UNITED STATES ATOMIC ENERGY COMMISSION

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IN THE MATTER OF:

TOURDO EDISON COMPANY (**)
And (**)
THE CHEVELAND EMPLYETC
THERETING COMPANY

(Davis-Basse Nuclear Power Station, Only-No. 1) yes



Place - Fort Clinton, Onto

Date - 12 Pebruary 1971

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Docket No. 50-346

Trinity Methodist Church Conference Room Adams and Second Streets Port Clinton, Ohio

Friday, 12 Pebruary 1971

The above-entitled matter came on for further

WALTER SKALLERUP, JR., Esq., Chairman, Atomic Safety and Licensing Board.

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RMS: rmsl

PROCEEDINGS

CHAIRMAN SKALLERUP: Will the hearing please come to order. The time is 9:30 and the Board would like to memoralize the fact that it is the birthday of Robert Tedesco and Abraham Lincoln.

(Laughter.)

DR. JORDAN: Yesterday I raised a question concerning Dr. Goldman's reply to one of the Intervenor's questions, in that I failed to understand just how the conversions went from picocuries per liter to microcuries per cubic centimeter.

Dr. Goldman has straightened me out on this, and I have no further questions in that respect.

MR. ENGELHARDT: Mr. Chairman, I would like to note for the record that the Applicant and the Staff are prepared to go forward. However, Intervenors appear to be absent at the opening of this hearing.

CHAIRMAN SKALLERUP: I had a phone call this morning from Mrs. Stebbins who said that she has prepared a summary statement and is on her way here and would hope to arrive sometime this morning.

MR. CHARNOFF: As I understood it, Mr. Chairman, we were to meet here to hear Mr. Lau's continuation of his direct and his cross examination. It seems to me that if he is not here at this point in time that he has defaulted.

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And I would move that the Board rule that Mr. Lau's opportunity for further cross and direct testimony in this case be terminated.

CHAIRMAN SKALLERUP: Have you any response?

MR. ENGELHARDT: Well, Chairman, it is now 9:32.

And the precedent established in this proceeding has been to defer at least briefly to counsel and other parties to make a timely appearance for the presentation of evidence.

I think at this hour of 9:32 it may be a bit premature to grant that motion. Maybe we should provide a reasonable period of 15 minutes or thereabouts and reconvene at that time to see whether Mr. Lau is present and ready to go.

CHAIRMAN SKALLERUP: Considering the severity of the consequences, the Board believes we cught to allow a reasonable period of time for Mr. Lau to arrive. So we will deny your motion.

We will recess until 9:45.

(Recess.)

CHAIRMAN SKALLERUP: The Board is ready to proceed. And the time being 9:47, with respect to Mr. Lau the burden is now on him to show cause why he should not be precluded from further participation in this case.

Accordingly, we are prepared tohear closing summary arguments.

MR. CHARNOFF: Shall I plan on going first, Mr.

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CHAIRMAN SKALLERUP: That would be appropriate.

MR. CHARNOFF: Let me establish the agenda. As I understand it, the only remaining item for this hearing is the closing statement by the Applicant, the Staff and any Intervenors who might get here,

CHAIRMAN SKALLERUP: That is our understanding subject to Mr. Lau's coming late and showing adequate cause why he should be heard.

> CLOSING STATEMENT ON BEHALF OF THE APPLICANT BY MR. CHAPNOFF

MR. CHARNOFF: Gentlemen: Ordinarily in proceedings such as this I pass the opportunity to make a closing statement. In such cases the issues, while technical in nature, involve only a determination that the proposed facility has been demonstrated to satisfy applicable AEC requirements. Such a determination is made on the basis of the entire record of the proceeding, including the application and the Staff's Safety Evaluation. In many respects this hearing does not differ from most proceedings that I am familiar with.

In some respects, however, this hearing proceeding has been unique. For example, it is the first proceeding that I know of to be afflicted with a case of the mumps. It is also the first AEC proceeding I believe to receive a

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Energy Act of 1954 was unconstitutional. Accordingly, I think it is appropriate for me to discuss the matters in controversy, the nature of the evidence relating thereto and the public interest in having the Dawis-Besse plant constructed and available for power production as close to its scheduled date for commercial service as possible.

Coalition, the first of the admitted Intervenors. This
Intervenor some may characterize as an intervenor in search
of an issue, any issue which might deter or halt the construction of the Davis-Besse plant. The Coalition contended
that the AEC siting criteria were not complied with, that
the plant engineering safeguards could not be relied on,
that the critical exposure routes associated with plant
effluents were not adequately examined and that the
ordnance and Air Force activities at Camp Perry and over
Lake Erie in some undefined way posed a threat to the safety
of the plant and therefore to the public.

Uncontroverted evidence was introduced explaining the AEC siting criteria and demonstrating how the Davis-Besse plant and site are in conformance therewith. Similarly, uncontroverted testimony was introduced demonstrating the adequacy and reliability of the engineered safeguards which make a core melt virtually incredible.

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The testimony demonstrates that the ordnance activities at Camp Perry and the Erie Industrial Park and the Air Force training programs carried out over Lake Erie were carefully reviewed by the Regulatory Staff and the Advisory Committee on Reactor Safeguards and that such activities will be conducted under appropriate controls established by cognizant defense authorities who fully recognize the existence and operation of the Davis-Besse facility.

