Chairman Markey

CHAIRMAN MARKEY AND SUBCOMMITTEE MEMBERS

I.

On behalf of the Environmental Law Clinic and my clients August S. Carstens and Friends of the Earth I would like to thank you for inviting me to appear before you today. By way of introduction my name is Richard J. Wharton. I am presently an associate clinical professor at the University of San Diego School of Law in San Diego California. The University of San Diego Environmental Law Clinic has been representing the Intervenors August S. Carstens and Friends of the Earth before the NRC in the matter of the operating license of San Onofre Nuclear Generating Units 2 and 3 since September of 1980. Prior to September 1980 I represented the Intervenors in this matter as an attorney in private practice. I prepared the original petition to intervene in the matter and have been involved in the licensing proceedings since May of 1977. This involvement included numerous conferences, extensive discovery, depositions and I was the only attorney for the Intervenors during operating licensing hearings held in June, July and August of 1981 regarding the seismic safety issues. I also attempted to have the Atomic Safety and Licensing Board consider emergency planning and evacuation under circumstances in which an earthquake occurs which causes a loss of containment accident to Units 2 or 3 or both. It is my understanding that the subcommittee is interested in reviewing the progress of compliance which posts Three Mile Island offsite emergency preparedness and whether the regulating process has afforded the public adequate participation in decision making. Mr. Charles McClung will be testifying here regarding the majority of the emergency planning issues which were

decided by the NRC Hearing Board and Appeals Boards. I will be limiting my comments to the issue of the NRC's refusal to consider the ability of the applicants and the surrounding jurisdictions to present and to prepare adequate emergency plans to protect the public health and safety in the event an earthquake occurs which causes a loss of containment accident and the attendant release of radiation. I will also be directing my comments towards the regulatory process of the NRC and how in light of my experience in litigating matters before various federal and state courts and state and local agencies that it is my opinion that the hearing process does not afford the public adequate participation in the decision making.

II.

Discussion of NRC Memorandum and Order (CLI-81-33) In Which The NRC Ruled That Emergency Planning Should Not Be Concerned With Earthquakes Approaching or Beyond the Safe Shutdown Earthquake Causing, or Occuring With, a Release of Radiation Offsite Because Such Issue Is a "Generic Issue."

This particular issue was raised by Intervenors when they filed interrogatories directed towards the applicant requesting applicants to describe how emergency planning and evacuation will take place in event of an earthquake which causes a release of radiation offsite. The applicants filed a Motion to for Protective Order and refused to answer the interrogatories. The licensing board found that such interrogatories were beyond the scope of intervenors contentions but requested the views of the parties regarding whether the applicants should demonstrate planning for radiological emergency caused by an earthquake at the site which is near or exceeds the safe shutdown earthquake and causes extensive damage to offsite transportation and

the like. In April 1981, Chairman Kelley of the Hearing Board requested briefs on emergency planning for an earthquake which exceeds the safe shutdown earthquake. The Intervenors Carstens et al responded to the licensing board and submitted its position regarding the issue on June 22, 1981. It was Intervenors position that the regulations call for reasonable assurances that adequate protective measures can and will be taken in the event of a radiological emergency. It was Intervenors position that the regulations require that a loss of containment accident must be planned for and given that the area of San Onofre is an earthquake prone area that the possibility of a loss of containment that is caused by an earthquake must be planned for. It is uncontested that in the event of a major earthquake near SONGS which caused a radiological emergency and release of radiation that there are no emergency response plans which would operate. This is because all of the emergency response plans are contingent upon the highways and access routes being open and if an earthquake occurs which causes a loss of containment accident at San Onofre Units 2 or 3 or both simultaneously that this earthquake would also destroy bridges and the roads which would render the existing emergency plans worthless. The Intervenors pointed out that in the event of a major earthquake causing damage to the facility site it is possible that a radioactive release could occur simultaneously at the three reactors at SONGS. The emergency plan should give consideration to this possibility because such a scenario is reasonably foreseeable considering the seismic history of the area. The failure to consider the impact of a simultaneous release upon the emergency response plan does not adequately protect the public health and safety

and provides no reasonable assurance that adequate protection measures can and will be taken.

