms. This is a first preliminary report of INPO status and plans to the Commission.

After we have made some works and written some reports, looking at specific details, it might make you feel a lot better about what we expect to do in that.

CHAIRMAN AHEARNE: Yes, I think certainly for myself I will be very interested in seeing one of those early reviews to get a better sense of what you will be looking at.

COMMISSIONER KENNEDY: Very early on in your talk, Admiral, you referred to a systems to utility as contrasted with inspection evaluation presumably, I assume, that the systems could arise in one of two ways, either

as an author resulting from one of these evaluations or alternatively requested a request from a utility. What would you see the nature of the systems being?

MR. WILKINSON: I see it developing in more than one way. From an inspection there is an area of service that we can be to an individual utility.

We will tell them, look you have got these problems can we help in a service in working out a methodology to attack those problems. We would be happy to provide that service if an outfit needs it and we have the expertise.

COMMISSIONER KENNEDY: So, a methodological approach not a hands on engineering exercise?

MR. WILKINSON: That's correct.

Now, then there are other specific instances, when the instant it happened at Crystal River on the 26th, we had an approach from Mr. Hiens, that same night as INPO and NSAC to participate in an evaluation of that incident, that approach was generated through a discussion of the problem and the issue between Chairman of our Board of Directors, Mr. Lee and Mr. Hiens, and I believe that we have not promulgated the result of that evaluation as yet but we have finished it in draft form and are not being reviewed by Florida Power and the other B&W users,

and expect that we will come out with that report before the week is out. We expect that that will be of value and that is a specific request with specific reaction from INPO.

We always stand ready to respond to that kind of a request.

COMMISSIONER KENNEDY: Could you say something about the relationship between INPO and NSAC?

MR. WILKINSON: Yes. One of the things that is of primary interest here are the licensee event reports the LER's, those things will show different problems, a design problem, an equipment problem, a procedural problem, and operational training or qualification problem.

Somewhere each one of those LER's should be evaluated to flush out what the problem is and what action should be taken across the industry to react to it.

I have been talking with Dr. Shubroski this weekend trying to lay out a division of responsibility as to how those LER's will be evaluated. So, I see an interrelation between INPO and NSAC in that kind of review.

Our basic thrust will be toward the operational their's should be toward the technical design.

MR. LEE: Let me add to that, Mr. Kennedy.

Both NSAC and INPO were viewed, every LER and other reports of events. Each will make a determination yes, there is something to be learned or no there is not. If no there is not sign it off, both have to sign off.

If yes, there is, then there is involving interrelationship of who is going to do what and who is going to call the shots. That's evolving right now.

But each will have to sign off on every one. Each utility in turn will have to report back to INPO or NSAC whoever is directing that particular lesson to be learned. That yes, here is what we have done about it or no we haven't done anything about it but we are like this.

MR. WILKINSON: If that is indicated, if there is an action.

MR. LEE: And then, finally INPO in its evaluation will close the loop to see to it that it is done. There will be some recommendations in the Crystal River report coming out later this week from INPO and NSAC.

They will have applicability as yet an undetermined number of plants in the systems. But INPO and NSAC are going to close the loop on those recommendations. They are starting.

COMMISSIONER KENNEDY: One last question I have.

MR. WILKINSON: Yes, sir.

COMMISSIONER KENNEDY: You define the nature of a relationship which you look to for the future with the NRC Staff, candidly how is it right now, today?

MR. WILKINSON: I have nothing critical in any way to say. We haven't had enough to work it out. I think it is up to me to make some overtures to evolve some contacts that work on a level, I have no problem. I have been so busy and my people have been so busy we haven't done what we should have done in that regard.

MR. LEE: There has been very little interfacing. Reports, we briefed them occasionally face-to-face or by telephone as to how we were coming. INPO has made a management decision with respect to the fact that we will not get into a turf with the NRC Staff. We do thing there is some areas where they are coming out of the box awfully fast.

We have not studied in detail exactly what they are coming up with. We are building our excellence and later if there is a confrontation or a difference of opinion about what is good, we will be glad to work hard to work that out.

But right now we are not engaging in turf argument.

COMMISSIONER GILINSKY: Let's see, why should there be any turf argument? What would there be a confrontation over?

MR. LEE: It may be in the Staff's opinion that this is necessary in terms of an individual qualification and INPO may find that it is something different that is more important.

Is the licensee going to have to comply with both that are pulling in different directions?

It may be that if we achieve the level of excellence to which we aspire, that the NRC will look at INPO like they look at the ASME code. Or it may be, and there is some evidence of this, the Staff would rather do it in full duplication.