Furthermore, the Staff presented. uncontroverted testimony concerning the steel and concrete surrounding the reactor's critical parts which provide inherent capability to safely withstand most forms of ordnance. The Coalition's single witness, Dr. Sternglass, proved to be the most versatile witness in the proceeding. He testified on behalf of the other two intervenors and on almost all the matters in controversy in the proceeding.

Regardless of the matter in controversy addressed by Dr. Sternglass, however, he delivered himself of only a single theme, that is, that radioactive gaseous effluents from all nuclear facilities are generally the same, radioactive materials reconcentrate in the food chain and there are strong statistical grounds for suggesting a causal relationship between radioactive gaseous effluent releases and infant mortality.

Unfortunately for Dr. Sternglass' testimony on behalf of the Coalition the evidence shows that the gaseous isotopes he was concerned about will be retained by the Davis-Besse gaseous waste hold-up and treatment system.

That is, those gaseous isotopes will not be released to the environment.

Also, unfortunately for Dr. Sternglass, the testimony shows that the gaseous effluents from the different types of nuclear facilities do differ in important respects. The Davis-Besse plant, a pressurized water reactor, will release gaseous effluents at levels more than a thousandfold less than the nuclear facilities of different types, and of a different generation too, I might add, which have been reviewed by Dr. Sternglass.

And I would remind the Board that it was Dr.

Sternglass who, based upon his review of the releases from these other types of facilities called for a thousandfold reduction in gaseous effluent releases in orde: that we may all sleep peacefully at night.

Of equal significance is the rejection of Dr.

Sternglass' simplistic and questionable selection of data to suggest a causal relationship between radioactive gases and infant mortality by organizations and persons not beholden in any way to the so-called atomic energy establishment, if indeed the latter exists in this country.

I, of course, am referring to the Committee on Environmental Hazards of the American Academy of Pediatrics and components of the Environmental Protection Agency, including sections formerly belonging to the United States Public Health Service.

The testimony by Mrs. Tompkins and by Doctors
Kahn and Davis convincingly demonstrated that Dr. Sternglass' hypothesis lacked any statistical base and suffers
from sincere but false use of data.

Dr. Sternglass' response to this criticism of his work is to complain about the existence of a conspiracy of some sort which refuses to recognize the validity of his work.

In this connection it is worth noting that Dr.

Sternglass also suggested a conspiracy of sorts when

Nature Magazine, the British equivalent of our Science

Magazine, rejected an article by him purporting to demonstrate a causal relationship between fallout deposition and infant mortality.

In reply, Nature Magazine editorialized on

January 31, 1970, as follows: "The fact that more than one
editor has rejected Professor Sternglass' papers could be
a sign of the looseness of Professor Sternglass' arguments
rather than of the tightness of the conspiracy."

Mr. Lau, the second intervenor, like the Coalition,

allegedly was concerned that the AEC and the Applicant did not correctly apply the AEC siting criteria. Taking an illustrative table in reference to document TID-14844, Mr. Lau simplistically contended that the Davis-Besse site has inadequate exclusion and low population zone areas and an inadequate population center distance.

The testimony demonstrates that several engineered safety features and systems have been incorporated in the plant design to assure conformance with the AEC siting criteria.

Mr. Lau also contended that the meteorological data obtained at the site was inadequate and that it did not take into account certain season weather storms. Perhaps this contention more than any other illustrates the complexity of dealing with complicated technical considerations in public hearings such as this for the layman.

Here we have Glenn Lau and one or more of the limited appearors reporting on bad weather storms allegedly not considered by the Applicant. Unfortunately, in the sophisticated technical world of atomic energy what may be bad weather for the layman is good weather for radicactive releases. The more violent the storm, the greater the dilution effect it has on radioactive releases, whether they be normal or accidental.

Lau's contention with regard to meteorology is

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follows

wrong. The testimony has demonstrated the conservatism of the meteorology used in evaluating this site.

As far as the ability of the station to withstand structural damage from such storms, the testimony pointed out that the station is designed to withstand a tornado, producing winds of 300 miles per hour, a more severe condition than has occurred at this site.

Mr. Lau also contended without success that the population growth projections are in error. No testimony was introduced contradicting the population projections in the PSAR. In comparison with many other approved reactor sites, this is a lightly populated area.

IIr. Lau's final contention related to the capability to evacuate the low population zone, or that portion of it which might only in the most remot circumstances have to be evacuated in the event there was a concurrent flood, sand or snowstorm.

The Applicant has clearly committed to make the necessary arrangements prior to the inception of plant operation to assure that evacuation, if it should be necessary, will be done and done promptly. The testimony demonstrates that Mr. Lau and his witnesses confused their normal difficulties with the effects of bad storms, with the feasibility of moving people, not vehicles, over a reasonable period of time, several hundred feet to areas outside of the radioactive cloud or outside of the low population zone.

Furthermore, the testimony yesterday afternoon

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clearly established the feasibility of accomplishing any required evacuation.