The NRC staff in its response to our Motion to Compel argued that "simultaneous release" should be considered under 10 CFR part 100 only when reactors are interconnected to the extent that an accident in one of the reactors could affect the safety of operation of the other (10 CFR 1 §100.11(b). The staff argues that SONGS 2 and 3 are separate units, and that the possibility of a release is "not a proper consideration". The staff has completely ignored the reality of the situation here. At the SONGS site there are three nuclear power plants one of which is designed to withstand only .55g's ground acceleration and the other two are designed to withstand .67 g's ground acceleration. No one can say with absolute certainty, that in fact, the design and construction of the plants will withstand that kind of earthquake without fail and no one can say with absolute certainty that an earthquake exceeding that standard will not occur If such an earthquake occurs, it is more than likely that all three plants would be affected by such an earthquake and that you would have a simultaneous release. The idea of interconnected plants has no relevance whatsoever to this particular scenario. The applicants in their Motion for Protective Order clouded the issue by indicating that there is no requirement for "multiple disaster planning". The intervenors never raised the issue of a multiple disaster, that is, a loss of containment accident caused by an incident other than earthquake related and an earthquake which occurs simultaneously or shortly thereafter. Intervenors agreed that such a scenario was extremely unlikely and beyond consideration. But this is the scenario that the staff and the NRC seized upon to avoid facing this most

important issue. The intervenors pointed out that the rules and regulations governing the licensing of nuclear power plants are drawn for all parts of our country. The fact that they do not specify earthquake with particular regard to a California nuclear power plant is not determinative of applicant's responsibility to protect the public against the most obvious danger in this particular region. 10 CFR 50 appendix EI states that the regulations "establish minimum requirements for emergency plans for use in obtaining an acceptable state of emergency preparedness (45 F.R. 55411 (emphasis added)). Specific considerations such as earthquakes are important and raise serious safety questions. The regulations of the NRC require an analysis of the time required to evacuate the emergency planning zone. Intervenors propose that such an analysis should include evacuation problems likely to arise in a case of emergency conditions offsight such as a major earthquake. It is with particularity that intervenors pointed out that Interstate 5 is the only through going highway connecting the city of L.A. and the city of San Diego and is the major evacuation route both north and south. A major earthquake would substantially impair all emergency plans established by the applicant since an earthquake that would be in the neighborhood 7.0 would very likely destroy most of the bridges which are essential to keeping this highway open. Intervenors propose that in order to establish adequate emergency plans that at the very least they should address the issue of what would happen to the evacuation routes and the essential facilities as a result of an earthquake which caused a loss of containment accident and a radiological emergency at San Onofre. The applicants in their response to the licensing boards' request submitted their position that there is no legal authority

or factual basis to support an exercise by the Atomic Safety and Licensing Board of its sua sponte power under 10 CFR § 2.760A which would require specific consideration of earthquake consequences, including an earthquake exceeding the SSE for emergency planning purposes. The nuclear regulatory staffs' position regarding this issue is most perplexing. The NRC staff stated its position in its usual cryptic language by stating "the specific size or magnitude of earthquake to be considered for emergency planning purposes is not a critical element as long as the magnitude postulated is less than or equal to the safe shutdown earthquake because such earthquakes are accounted for in the plant design. They go on to summarize their viewpoint stating "consequently, due to the remote likelihood of its occurrence (earthquake higher than SSE) and due to the great commitment of resources required for the extremely low risk involved, the NRC staff is of the view the earthquake more severe than the SSE need not be explicitly considered for emergency planning purposes.