CHAIRMAN AHEARNE: Well, I guess, just to be clear, unless there is a change in the law, the Staff doesn't have any choice nor do we to until we reach some formal conclusion that another mechanism meets the appropriate requirements that the law lays on us.

We have got to do it, so I wouldn't so much use the word duplication as performance of the law.

MR. LEE: Well, I would agree with that, and certainly I fully understand that. INPO will develop benchmarks of excellence for training. NRC is developing

criteria for training.

It may be that NRC can look at the benchmarks of excellence for training some day and say that is really better than our criteria, we will cancel this and the longer you meet those benchmarks we will audit and make sure you do it and meet them, or we will audit the INPO audit.

I would think if we do our job well, our product will be of value to you.

CHAIRMAN AHEARNE: I am sure it will be.

MR SELBY: As the licensee, I look at it this way. That if we work with INPO, and we take advantage of what comes out of INPO in terms of their knowledge and how utility A is doing it, which might be better the way we are doing it, then we should be able to design our training programs, our operating procedures, our maintenance procedures, and so forth, so that there would be little question in my mind, then NRC comes around to see if we are doing it in accordance to the requirements they set up, then we are going to make it.

I don't think one can ever surplant the other but there may be mechanisms by which you can ease the job of the other. That is principally right.

As a licensee, we are responsible for the safety of the plant in the final analysis. INPO is

a mechanism to help us do that.

Included in that are inspections and evaluations.

MR. WILKINSON: If the NRC finds something that we have missed, it ought to be in those benchmarks of excellence, we will get them in there.

COMMISSIONER BRADFORD: What is the salary that you would propose to be paying the people who accosted to 6 man teams, 6 person teams?

MR. WILKINSON: I have been asked this salary, I need what is required to get the talent I need. I have gone back and talked to the Executive Committee of the Board of Directors about that and I have there assurance that they understand that.

It depends on what level of member you are talking about. Each one of those teams needs a team leader, and I would like to have a guy that is really good, who has experience out in industry and those people don't come cheap, not the kind of people I am talking about. Then, you are talking lesser members down below, and finally one long member from industry, the guy that is loan from me, I am going to pay him whatever industry is paying him because I will just pay his parent company for him.

Those in between, I don't know, I am still negotiating that .

COMMISSIONER BRADFORD: Negotiating it with your Board or negotiating it with people?

MR. WILKINSON: With people.

I have interviewed about 3 guys I think would make adequate team leaders, as I said, I hope that is 16 by the end of the year. The key is to get the top guys first.

COMMISSIONER GILINSKY: Could I ask you about your Crystal River report? Is that a report to the utility or is that a report to the industry, is it a public report?

MR. WILKINSON: That won't be a joint report from INPO and NSAC. I was out at NSAC this weekend, going over that with Dr. Shubroski and that will be a report addressed to Florida Power Corporation, but we have an agreement with Florida Power Corporation thereupon provise that report to NRC.

MR. LEE: We will send it to you at the same time.

COMMISSIONER BRADFORD: Could you speak a little about what you see the role of your advisory council being? How often will it meet, what will it do?

MR. LEE: Our initial plan is for it to meet quarterly, it has met for one day in Atlanta, February,

and it was a very stimulating experience. The ideas came from these individuals that we think are very exciting. WE now have a checklist of things from the very first meeting that we are going to report back to that Council on, a number of questions and things that it never occured to me in my experience.

I personally was delighted with challenge and fairplay initiative of the Advisory Counsil.

COMMISSIONER BRADFORD: Does it ever meet jointly with the Board?

MR. LEE: Yes, in the afternoon of that meeting a number of the Board members were there, and then that evening the Advisory Counsil and the Board met together.

MR. WILKINSON: At its first meeting, there were several Board Members there and it seems to me that they got a pretty good group because they had an awful lot to say the first meeting.

We have another meeting scheduled in May and one in August we are workingout a plan for the Board meeting, instead of being in Atlanta, to be a TBA and it will look at the simulators system at TBA because the Board in their first meeting had a lot of questions about the proper use of simulators in all our training methodology.

COMMISSIONER BRADFORD: Is there a regular mechanism that will work between the Board and the Advisory Council on the other?

Are there any members of one who are also members of the other or any assured mechanism for making sure that they stay in touch with each other?

MR. LEE: There assured mechanism is that we meet together.

COMMISSIONER BRADFORD: Well, you have once.

MR. LEE: There is an old joint membership between the Board but the Advisory Council on the Board of Directors, there is nothing that we will do with the Advisory Council that won't be made into a report and distributed to the Board of Directors.