Finally, we come to the Intervenor, who has made this case unique, LIFE and Mr. Reany. This is the first proceeding to involve a challenge to the AEC's radition protection standards since the Commission's memorandum in the Calvert Cliffs proceeding. That memorandum set the ground rules for challenges to the radiation protection standards in licensing proceedings. These ground rules need to be clearly understood the Commission's memorandum in the Calvert Cliffs decision dated August 8, 1969, clearly stated that findings in proceedings such as this must be made in accordance with AEC regulations which establish the standards for reactor construction permit determinations and that such regulations which are general in nature and are adopted in public rule-making proceedings are not subject to amendments by Atomic Safety and Licensing Boards in individual plant licensing hearings.

The memorandum did, however, permit a challenge in licensing hearings such as this to the validity, and I underscore the word "validity," of such AEC regulations on limited grounds, if the contested regulation relates to an issue in the proceeding. And I would underscore the latter, "on limited grounds, if the contested regulation relates to an issue in the proceeding."

The memorandum thereupon identified three limited grounds for challenge to the validity of AEC regulations in licensing hearings.

One, whether the regulation was within the Commission's authority;

Two, whether the regulation was promulgated in accordance with applicable procedural requirements; and,

Three, with respect to the radiological safety standards, whether ther the standards established are a reasonable exercise of the broad discretion given to the Commission by the Atomic Energy Act for implementation of the statute's radiological safety objectives.

In this proceeding LIFE at al have not challenged 10 CFR Part 20 on the first two limited grounds which I have just mentioned. LIFE's challenge apparently is directed only at the third limited ground, namely, whether the standards are a reasonable exercise of the Commission's discretion.

The radiological safety objectives of the Atomic Lnergy Act of 1954 as amended are set out in many places in the Act. Sections 3(d) and 161(b) are representative. They speak of development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with protection of the health and safety of the public.

The test of reasonable exercise of its broad

discretion is not different from the test that would be applied on judicial review by a court of appeals—to establish that there is a substantial question as to the validity of the standards and I would note that the memorandum points out that only if the Board feels that there is a substantial question presented on the record as to the validity of the challenged regulation is it to do anything, and if it is to do anything at all, it is simply to certify that question to the Commission.

To establish that there is a substantial question as to the validity of the standards, the Intervenor LIFE would have had to show that such standards were or are an arbitrary or capricious exercise by the Commission of its discretion. This LIFE has failed to do.

convincingly rebutted as to his hypothesis, his techniques, and his facts. Nor does the record which includes the testimony of the Board's witness, Mr. Tamplin, show that such standards represent an arbitrary or capricious action by the Commission. On the contrary, the record of this proceeding shows that the Commission's Part 20 standards are based on and consistent with the recommendations of the Federal Radiation Council and approved by the President for the guidance of federal agencies. This is consistent with the provisions of Section 274(h) of the Act, which until

December 1970, established the Federal Radiation Council.

In December of 1970, as has been stated here many times, the functions of the Federal Radiation Council were taken over by the new Environmental Protection Agency. The testimony also reveals that the National Council on Radiation Protection and Measurements, as recently as last month, published recommendations that the present standards, as they apply to the general population, be retained. This reflected a review of developments in research during the last decade as evidenced by the references set forth in the NCRP document number 39, which was Applicant's Exhibit No. 8, I believe.

Academy of Sciences, National Research Council Advisory

Committee to the Federal Radiation Council in April 1970

reviewed allegations such as those made by Drs. Gofman and

Tamplin, calling for immediate reduction of the maximum

permissible radiation levels and concluded that there is

no justification for an immediate revision of the existing

standards.

Arrayed against this testimony is the testimony of Dr. Sternglass and Dr. Tamplin.

With respect to Dr. Tamplin's testimony, it is sufficient to note that in addition to the consideration given to his views by the National Council on Radiation

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Protection and Heasurements, and the NAS-NRC Advisory

Committee to the FRC, that the testimony shows that substantial questions have been raised as to his assumption that
the population at large can receive an average dose of 170

millirem if the individual dose at the site boundary is limited
to 500 millirem.

Dr. Morton Goldman's testimony has established that the 500 millirem maximum annual dose to an individual at the site boundary virtually precludes the exposure of a suitable sample of the population to a dose of 1970 millirem per year. Substantial questions have also been raised as to Dr. Tamplin and Dr. Gofman's assumptions with respect to the magnitude of carcinogenic effects that would result from the doses that they assume. Both Dr. Sternglass and Dr. Tamplin present the phenomenon of reconcentration of radioactivity in portions of the food chain as a recent development or discovery which requires revision of the Part 20 standards. They choose to ignore the fact that Section 20.106(e) in Part 20 has been in Part 20 for quite some time and is used by the AEC to restrict nuclear power plant releases where it appears necessary to do so, taking into account the possibility of reconcentration in critical food paths.

The testimony of Mr. Rogers and Dr. Morton Goldman is clearly refutation of LIFE's apparent contention that

Section 20.106(e) is a residual power exercised by the Commission only after a bad situation develops. LIFE misreads that provision. It clearly allows the Commission to anticipate situations and to establish specific limits to fit specific situations.

The testimony demonstrates that this is indeed exactly what the AEC has done and does do.