The staff's position can be summarized by stating that once the NRC has decided that it is not likely to have an earthquake in excess of 7.0 then it does not have to be considered for any purpose whatsoever even though such consideration could save thousands of lives. One must understand that the Licensing Board which was entrusted to make the decision as to whether a Ms=7.0 earthquake, generating ground acceleration in excess of .67 g could not be exceeded consisted of a marine biologist, a nuclear physicist and an attorney. Not one of the Licensing Board's members had any background in geology or seismology. Yet the NRC wants us to rely on this Board's opinion with absolute certainty. They want us to

accept the Board's decision with such certainty that an event in excess of the SSE cannot be considered for any purposes at all even that of planning for such an emergency which could save thousands of lives. Intervenors submitted that this position totally ignored reality and places the administrative process of decision making in the realm of divine revelation. The staff's position regarding this issue required more certainty that any licensing board could possibly achieve. On August 7, 1981 the Atomic Safety and Licensing Board basically agreed with the intervenors' position and certified an emergency planning issue for litigation. The issue as proposed by the Board was as follows: "Assume a major earthquake in the SONGS area. This assumed earthquake caused extensive structural damage to the facility, to communications, to highways designated as evacuation routes, and is accompanied by radiological releases requiring evacuation of its plume exposure pathway of EPZ. In these circumstances what steps could be taken by the applicant and responding jurisdictions to carry out evacuation in a timely manner and/or protect those in the EPZ pending evacuation? What federal resources including military fources could be brought in to assist in this situation? How would federal assistance be accomplished?"

The Licensing Board concluded by saying "our questions are designed only to test the adequacy of the emergency plans and to determine whether there is reasonable assurance that adequate protective measures can and will be taken at SONGS in the event of a major earthquake accompanied by radiological releases severe enough to initiate the emergency plans. On August 17, 1981 the applicants requested certification to the NRC and requested that they overrule

the Licensing Board's decision.

On December 8, 1981 by Memorandum and Order CLI-81-33 the United States Nuclear Regulatory Commission overturned the hearing Board's order and ordered them not to consider this contention. In that decision they stated:

> "After consideration of this and related issues the Commission has decided that its current regulations do not require consideration of the impacts on emergency planning of earthquakes which cause or occur during an accidental radiological release. Whether or not emergency planning requirements should be amended to include these considerations is a question to be decided on a generic, as opposed to a case by case basis. Accordingly the Licensing Board is hereby directed not to pursue this issue in this proceeding."

The Commission goes on to state, "the Commission will consider on a generic basis whether regulations should be changed to address the potential impacts of a severe impact on emergency planning. To this witnesses knowledge the NRC has absolutely nothing to consider whether regulations should be changed to address the potential impacts of a severe earthquake on emergency planning. The action taken by the NRC is precisely that kind of action which was strongly critcized in the Kemmeny Report.

It is obvious from this ruling that it is business as usual at the NRC. In the present case, we have a site specific problem that should be encompassed by the regulations. In fact, it is covered by the regulations and previous rulings of the hearing Boards have set precedent for considering site specific and region specific hazards for purposes of emergency planning. In the matter of Cincinnati Gas and Electric Co. (Zimmer Station) 12 NRC 6773, the Licensing Board allowed the intervenors' contention that flooding of access roadways was a matter to be taken into consideration with regard to emergency planning for that nuclear power plant. This apparently was a site specific problem as is seismicity in California. The Board in that case considered the issue and allowed the contention. The regulations of the NRC do not attempt to define, nor should they attempt to define every accident, sequence or impact on emergency plans to be taken into consideration. Regulations are drawn to regulate the entire nuclear industry in the U.S., they cannot be expected to define every contingency to be planned for and, therefore, must attempt to consider site specific problems for emergency planning. It is the intervenor's position and my own personal opinion that the NRC has lumped this particular problem into the classic "generic problem" category in order to ignore the problem. It appears that the NRC is not taking heed of the warnings in the Kemmeny Report and if they continue to act in such a manner we can expect future Three Mile Islands. The NRC in its decision in a sense agrees with my viewpoint where it says that " the current regulations are designed with flexibility to accomodate a range of onsite accidents, including accidents that may be caused by severe earthquakes."

However the Commission continues, "this does not, however, mean that emergency plans should be tailored to accommodate specific accident sequences or that emergency plans must also be taken into account the disruption in implementation of offsite emergency plans caused by severe earthquakes." To this witness, this finding made by the NRC is totally inexplicable. In the opinion of this witness this is but one more example of the NRC placing problems that they cannot quickly resolve into the category of "generic problems' so that the problem can be ignored.