MR. SELBY: There are minutes kept of the Advisory Council meeting. But, it is planned to coordinate those meetings around the Board meetings so that all Board members won't be at all the meetings, I generally expect some Board members won't be at all the meetings of the Advisory Council.

CHAIRMAN AHEARNE: Bill, do you have some closing remarks?

MR. LEE: Yes, Mr. Chairman, and gentlemen, as you know, INPO is addressing the broad spectrum of

of the matter of human resources and how they can be applied to better assure safety.

In that effort, we are concentrating on energy on several high priority areas. We have noticed an item that we think deserves your attention and gives us concern.

This is the matter of the -- when you look at the nation's human resources that is a certain quantity. This is a matter, then, of the proliferation of Bulletins and Orders of letters of action items of proposed criteria.

Most often requiring simultaneous efforts and prompt actions and responses on a fixed quantity of human resources. It is a tight deadline without priorities.

This is the concern of INPO that resources in the industry are heavily absorbed in this overwhelming regulatory morass, the pressures on people occasioned by this regulation far exceed those that existed prior to TMI.

The situation which was the subject of criticism by the Kemeny Commission. Such overwhelming diversion of limited human resources gives INPO concern that there may be some utilities that may not be able to give full focus on safety.

We have not identified any, but we have talked

enough plant managers such that we have this concern. We hope this Commission will heed this concern and appropriately reflect such risks in the direction to stand.

We are not here to present a point-by-point review of any action plan but to express and overall concern. We have no hard data, that speaks to this concern. There are indicators, for example, in one action plant that is being considered, there is an estimate of 13 thousand manyears required to implement the action plan. We don't know, that to us clearly domonstrates the need to priortize.

Which leads us to the solution as we view it, is to set priorities on safety goals and first do only those few things that we have learned clearly have priority of a probablisitic basis, an example of which might be the information on the degree of subcooling always available to the operator who has been trained to correctly interpret that information as a high priority item.

Once the high priority loops have been closed then address the next priority all the time bearing in mind that the very highest priority is to have technically qualified people always available to safely operate, supervise, and manage the nuclear plant.

The nation cannot provide a step function increase in the number of such qualified people. Who are also those same people with the level of knowledge necessary to respond to all of the NRC requests.

WE believe this situation is managable provided this Commission gives recognition to its importance. There is a lot of pressure out there.

CHAIRMAN AHEARNE: Thank you, Bill.

Well, I think that we do share the basic concern to insure that requirements that we lay out and ones that we have thought to and that are the ones that we feel are necessary in the order that we lay them on.

WE understand the concern and it has been an issue which the Commission has been addressing as we have worked through several revies of the action plan and as I am sure you know, we have yet to reach final agreement on either which items or as a schedule on which they will be incorporated. But that certainly is an issue that we are taking into consideration.

Vic?

COMMISSIONER GILINSKY: I don't have anything. I just want to say at this point, we are launching an important effort getting under way an effective way, and

I am pleased to see it.

MR. WILKINSON: Thank you.

CHAIRMAN AHEARNE: Dick?

COMMISSIONER KENNEDY: Well, as one who feels no doubt that nuclear power is essential, nor does he have any doubt that it is safe, and can even be safer, I want to commend you for what I think is perhaps every bit as important, Bill, as you suggested it was in the annals of American Industry.

It represents what I think all of us can take great pride in. In return to a concept which says we can always do it better, not just cheaper, but better. That is the way it used to be and that is the way its got to be and I just commend you for that kind of an attitude.

One other thing, it is a recognition that like I said 5 years ago, at an AIF meeting in New Orleans they are your plants and they are your stockholders, and your communities we are talking about, not ours.

The recognition that responsibility where it does not on the table of a bunch of bureaucrats is the first step toward real safety.

I commend you. Thank you.

MR. LEE: Thank you, Mr. Kennedy.

CHAIRMAN AHEARNE: Peter?

COMMISSIONER BRADFORD: Obviously, starting any new enterprize there are a number of directions that it could go in, I certainly hope that it takes the constructive direction that you all indicated and Dick has articulately reinforced my concern, at the same time, would be that you be conscious of avoiding the pitfalls that sometimes do await industry groups engaged in exercises of self regulation.

There is a tendency toward sometimes protecting the lowest common denominator rather than setting criteria for benchmarks of excellence to use the term that you have used.

I hope that our two prophecies can be of mutually helpful one and certainly look forward with eagerness to helping in any way that we can while at the same time obviously continuing to discharge the regulatory functions that Congress has vested us with.

MR. LEE: Thank you, sir.