Dr. Tamplin and Dr. STernglass and LIFE might

like to see 10 CFR Part 20 formulated or drafted differently

to account for the phenomenon of reconcentration, but their

testimony cannot and does not demonstrate that reconcentration

is not anticipated and treated by the present 10 CFR Part

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It is clear, therefore, that the Intervenor LIFT and the testimony have failed to demonstrate any abuse of discretion by the AFC in establishing and unholding the radiation protection standards in 10 CFP 20. The testimony to the contrary demonstrates that the AFC standards are in accordance with the most recent advice of the Federal Padiation Council. the Congressionally-chartered National Council on Padiation Protection and Measurements, and the ICPP, except for certain few NCPP occupationally dose recommendations made in January of this year which the Atomic Pnercy Commission and the Invironmental Protection Agency which now has standard setting responsibilities, have obviously not had time to turn around on.

This alone demonstrates that the ATC has not acted arbitrarily or capriciously and, therefore, there is no substantial question with regard to the validity of the ATC radiation protection standards. I would remind the Board that under the Calvert Cliffs decision all it can do is determine whether on the limited grounds for challenge of the standards in a licensing hearing there is a substantial question as to the validity of the standards.

and Tamplin and its very effective impeachment and rebuttal
by the Staff witnesses and Dr. Mayton Goldman, and given the
conformance of the ATC standards with the advice of the

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qualified standards setting agencies, this Board cannot but find no unreasonable exercise of discretion by the ATC in implementing the radiological safety objectives of the Atomic Therapy Commission Act of 1954 as amended.

I would, however, like to proceed further, partly because, gentlemen, I think this being the first case to handle a challenge to 10 CFR Part 20, I would submit to you that the extents to which you consider this challenge and you apply the rules of Calvert Cliffs will have precedent-setting value for other cases.

Calvert Cliffs decision with great care. While it may not be a classic example of clear and simple prose, that decision unequivocably requires that the challenge to the regulation in a proceeding such as this must be related to an issue in the proceeding.

Those words cannot be lightly disregarded.

Accordingly, this is not a general inquiry into the validity of Part 20 independent of any other considerations in this case. It must be limited to an inquiry into the validity of Part 20 as it applies to the Davis-Pesse reactor.

Let me quickly state that this does not mean that the issue is whether the Davis-Pesse reactor can meet Part 20. That issue has not been raised by any of the parties. What it does mean is that the challenge to the validity of Part 20

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the Pavis-Pesse facility. Similarly, the challenge cannot be based upon an examination of the reasonableness of the maximum permissible concentrations set forth in the Table 2 in Appendix B, for any one of the isotopes which may be released by the Davis-Pesse plant, if that isotope is not physically releasable by itself without accompanying isotopes.

This is because the note at the end of the tables in Appendix B of Part 20 provides that where there is a mixture in air or water of more than one radionuclide, the limiting value for each radionuclide is determined to be less than the table APC values for such nuclide.

Thus, LIFF, under the Calvert Cliffs memorandum, for example, might have attempted to challenge Part 20 as it applies to the Davis-Desse facility by presenting testimony with respect to the safety of isotopes which would be released from the Davis-Pesse plant; such testimony would have had to show that the maximum permissible concentration values for such isotopes, taking into account both the note at the end of the tables in Appendix P, and the provisions of Section 20.106(3), were grossly unsafe.

This LJFT has failed to do. Tamplin's testimony was equally deficient. The testimony of Sternglass and Tamplin insofar as it discussed, for example, the effects of cesium-137 and 138 and strontium resulting from gaseous effluents, and

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insofar as it considered only the Table 2 values for cesium, without considering the reductions in those concentrations as required by the note at the end of the table, was simply not relevant to an issue in this proceeding.

Accordingly, on the basis of the record at this hearing, gentlemen, I submit that you can find no substantial question as to the validity of the radiation standards. Upon receipt of the proposed findings by the parties, we would hope that you will promptly issue a decision granting the construction permit. This is justified by the record in this proceeding.

The prolongation of this hearing to hear from promised witnesses by LJFF who did not materialize, together with the order to the Director of Pegulation to denv our request for a modest amendment to our previously granted exemption has already made it impossible to meet the December, 1974 schedule for power production from the Davis-Besse facility.

Power Commission which are set forth beginning on page 1-21 of the Staff exhibit which set forth the Staff's detailed statement under the National Environmental Policy 1ct. Those comments of the Federal Power Commission will enable you to gain a very clear understanding of that other public interest which is sometimes lost sight of in hearings such as these, namely, the public interest in having a reliable supply of power in 1974, '75, and later years. Thank you.

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record.

CITIPITN FRALLFRUP: The Board will go off the

(Discussion off the record.)

CHAIRIAN SKALLFRUP The Board would like a conference with counsel.

(Dench conference.)

CHAIRMAN SKALLFRUF: Mrs. Lau.

husband is completely unable to even get out of bed this morning. And he asked me to come here and appear in behalf of him, not to cross-examine or give further testimony, but to ask that the Board might reconsider his motion for a delay on these problems that he has.

I understand the first motion was made for a threeweek delay. I don't know if a whole three weeks is necessary.

It is going to depend a great deal on, as I told you up there,

I have called a neurologist, but I cannot talk to anybody until

12:00 today. It may depend on what his recommendations are.

It may only be a week.

And I would ask the Board to reconsider this very strongly and in view of the fact that Mr. Charnoff says that they cannot already meet the 1974 December deadline, that I don't feel another week or even two weeks is going to have that much more delay on the case.