The Commission concludes its opinion by stating that, "for the interim, the proximate occurrence of an accidental radiological release and an earthquake that could disrupt normal emergency planning appears sufficiently unlikely that consideration in individual licensing pending generic consideration of the matter is not warranted."

Again the NRC is using cryptic language to disguise the fact that they are not addressing the real issues.

By this statement they have accepted the applicant's "straw man" (the "multiple event" scenario) as their own. That is, because it is highly unlikely that a loss of containment accident will occur at approximately the same time as an earthquake that destroys access ways and communication links, it is unnecessary to plan for such an emergency. No one has ever asked for planning for such an event. What the Intervenors requested was that the applicant demonstrate that there are reasonable assurances that the public health and safety can be assured in the event of an earthquake that causes a loss of containment accident (radiological emergency). This earthquake, by its very nature (in the range of M_S 6.8-7.8) would cause the destruction of access routes, communication lines, treating facilities, and would cause panic among the public.

In my opinion, the NRC simply didn't want to face up to this scenario because it would raise so many issues, none of which could be adequately addressed. It is in fact a doom's day scenario for Southern California. But it is possible given the seismic volatility of the area. The testimony given at the operating licensing hearing (discussed below) clearly shows that is is not unlikely that an earthquake in excess of M_S 7.0 could occur at anytime.

Even accepting the NRC's decision that the Design Basis Earthquake is adequate M_S 7.0, one must understand that such a design basis is arrived at by way of compromise. A plant can be built to withstand an earthquake in excess of M_S=7.0 (.67g). But it does cost substantially more. Does the fact that some experts concerned with cost, decided that the SSE is adequate at M_S=7.0(.67g) make such a determination absolute for purposes of planning for an emergency. While it may be arguable on a cost-benefit analysis basis that the plant does not have to be built to withstand a larger earthquake, it cannot be justified on a cost-benefit analysis basis that the applicant and the NRC do not have to prepare plans to protect the health and safety of hundreds of thousands of people who would be in severe danger as a result of a radiological emergency caused by an earthquake in excess of the plants design.

A plausible explanation of the NRC's action in that the NRC does realize that such a scenario is truly an unplanable event and that it would cause more problems to consider it that to not consider it. The NRC decided not to decide the question. Such a decision, is a decision not to consider the health and safety of the public.

By way of argument the Intervenors submit that the Licensing Board, after hearing the testimony regarding the seismic risk in the area, was well aware that the possibility of an earthquake

larger than M_S=7.0 with ground accelerations in excess of .67g was very real. They also know that if they ruled against the applicants and the NRC staff on the seismic safety issues that they would be creating a 4 billion dollar white elephant, which elephant was midwifed by the NRC.

The Licensing Board in its wisdom did order that emergency plans be put in place in the event that the decision which they knew they had to make for economic and political reasons was wrong.

The members of the Licensing Board heard the evidence. They knew what the risk was and is. The Board sua sponte after hearing the evidence, decided that it would be advisable to prepare for an earthquake larger than that which the plant was designed to withstand. The Licensing Board did understand the danger!

The NRC, which did not hear the evidence regarding the earthquake hazard, overruled the Licensing Board and determined that an issue, which is specific to California and site specific to San Onofre, was a generic issue which should be placed in limbo.

The NRC has learned nothing from Three Mile Island. They ignore the Kemmeny Report and continue with business as usual.

As stated by Commissioner Bradford in his dissent ot the NRC ruling:

> "When it (the NRC) has stepped into proceedings in progress, it has curtailed investigation of issues unfavorable to the applicant; the Commissioner has stayed its hand when that action upholds Board or staff conduct favorable to the applicant. It has rarely required a Board or the Staff to expand safety or environmental considerations."

As stated by Commissioner Gilinsky in his dissent to the ruling:

"It appears the Commission will go to any length to avoid having a Licensing Board deal with a question the Board itself has raised.