CHAIRMAN AHEARNE: Well, Bill, I guess my final count to be, Dennis, you have had very hard jobs in the past, and you done those very well, I am sure that you will tackle this one successfully.

We both have the kinds of responsibilities that

we have been talking about today, which shall be as Mr. Kennedy pointed about the perspective on the utilities responsibilities, and Mr. Bradford referred to our own.

We do see our responsibilities as protecting the public health and safety. I am very encouraged by your effort but just as I mentioned in other places, the NRC itself has made many changes and is trying to step forward and take a number of actions and it remains to be seen whether we accomplish what we are setting out to do

You set good goals and you are working hard. I hope to see that you accomplish what you set out to do.

Thank you very much, gentlemen.

(Whereupon the meeting was adjourned at 11:50 a.m.)

# BIOGRAPHICAL DATA

## INPO BOARD OF DIRECTORS

Mr. William S. Lee, Chairman of INPO, is the President and Chief Operating Officer of Duke Power Corporation in Charlotte, N. C. He joined Duke in 1955 as a design engineer and progressed to Senior Vice President in 1971, Executive Vice President in 1976, and President in 1978. He is a member of the National Academy of Engineering and a past Chairman of the Greater Charlotte Chamber of Commerce.

Mr. Carl Andognini, is presently the Superintendent of the Nuclear Operations Department of Boston Edison Co. and is responsible for the operation of the Pilgrim Nuclear Power Plant, the Nuclear Fuel Division, and the support Engineering Group. He was with Yankee Atomic Company from 1958 until he joined Boston Edison in 1975.

Mr. James O'Connor, is presently the Chairman, President, and Chief Executive Officer of Commonwealth Edison Company, and has been with the company for 17 years. He is active in many civic and charitable organizations such as the Chicago Association of Commerce and Industry and the American Cancer Society Chicago Unit.

Mr. William R. Gould, is President of the Southern California Edison Company which he joined in 1948. He is Chairman of the Institute for the Advancement of Engineers, past Chairman of the Atomic Industrial Forum, a member of the National Academy of Engineers, and a member of the Board of Trustees of the California Institute of Technology.

Mr. Don D. Jordan, is President and Chief Executive Officer of Houston Lighting and Power Company and has been with the company for 26 years. He is the Chairman of the EEI Policy Committee on Legislative Affairs and the Chairman of the Electric Reliability Council of Texas. He is also the Director of several organizations including the Texas Research League and the Texas Atomic Energy Research Foundation.

Mr. Frank Linder is General Manager of Dairyland Power Cooperative. He joined Dairyland in 1947 after several years with the Rural Electrification Administration. He is Chairman of the Board of Electrical Examiners for the City of LaCrosse, Wisconsin and is on the Board of Directors of the First National Bank of LaCrosse.

Mr. Hugh G. Parris is the Manager of Power for Tennessee Valley Authority. He joined TVA in 1958 and has participated in many management assignments. He is a member of the Board of Trustees of the National Electric Reliability Council, a member of the Executive Committee of the Southeastern Electric Reliability Council, and a member of the Project Management Committee of the Atomic Industrial Forum's National Environmental Studies Project.

Mr. A. J. Pfister is the General Manager of the Salt River Project in Phoenix, Arizona which he joined in 1970. He is the President of the American Public Power Association, and he is the public power representative on the TMI Ad Hoc Nuclear Oversight Committee. He is active in a large number of civic activities in Phoenix.

Mr. Glenn Reed has been with Wisconsin Electric Power Company for 14 years as the Manager of the Nuclear Operations Division. He previously worked for the New England Electric System and worked for the Yankee Atomic Electric Company as plant superintendent and manager of operations of the Yankee Rowe Plant. He worked on basic nuclear programs with the Argonne National Laboratory and on naval submarine propulsion.

Mr. John D. Selby is Chairman of the Board, President, and Chief Executive Officer of Consumers Power Company. He joined Consumers as President in 1975 after 29 years with the General Electric Company. He is a Trustee of Jackson Community College, Director of the Michigan State Chamber of Commerce, and a member of the Board of the Greater Jackson Chamber of Commerce.

Mr. Lelan F. Sillin, Jr. is the Chairman and Chief Executive Officer of Northeast Utilities, Inc. He joined Northeast in 1971 after being with the Central Hudson Gas and Electric Corporation where he served as an officer from 1951 to 1968. He is a Director of many organizations including the Edison Electric Institute, the Atomic Industrial Forum, the Irving Bank Corporation, Arthur D. Little, Inc., and Helium Breeder Associates.