I might also further state that he is completely

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prepared with his, to give cross-examination, and to give his testimony. This is not any reason at all for the delay. Also, that he has been here this week, when I don't feel that he should have, and he has just extended himself much further than a man should be capable of doing.

Also, in view of the fact that you are beginning with summation, and you have stated that Mr. Lau has given some cross-examination, the greatest part of his cross-examination has not been completed.

Now, whether this will take two, three, four, five hours of cross-examination, I don't know. But the thing of it is there are very important questions which he has yet to ask. And these deal with some of the things Mr. Charnoff brought up in his I think it is called a summation, dealing with the meteorology, population zones, and so forth.

the case. Now if he is denied the time that he needs to get a little recuperated, that all the points in this case cannot be brought out, and, therefore, cannot be rendered and given a just verdict or decision by the Board, if they do not have all of the facts to consider.

Therefore, I think at this time I will again put the motion before the Board as to asking for a delay.

CHAIPMAN SKALLFRUP: Mr. Charnoff?

I'P. CHAPMOFF: Yes, sir, Mr. Chairman.

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I will give a very brief response. We are sorry that I'r. Lau is not feeling well. We believe, however, that the arguments that were offered yesterday by us with regard to his motion for at least three weeks apply equally forcefully to the statement by I'rs. Lau.

We believe too that there is a requirement to balance all of the interests and considering all of the many opportunities that have been extended to Mr. Lau, that were recited by me in my argument yesterday and considered by the Board in its decision vesterday, we believe the Board's decision was a fair one yesterday and we would urge the Board to reconfirm it.

I would also point out that the Board noted that it was sending the question up, or its decision up to the Atomic Safety and Licensing Appeal Board. If that Appeal Board feels that the Board's decision yesterday was not correct, it would order this Licensing Board to reopen the hearing.

There is nothing particularly new in what I'rs. Lau has offered this morning, that was different from what Mr. Lau had offered in support of his motion yesterday.

That being the case, I would urge the Board to simply reconfirm its decision vesterday and I think that its decision with respect to submitting the question to the Atomic Safety and Licensing Appeal Board was a correct and a

wise one.

CITIPHAN SKALLFPUP: "r. Fngelhardt.

of the Staff, I think I would have to say that we would be opposed to a reconsideration of the Board's decision of yesterday, regarding Mr. Lau's motion for more time to prepare.

by Mrs. Lau this morning in any way appreciably change the facts as they were presented to the Board yesterday when it responded to Mr. Lau's motion and we think that the opportunities for Mr. Lau to present his case has come and gone, and that it is now the time to find that this matter has been dealt with properly and as a consequence we would oppose any reconsideration of the Board's action of yesterday denying Mr. Lau's motion.

PRS. LAU: Mr. Chairman, may I say something first.
CHAIRMAN FKALLERUP: Yes.

of all Mr. Lau does not need more time to prepare his case, as he already does have it prepared. And also when Mr. Lau was here and made the motion himself, at that time he was feeling very bad.

Dut this time he is completely incapable of even coming. Fo I feel the matter has worsened, and, of course, this is not being used as a means for delay. It is something

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for. And I think under these circumstances reconsideration should be made.

CHAIRMAN SKALLFRUP: The Board will go off the record.

(Discussion off the record.)

CHAIRMAN SKALLFRUP: On the record.

MRS. LAU: Mr. Chairman, may I make one more further point before you speak?

Talking about the delays in being prepared and having enough time to do cross-examination, it might be noted that Mr. Lau first began his cross-examination, that at that time he did come down with the mumps.

or something, until February 8th for somebody, which was not Mr. Lau. And I think this also should be taken into consideration, that at the time he did begin his cross-examination, it was not his fault that he could not continue it at that time.

And, therefore, I feel he should have time to put his case into the record.

CHAIRMAN SKALLERUP: The Board has considered the arguments of the Applicant and the Staff, and the Board would state that in coming to its conclusion vesterday to deny the motion to recess for three weeks, the Board did consider I'r. Lau's illness and recognized the possibility that he might

not be able to continue with the case due to his illness.

We took this into consideration and in weightr all of the interests involved, determined that the proceeding should continue.

The Board will at the earliest practicable time, very likely on Monday of next week, file with the Appeal Board its ruling in this matter. And we will also file with that ruling this ruling denying the motion for reconsideration.

MRS. LAU: Is it proper for me at this time to ask what interests were weighed?

CHAIPMAN SKALLERUP: That is in the record.

MPS. LAU: Thank you.

CHAIPMAN SKALLERUP: It would appear in vesterday's transcript.

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IIR. CHARNOFF: Mr. Chairman, I take it the only remaining item then are the closing statements by the parties who have not yet made them.

of yesterday and that is a schedule has not been set for transcript corrections, proposed transcript corrections.

Hight I propose that all of the parties submit them on the 20th day, on or before the 20th day after the conclusion of the hearing.

CHAIRMAN SKALLERUP: Any objection?

MR. ENGELHARDT: No.

CHAIRMAN SKALLERUP: The Board orders that any corrections to the transcript be submitted to the Board on or before the 20th day after the conclusion of the hearing.

Mrs. Stebbins, would you like to have the last word or give Mr. Engelhardt the last word?

MRS. STEBBINS: Mr. Engelhardt, what is your desire? You know a woman always likes the last word.