The San Onofre Board asked, in effect, whether the applicant and NRC staff had considered the possibility that an earthquake which damages the reactor might simultaneously disrupt evacuation routes and sever offsite communication. Such an earthquake need not necessarily exceed the limiting earthquake considered in the safety review process. It seems a reasonable question to ask about a nuclear plant in an earthquake-prone area.

A common sense approach would let the Board examine and decide the issue in the particular circumstances of this case. This would be done simply and quickly and the Commission would have a chance to review the result. Instead, to take the matter outside the adjudicatory process, the Commission has decided that the question affects all plants and that it should therefore be handled "on a generic basis". It will consult with the Federal Emergency Management Agency on the effects of earthquakes on emergency planning "as it proceeds to determine a further course of action".

If past practice is a guide: Interagency meetings will be held. Memoranda will be written. The Commission will be briefed. contracts to study the question will be awarded to national laboratories. Increased budget request will be received from our staff. The Commission will be drawn into ponderous rulemaking. but the most elementary steps to assure public protection will not be taken. An all too familiar story."

The issue is still in a "generic issue" limbo. Meanwhile, the citizens of Southern California must trust the NRC that this limbo won't turn into a living hell.

As will be detailed below the likelihood of an earthquake larger than the SSE is very real. For the NRC to rule out even considering and planning for the consequences of an earthquake which causes a release of radiation and the attendant loss of evaucation capability and health care accessability is simply

beyond comprehension. It is clearly an area where the NRC has simply denied its responsibility.

Expertise of Licensing Board Panel Members

It is the position of the Intervenors at San Onofre that none of the panel members appointed were qualified to decide this particular case.

In the case of the San Onofre operating license hearings the issue of crucial importance was seismic safety. The panel members were:

1/ Elizabeth Johnson, a nuclear physicist at Oakridge Laboratory who has no qualifications whatsoever as a geologist or seismologist and has no working knowledge of the field (as she admitted).

2/ Cadet Hand, a marine biologist who also has no knowledge of geology or seismology and who also admitted to having no such knowledge.

3/ Chairman James Kelly's background consists of being an attorney for the AEC and the NRC. He has never, to Intervenor's knowledge, been involved in a case where the issue was seismic safety, nor does he have or claim to have any knowledge whatsoever regarding geology and seismology.

While not disputing that all of these people have some expertise regarding certain aspects of nuclear power plant operation and the conduct of NRC proceedings, none of these panel members have any knowledge, expertise or even a basic understanding of the issue of primary importance in the San Onofre hearings, namely seismic safety.

This fact highlights the basic problem with Nuclear Power Regulation. As is common with all national "regulators", the NRC consistently looks for the sameness in situations rather than the differences. The NRC tries to classify everything as basically the same. This attitude ignores some very obvious problems. That is

why Judge Cotter can say he believes that the members of the licensing board panel have the highest level of expertise available.

10 CFR Part 100 Appendix A requires geologic and seismic investigations in seismic risk areas. This is the section that has been litigated in California in Diablo Canyon and San Onofre. To date, the NRC licensing board panel has not assigned a qualified person to assist in litigation of these issues in California (Diablo Canyon or San Onofre). It can be simply stated that the NRC has never had a hearing officer who has a basic understanding of geology or seismology hear and decide the main issue to be decided in California, namely, seismic safety.

We would suggest that the NRC include in its licensing panel persons qualified in the area of seismology and geology and assign persons with such expertise to hear cases regarding seismic safety.

The lack of expertise of the Board members is evidenced by their need to be presented a "tutorial" regarding basic geology and seismology during the hearings. Of course, the "tutorial" was given by the Applicants witnesses who used that opportunity to slant the "basics" to fit the Applicants case. This total lack of any expertise regarding geology and seismology by the Board gave rise to the first of many procedural irregularities. The Applicant was literally able to train the Board to think its way about Geology and Seismology.

Procedural Irregularities

The procedural irregularities in the San Onofre proceeding since 1977 are too numerous to mention. The following are a few examples:

1/ On august 27, 1980, the ASLB issued an order establishing a discovery timetable. It ordered that discovery would terminate

on seismic issues on September 30, 1980, except for discovery upon information contained in the SER, to be published later and other relevant documents in which case the discovery was to be extended 30 days, after publication of these relevant documents. Discovery on emergency planning was to terminate 30 days after publication of all emergency plans.