BIOGRAPHICAL DATA

INPO ADVISORY COUNCIL

Dr. Victor P. Bond, of Upton, N.Y., is associate director of the Brookhaven National Laboratory and professor of radiology at Columbia University. He served on the Public Health and Safety Task Force of the President's Commission on the Accident of Three Mile Island and has more than 30 years of experience in the fields of medicine, hematology, radiation biology, and nuclear .. dicine.

Dr. Anne M. Briscoe, of New York, New York, is director of the Biochemistry Laboratory at the Harlem Hospital Center. She also is an assistant professor of medicine at Columbia University and a fellow of both the New York Academy of Sciences and the American Institute of Chemists.

Dr. Robert A. Charpie, of Boston, Mass., is president of the Cabot Corporation -- a diversified energy technology company. Dr. Charpie was Deputy U.S. Delegate to the United Nations Advisory Committee on Atomic Energy and also served as the scientific secretary for the First International Conference on the Peaceful Uses of the Atom.

Charles H. Elmendorf, III, of Madison, N. J., is a former assistant vice president of American Telephone and Telegraph Company and now operates his own technical management consulting firm. Elmendorf has extensive experience in the telecommunications industry, including 30 years of work with radar and transmission systems at Bell Laboratories.

Patrick E. Haggerty, of Dallas, Texas, is the former president of Texas Instruments Incorporated. He currently serves as the company's general director. From 1970-71, Haggerty also was chairman of the Presidential Science Advisory Committee Panel and, most recently, he served as a member of the President's Commission on the Accident at Three Mile Island.

John R. Hamann, of Grosse Pointe, Michigan, is a former president of The Detroit Edison Company and currently serves as a vice chairman of the Board of Directors. He has been associated with Detroit Edison since his graduation from Michigan State University in 1937. Hamann also is a member of the Board of the Edison Electric Institute.

Dr. Edward R. Jones, of St. Louis, Missouri, is the chief human factors engineer at McDonnell Douglas Corporation. He has nearly 30 years of government, academic, and industry experience in the field of engineering psychology. As a member of the U.S. Air Force Research and Development Command, Jones was responsible for research on the first flight simulators delivered to the Air Force.

Laura Keever, of Houston, Texas, is chairman of the Advisory Committee on Nuclear Energy of the Texas Energy and Natural Resources Advisory Council. This group formulates energy policy for the state of Texas. Keever also serves on the boards of several Texas environmental organizations and has been a member of the National Energy Committee for the U.S. League of Women Voters.

Jerome Lederer, of Laguna Hills, California, is a former director of safety for the National Aeronautics and Space Administration. His 50-year career in aviation safety includes service with the Civil Aeronautics Board and work with Cornell University and the University of Southern California, where he currently is adjunct professor for the Institute of Safety and Systems Management.

Dr. Harold W. Lewis, of Santa Barbara, California, is a member of the Physics Department of the University of California at Santa Barbara. He is a former chairman of the Risk Assessment Review Group of the Nuclear Regulatory Commission and a member of the Advisory Committee on Reactor Safeguards.

Dr. Thomas H. Pigford, of Berkeley, California, is a professor of nuclear engineering at the University of California at Berkeley. He formerly served on the faculty of the Massachusetts Institute of Technology and was a member of the Atomic Safety and Licensing Panel of the Atomic Energy Commission. In the past year, Pigford served as a member of the President's Commision on the Accident at Three Mile Island.

Samuel R. Ross, of Indianapolis, Indiana, is a supervising engineer with R. W. Beck and Associates. Prior to joining that firm, Ross spent more than 20 years with Public Service Company of Colorado, where he had responsibility for system planning and analysis and nuclear power supply.

Dr. John A. Swartout, of Hilton Head, South Carolina, is a retired vice president of Union Carbide Corporation and a former deputy director of the Oak Ridge National Laboratory. He currently serves as chairman of the Utilities Scientific Advisory Council to the Nuclear Safety Analysis Center.

Dr. M. Gordon Wolman, of Baltimore, Maryland, is chariman of the Department of Geography and Environmental Engineering at Johns Hopkins University. In addition, Wolman has chaired numerous committees for the National Academy of Sciences and the National Research Council. He is a member of the World Health Organization and also serves as chairman of Resources for the Future -- a non-profit consulting firm in Washington, D. C.

Dr. Robert Seamans, of Boston, Massachusetts, is the current Dean of Engineering at the Massachusetts Institute of Technology where he also is the Henry R. Luce Professor of Environment and Public Policy. He has served in many important assignments, including the Administrator of the Energy Research and Development Administration, the President of the National Academy of Engineering, the Secretary of the Air Force and as Associate and Deputy Administrator of the National Aeronautics and Space Administrator.