MR. ENGELHARDT: You look so prepared and eager,

I think I should defer to you to make your closing statement.

ON BEHALF OF THE COALITION FOR SAFE

NUCLEAR POWER.

MRS. STEBBINS: Well, my statement is as Chairman of the Coalition and I am also speaking for all of the

organizations and individuals that we represent.

We must disagree completely with Mr. Russell Baron, attorney for the Coalition, in his closing remarks and must point out that the remarks made by him did not represent the Coalition's view of the AEC hearing, that they were his own personal comments and certainly do not reflect the position of the Coalition.

I, further, do hereby swear and affirm that the Coaltion for Safe Nuclear Power never requested a "delay for the sake of delay" and that our request for delay was based solely upon one reason — the time needed to properly prepare a case and bring in expert witnesses. We completely fail to understand how Mr. Baron could have used that term. He seemed to be quoting something the Applicant's lawyer, Mr. Charnoff had accused us of.

As members of this Hearing Board, the AEC Staff, and the Applicants, Toledo Edison and Cleveland Electric Illuminating, know full well, the purposed purpose of this hearing is to determine whether or not the construction and operation of the proposed facility will cause undue risk to the public health and safety or damage to the environment or biosphere.

This Hearing Board, the AEC Regulatory Staff, and the Applicant, along with the AEC rules and regulations, have worked together to prevent a fair hearing for the issues

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which need to be discussed at this hearing, and decided before the Davis-Besse Nuclear Power Station is constructed. The Applicant, aided and abetted by the AEC, is trying to push this nuclear power plant down the throats of the citizens of Ohio.

which allowed them to start construction, at their "own risk," of course, before the construction hearing which is to decide whether such a plant can be built safely. An objection to this variance permit was made by one of the Intervenors before the permit was granted, because of the fact that once the utilities had invested money in the plant, the Boaring Board would be under pressure to allow them to proceed. It is perfectly obvious that the start of construction by the Applicant puts pressure on the Board to allow them to continue construction.

Edison's action in this matter. We wish to point out that the Coalition was offered time to prepare our case if we would agree to a "mini-permit" which would allow Toledo Edison to continue construction, of course, at their "own risk." However, because of the precedent setting possibility of such a decision, and the very dangerous implication that this might have on construction of other nuclear power plants, whereby the power companies could first get a variance to

start construction, then continue with a "mini-permit" and pour millions of dollars into construction before it was ever decided that such a plant could or should be built at that location, and thereby making it even more of a burden on the hearings boards to allow a construction permit "after the fact of construction" already started.

Since we would not agree to the mini-permit, the Toledo Edison Company sneaked around behind our backs and requested such a permit from the AEC on January 7, without sending copies of such request to the Intervenors, and did not do so until January 11. Here they were requesting the very same thing that we had denied them, and which would have given us the time we needed to prepare our case.

We must, at this point, commend this Hearing
Board, for their refusal to allow any further construction
on the Davis-Besse plant until the construction permit is
issued.

Second, the Coalition was not granted intervention status at the prehearing, and decisions were made regarding the hearing without our being allowed any say so in this decision making. As a citizen group, with lack of adequate funds, we could not go ahead with any planning for a "possible" participation in the hearing as Intervenors. Instead of deciding whether we would be allowed intervention status as a first order of business, we were not granted intervention

It would seem as though there should have been an additional prhearing, as has been done in some other cases, to determine

status until December 9, after the hearing had been proceeding.

our status legally, and that this should have been a first

order of business.

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This hearing Board did not grant the Coalition adequate time to prepare our case and bring in our witnesses.

I do hereby swear and affirm that the Coalition had contacted the following persons, and they had agreed to be witnesses for the Coalition: Dr. Edward Radford of Johns Hopkins, Dr. Lamont Cole of Cornell University and Charles Huver, of the University of Minnesota, previously entered into the record.

The Applicant has put constant pressure on the Hearing Board not to grant any delays because it would cost them money. The purported reason for the hearing -- to decide whether this plant can be built without risk to the public health and safety -- should have been the only deciding factor, not whether it would cost the Applicant money.

Without adequate time, we could not properly prepare our case. Further, even when we could have had a witness, Dr. Huver, come in on Monday, January 11, we were denied permission to do so. We offered to have him come in when the hearing reconvened, and that was also denied.

Fourth: One after another of the Coalition's contentions were not allowed to be discussed, not necessarily because AEC rules would not allow them to be discussed, but apparently simply because we had not worded our contentions in a manner in which the AEC staff, the Applicant and the Hearing Board thought to be properly worded.

DB-2

We were not allowed to discuss radiation standards, as allowed in the Calvert Cliffs case. We must point out that the "safe standards" which the AEC adopted for uranium miners have caused lung cancer. The supposedly safe radiation from weapons testing has probably caused leukemia in persons in Utah. The accidental but "safe" release, according to AEC, of radiation from the recent testing out West contaminated milk in five states.

Eminent scientists have said that the radiation standards which the AEC has adopted will cause cancer and leukemia, and yet the Coalition was not permitted to raise this issue.

Why? Because for some reason we did not word our petition for leave to intervene in the correct manner. The issue was here, but we could not discuss it.

You need only to go through out petition and ask whether the points we raised are pertinent considerations that should be thoroughly looked into in order to assure that this nuclear facility can be built without undue risk to the public health or safety. When should we discuss the following matters, before or after a plant is built?