Thereafter, Intervenors filed extensive interrogatories under the timetable. In response, applicants and NRC staff objected and refused to answer almost half of the questions. Intervenors were forced to bring Motions to Compel.

In the meantime, the full NRC issued a directive to the Licensing Boards to speed up licensing. This itself was a procedure irregularity. Because of this outside influence, a Prehearing Conference was ordered and held on April 29, 1981, before discovery was complete and before the Board had even ruled on Intervenor's Motions to Compel.

The Board by its order of May 8, 1981, ordered the Conference to be a Final Prehearing Conference even though under 10 CFR 2.752 the Prehearing Conference can only be held after discovery is completed. At that time, they also ordered the Intervenors to file all of its written testimony by June 5, 1981, less than one month after the order.

The Board did not rule on the Motion to Compel until May 13, 1981, and ordered the staff to answer by May 20, 1981. Discovery on seismic issues was not complete until May 20, 1981.

The Board revised its order to allow Intervenors until June 12, to file its written testimony and ordered Hearings to commence on June 22, 1981.

This gave Intervenors only 3 weeks after discovery was complete to prepare and file written testimony of its entire case, and only 4 weeks to prepare for the actual Hearing.

At that time it must be pointed out that Intervenors litigation "team" consisted of a clinical education professor of law, working "part time", two law students and an amateur geologist. At no time did Intervenors have paid consultants nor paid expert witnesses. All expert witnesses were volunteers giving of their time.

The Applicants had, at this time, six full time attorneys, and thirteen geologists and/or seismologists. The NRC staff had two attorneys and staff consultants.

The Hearings lasted six weeks and comprised over 7,000 pages of testimony. It is highly irregular to allow Intervenors with limited resources only four weeks to prepare for such a complex case.

I can attest that because Intervenors had only three weeks to prepare the entire written testimony of its volunteer witnesses, it was impossible for me to review the voluminous written testimony of the Applicants and prepare for cross-examination of some 27 witnesses in one week.

The Intervenors requested that the Hearings not begin until the last week in July. They pointed out that they only had one attorney, and that all of their witnesses were volunteers who could not be called upon to prepare testimony and drop all other prior commitments in such a short period of time.

The Board instead relied on the Applicants representation that any delay would cause a delay in Full Power operation directly commensurate with the delay in starting the seismic hearing. This statement was blatantly false as evidenced by the fact that the

Applicant received its low power license on February 16, 1982, and did not commence low power testing for many months after that date.

This is the first example of the obvious bias of the Board which attempted, though procedural irregularities that could not have been anticipated by the Intervenors, to make it as difficult as possible for the Intervenors to present its case.

2/ The Board admitted into evidence a document prepared by the Applicants entitled The Final Safety Analysis Report. The document consists of 11,000 pages. This document was not identified by anyone who fully read it; it was not authenticated as being a true copy of the document sent to the NRC and none of its authors were identified. Further, the Board would not allow any of the Applicant's witnesses to state which part of the document they wrote or participated in preparing. It was admitted into evidence to prove the truth of all of the contents of the documents as an unidentified, unauthenticated, hearsay document. The Intervenors could not cross-examine any witnesses regarding its content because they could not determine who wrote it. The Appeals Board ruled that this was error but found it to be "harmless error."

3/ The Board would not allow the Intervenors to question any witness at the Hearings as to the amount of money they were paid by the applicants.

4/ One procedural irregularity which was particularly distressing was the manner in which the Board ordered the Intervenors to take the testimony of Dr. Kennedy and how Intervenors were limited in discussing the case with two key witnesses.

Dr. Kennedy and Dr. Green were the scientists who discovered and named the Cristianitos Zone of Deformation. This geologic feature was discovered in September of 1980 after independent review by Kennedy and Green. The discovery of the CZD strongly supported Intervenor's case. The Intervenors declared them as witnesses for the Intervenors.