Whether the Davis-Besse plant can operate safely in view of the fact that this plant is based on designs which are not presently tested according to the information listed by the Applicant in the PSAR, since none of the plants listed by the Applicant are presently operating.

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Whether there is any assurance that the integrity of components and engineering of safeguards will be maintained over the life of the proposed plant, inasmuch as they will be exposed to radiation which will lead to deterioriation.

Whehter the quality control and quality assurance procedures and programs are adequate.

Whether emergency plans and procedures have been adequately developed in case of an accident.

Whether occurrence of an accident or the discharge of radioactive effluents and heat into Lake Erie would endanger the health, safety, lives and property of the public.

Whether the fog created by the cooling towers would cause dangerous environmental conditions hazardous to aircraft, and cause more dangerous conditions in case of accidental release of radioactivity.

Whether the proposed plant will cause serious erosion of the Lake Erie shoreline and damage to shorefront property.

How the dnagerous radioactive wastes will be transported from the plant, and whether this can be done safely.

Whether such wastes would have to pass through densely populated areas.

Whether the normal release of radioactive wastes will be properly monitored.

Whether operation of the plant will be inimical to the health and safety of the public due to the location near

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and Cleveland. Whether effective arrangements could be made to control

dense population centers of Detroit, Toledo, and Sandusky

traffic and permit ready removal and evacuation of people in case of an accident.

Whether the applicants have demonstrated that no biological damage to any of the population of Lake Erie area will result from the radiation emitted by the proposed plant.

Whether all aspects of the environment should be considered, as required by the National Environmental Protection Act.

Whether the Applicant has demonstrated that the proposed facility can comply with applicable Federal and State water quality standards.

Whether the risks to the public health and safety far outweigh the benefits.

Whether the final design has undergone necessary research and development.

Whether the AEC presently has qualified, adequate staff to conduct the necessary on-site compliance inspection during the course of construction.

Whether a complete environmental study should be completed before construction.

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The questions which we must ask are:

Is this a hearing to see how well our lawyer could word our contentions, or is the purpose of this hearing to determine whether or not the construction and operation of the proposed nuclear plant will cause undue risk to the public health and safety?

Shouldn't the AEC allow the discussion of these vital, pertinent issues before construction of a nuclear power plant?

Fifth, the Atomic Energy Commission is a God unto itself, and can set its own rules and regulations without regard, even for the laws of the land. It has been an agency with its own built-in conflict of interest, due to the fact that they were charged with setting safety standards and also promoting nuclear power.

The National Environmental Policy Act was designed to assure the public that all federal agencies, including the AEC, would fully explore the environmental implications of activities under their jurisdiction to prevent costly mistakes. The AEC finally adopted new eregulations on December 4 for implementing the NEPA, slightly more than four months after the deadline established by President Nixon for all federal agencies and six months after the June 1 deadline set by the President's Council on Environmental Quality.

Davis-Besse plant, because the AEC, in its own way, without regard for the environment, has determined that these rules do not apply until March 4, 1971.

The question we must ask is whether it is logical to allow the Davis-Besse plant to be built without considering the NEPA when the plant will have to operate within the determinations of the National Environmental Policy Act. It would seem as though these determinations should be made before the plant is built, not after, which might prove exceedingly costly to the power companies and its customers.

Sixth, with respect to the other Intervenors, we must point out:

That the conditions under which LIFE was forced to present complete testimony to the AEC and the Applicant, a change of the rules in the middle of the hearing; and the extremely short time allowed for them to obtain such testimony would have made it practically impossible for them to comply with such an unfair ruling.

Here again, it was the insistent demands of the Applicant that there be no delays, that the hearing proceed, which forced the short time, not the consideration of whether the issues to be examined could be properly done in the short time allowed.

We completely fail to understand how the Board

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could have possibly ruled against Mr. Lau's request for a delay in the hearing because of his illness. It must be unheard of in the annals of "justice." Since I was not here, I can only presume that the Applicant must have again reiterated his time worn phrase that there should be no delays, that these delays cost the Applicant money.

Again, we must ask: What is the purpose of this hearing?

Toledo Edison Company and Cleveland Electric Illuminating

Company? Or is it to assure that the construction and operation

of the Davis-Besse plant will not cause undue risk to the

public héalth and safety or damage to the environment or

biosphere?

We do hereby finally and emphatically declare that we do not, cannot consider that there has been a fair hearing -- a hearing which would allow discussion of the issues which should be decided before the Davis-Besse nuclear plant is built.

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I would also like to enter into the record a copy
of a telegram which I sent to the Director of Chio Water
Pollution Control Board and to the Governor of the state, which
I think has some bearing on this hearing.

The telegram reads, "Dr. Thomas 7. Gardner, 7cting Chairman, Ohio Water Pollution Control Board, 450 Fast Town Street, Columbus, Ohio 43216, dated February 9, 1970.

"We strongly urge that a public hearing be held before any certificate or permits be issued for the Davis-Besse nuclear power plant. We further request that public hearings be held in Cleveland.

"Discharge of radioactive waste to the water would violate the water quality standards, minimum conditions applicable to all waters at all places and at all times, should be free from substances which are toxic or harmful to human, animal, plant or aquatic life. The discharge of radioactive waste to our water would also violate non-degradation clause of our water quality standards."

Signed Evelyn Stebbins, Chairman, Citizens for Clean Air & Water, Inc., and Coalition for Safe Nuclear Fower.

I would also like to enter into the record a copy of the Wall Street Journal article on Atom-Age Trash, dated Monday, January 25, 1971.

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MR. ENGLEHARDT: Mr. Chairman, that last request raises some question as to what status this is. Is Mrs.

Stebbins just bringing this to the attention of the Board?

MRS. STEBBINS: Just bringing it to the attention of the Board is all.

MR. ENGELHARDT: Need it be marked for anything, other than just recognized as an article brought to your attention?

CHAIRMAN SKALLERUP: What is it you are doing?

MRS. STEBBINS: "Atom-Age Trash," I marely wish
to enter it into the record for whatever purposes such a
mimited appearance might count, not for evidence or anything
of that nature.

CHAIRMAN SKALLERUP: Any comment?

MR. CHARNOFF: No comment.

CHAIRMAN SMALLERUP: It is so wordered that it be received as a limited appearance.

Are you ready for Mr. Engelhardt?
MRS. STEBBINS: I am ready.

CLOSING STATEMENT ON BEHALF OF THE REGULATORY
STAFF BY MR. ENGELHARDT

brief closing statement. The application for a construction permit filed by the Toledo Edison Company and the Cleveland Electric Illuminating Company for the Davis-Besse plant has

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been under consideration by the Regulatory Staff and by the Advisory Committee on Reactor Safeguards since August 1, 1969.

As our testimony in this proceeding has shown, we have concluded that there is a reasonable assurance that this proposed facility can be constructed and eventually operated without undue risk to the health and safety of the public.

Three intervenors in this proceeding have attempted to raise questions as to the safety of this proposed facility. The Coalition for Safe Nuclear Power presented as its sole witness Dr. Ernest Sternglass, whose testimony had little relevance to specific contentions of that party. And what was relevant raised no serious question as to the adequacy of the design of the proposed plant or the safety of the proposed operation.

Cross examination by the Intervenor also failed to raise any serious questions regarding this facility.

They did raise specific questions regarding the use of offshore ranges by the various military organizations, but these matters have essentially been resolved during the review of the application by the AEC Regulatory Staff andby additional assurance given by responsible government officials as to the controls to be exercised in the use of these ranges.

The second intervenor, Mr. Glenn Lau, presented

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Dr. Sternglass as his witness. This testimony was essentially not relevant to Mr. Lau's contention with respect to the safety of this facility.

Mr. Lau presented in addition some 10 witnesses who described the snow and storm conditions in the Sand Beach area in which they live in support of Mr. Lau's contention that the applicant failed to meet the requirements of the Commission in that it could not assure the feasibility of proposed evacuation plans.

The information was not previously known by
the Regulatory Staff, it was considered by the Staff, and
in rebuttal testimony it indicated that this problem would
be given serious consideration in the course of review of the
detailed emergency plan to be developed by the Applicant
during the operating license review stage.

There was, however, no showring by Nr. Lau that a feasible plan for coping with emergencies could not be developed or that the Applicant could not meet the requirements of the regulations.

The third intervenor, LIFE, contended that the radiation standards set forth in 10 CFR Part 20 were illegal, inadequate and an abuse of the Commission's discretion.

In support of their contentions Intervenor LIFE presented but a single witness, Dr. Sternglass. In addition, the Board presented as its witness Dr. Arthur Tamplin,

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whose testimony was also related to the LIFE contention.

The testimony of the LIFE witness and Dr. Tamplin was rebutted by the Staff's witnesses.

With respect to Dr. Tamplin's testimony, rebuttal testimony indicated that Dr. Tamplin's testimony was deficient in that it failed to provide underlying assumptions on which his conclusions were based, and that further the assumptions which were provided were unrealistic.

The testimony by Dr. Sternglass was rebutted by several Staff witnesses. The rebuttal made clear that the data relied upon by Dr. Sternglass in his testimony relating to the adequacy of the standards were unreliable and chosen to support his hypothesis while ignoring or distorting other data which failed to support this hypothesis.

Other rebuttal testimony discredited certain contentions of Dr. Sternglass with respect to the adequacy of known information, the adequacy of studies and the effects of strontium-90.

In summary, the Staff in this proceeding has heard no reliable evidence which would in any way change its conclusions as stated in the Safety Evaluation as to the adequacy of the application or as to whether this construction permit should be issued.

Furthermore, the evidence presented in this

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proceeding regarding the invalidity of Part 20 has been fully and completely rebutted in the presentation of evidence by the Smaff and the Applicant.

And as far as the evidence is concerned, there has been no showing by the Intervenors that the Part 20 radiation standards are deficient or will not adequately protect the healt and safety of the public.

That concludes our statement.

CHAIRMAN SKALLERUP: Any further matters to come before the Board?

(No response.)

CHAIRMAN SKALLERUP: There being none, the Board adjourns the hearing.

MR. CHARNOFF: May I ask whether the Board has closed the record in the hearing?

CHAIRMAN SKALLERUP: The Board is closing the record of the hearing. It is so ordered.

(Whereupon, at 11:10 a.m., the hearing was concluded.)