Mr. Chandler, attorney for the NRC staff (who for all practical purposes was totally aligned with the Applicants), insisted they were staff witnesses, and that we could not discuss their testimony unless he was present. The Board agreed and we could not discuss their testimony with them on an informal basis even though their testimony supported Intervenor's case and not the Applicant's or staff.

The Intervenors also planned to call Dr. Kennedy as their own witness regarding the length of the main geologic feature, the OZD.

As a concession by the Intervenors to the schedule of Drs. Kennedy and Greeen it was agreed to take them out of turn. That is, the applicant's case would be interrupted to allow both of them to testify for the NRC and then to testify for the Intervenors.

It was agreed that Kennedy and Green would testify regarding the CZD, and be subject to cross-exam by the Applicants and the Intervenors on the same day. Dr. Kennedy would testify for Intervenors on the following day.

For some inexplicable reason, the Board at NRC staff's request, interrupted the agreed upon sequence of examination and ordered the Intervenors to do its direct exam of Dr. Kennedy on the issue of the length of the OZD.

Intervenors attorney told the Chairman that he was not prepared to do direct examination of Dr. Kennedy because it was not anticipated; he had not been able to talk to him, and he was prepared to do cross-examination on the issue of the CZD.

Without any valid reason, Intervenors were ordered to do direct exam and given 15 minutes to prepare for direct examination of its own witness.

Dr. Kennedy was a reluctant witness and Intervenors were not able to elicit from him certain crucial testimony because of lack of reasonable time to prepare for direct examination. It was literally an attorney's nightmare having to do direct examination without notice or ability to discuss the testimony with the witness.

Dr. Kennedy returned to testify the following day and there is no reason that Intervenors could not have done direct exam of its own witness at that time when it was anticipated and when they were prepared to do so.

This is another example of the Board using procedural irregularities to make the proceeding as difficult as possible for the Intervenors.

Since the Board did not give the Intervenors adequate time to prepare its case, and since the Intervenors did not have ready access to Dr. Kennedy to review his testimony, and since Intervenors were literally preparing their case day by day, it is inconceivable that the Board would force the Intervenors to take their own witness out of turn when Intervenors informed the Board of an agreed on schedule and that they were not prepared to do direct examination of an important and reluctant witness.

5/ The procedural irregularity of greatest significance was the decision of the Board to refuse to allow the Intervention to

litigate the issue of the activity of the Cristianitos fault based on a determination that the Intervenors were "foreclosed" from litigating the issue. The Board admitted that the activity of the Cristianitos fault was a crucial safety issue. It admitted that it was the fault closest to the plant, it admitted that the issue had never been litigated and that the Intervenors in this case never had an opportunity to litigate it.

The sole basis of the Board's decision was that the previous Intervenors in the 1972 construction hearing, knew or should have known of the existence of the Cristianitos fault and should have litigated the issue then. Since those Intervenors did not, the Board ruled that the issue cannot be litigated by the present Intervenors.

This ruling is highly irregular in light of the fact that since 1973 seven earthquakes occurred in the area of the Cristianitos fault. The Board allowed testimony from the Applicants designed to show that the Cristianitos fault is not active and refused to allow testimony from Intervenor's expert witness that the Cristianitos fault is active and that 17 earthquakes could have occurred on the Cristianitos fault (within 69% accuracy) since 1932 and that nine earthquakes could have occurred since 1973 (within 68% accuracy).

It is highly irregular, to say the least, to prevent the litigation of a crucial safety issue (which has never been litigated) on the basis of "foreclosure" where none of the elements of foreclosure exist, and where there is new evidence of activity on the Cristianitos fault.

6/ The Board compounded its error in invoking foreclosure regarding the Cristianitos fault (in which the issue was never litigated)

by relitigating and redeciding an issue against the Intervenors that was fully litigated in 1973 construction hearings to which the Applicants and NRC staff were parties. This error is highly irregular in light of the fact that all of the parties to the operating license hearings had agreed that the continuity of the Offshore Zone of Deformation was not an issue in these proceedings and that the decision of the Licensing Board in the construction hearing that the OZD was a continuous fault, 240 kilometers long was a binding decision.

Despite the fact that all of the elements of "foreclosure" were met and that all of the parties agreed that the issue of the continuity of the OZD was not at issue, the Board, without Intervenors even knowing that the issue was being litigated, redecided the issue and found that the OZD was not continuous but rather consisted of three discrete segments.

This ruling is not merely irregular, it is outrageous, in light of the Board's ruling that an issue that was never litigated, namely the activity of the Cristianitos fault was foreclosed from litigation.

These rulings are further evidence of the bias and prejudice of the Board, and are highly irregular procedures.

The issue of whether the OZD is a continuous fault is a crucial issue. The Intervenors assumed during the hearings, after agreement by all of the parties, that for the purposes of the Hearings, the OZD was a continuous throughgoing fault.

Given that basic premise, the evidence clearly shows that the OZD is capable of an earthquake of M_S=7.5 up to M_S=8.0. This is far in excess of the design basis of M_S7.0.

The only way it could be decided that the OZD is not capable of an earthquake in excess of M_S=7.0 is to decide that the OZD is

segmented. That is precisely what the Licensing Board did, even though that was not an issue which was being litigated and the previous decision was binding on the parties to the previous decision.

In all candor, it appears that the Board has rewritten the law to reach a foregone conclusion.

7/ The Board in its decision consistently misconstrued and misapplied the testimony of key witnesses. The following are just two examples:

(a) The Board relied on Dr. Slemmons to conclude that an M_S=7 earthquake is a conservative determination of the maximum earthquake that may occur and totally ignored Dr. Slemmon's testimony where he changed his written testimony and after thoughtful consideration, determined that the proper conservative estimate was M_S=7.5. It is highly irregular to ignore the operative testimony of a crucial witness in favor of the testimony that the witness himself repudiated.

(b) The Board directly misconstrued the testimony of the Intervenor's witness, Dr. David Boore, regarding the maximum ground acceleration that can be expected from ar earthquake of M_S=7.0 and M_S=7.5. Dr. Boore is the author of a state of the art report which has used all available data to predict maximum ground acceleration. His report and his testimony has clearly proven that the gound accleration from both an M_S=7.0 and M_S=7.5 earthquake will be in excess of the maximum ground acceleration for which the plant was designed.

The Board instead of following the direct and unrebutted testimony of Dr. Boore, relied on statements made by Dr. Boore wherein he performed certain calculations at the request of the attorney for

the Applicant. At no time did Dr. Boore agree with the calculations and he specifically rejected them as having no substance and yet the Board ruled on the solicited calculations which Dr. Boore did not agree with and construed them to be the testimony of Dr. Boore, and ignored Dr. Boore's operative testimony.

The above are just some examples of the highly irregular nature of these proceedings.

The very nature of the proceedings makes it an impossible task for Intervenors. The Intervenors are up against two sides -- the Applicants and the Staff. Whatever the Applicant misses, the Staff makes up for, and vice-versa.

There is also the matter of transcripts. Because of the costs involved, Intervenors could not afford to purchase copies. Each evening, two hours after the proceedings, the Applicant and the Staff were supplied with a transcript of that day. The Intervenors literally had to beg to borrow a transcript the following day so that it could be copied and the original returned.

It is truly ironic that the net result of the Three Mile Island review on San Onofre was a order by the Nuclear Regulatory Commission to speed up the licensing process. This order worked to the great detriment of the Intervenors because it resulted in their having insufficient time to prepare for the actual hearings.

It is my personal opinion that the regulating process does not and cannot under the present circumstances afford the public a fair and adequate participation. Intervenors with no financial resources cannot be expected to go up against the resources of a huge utility such as Souther California Edison, and the resources of the Nuclear

Regulatory Commission Staff. If there is to be adequate participation, an Intervenor must be afforded financial resources to hire attornies, qualified experts, and at the very least, hearing transcripts.

Under the present system, Intervenors simply don't stand a chance to affect the decision making. It is a stacked deck.

Respectfully yours,

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Richard J. Wharton

RICHARD J. WHARTON