

UNITED STATES ATOMIC ENERGY COMMISSION

extra

IN THE MATTER OF:

METROPOLITAN EDISON COMPANY

(Three Mile Island Nuclear Facility,
Unit No. 1.)



Docket No. 50-289

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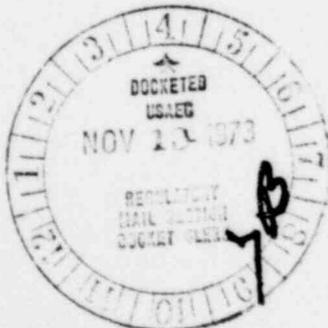
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UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

In the Matter of: :

METROPOLITAN EDISON COMPANY : Docket No. 50-289

(Three-Mile Island Nuclear Facility, :
Unit #1) :

Hearing Room No. 1
Public Utilities Commission
Commonwealth & North Streets
Harrisburg, Pennsylvania

7 November 1973

Hearing in the above-entitled matter was
reconvened, pursuant to adjournment, at 9:30 a.m.,

BEFORE:

CHARLES B. HASKINS, Esq., Chairman, Atomic
Safety and Licensing Board.

DR. JOHN R. LYMAN, Member.

DR. M. STANLEY LIVINGSTON, Member.

APPEARANCES:

(As heretofore noted.)

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C O N T E N T S

<u>WITNESSES:</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>
Herbert S. Denenberg	516	530		
James McVey	536	554		

<u>EXHIBITS:</u>	<u>FOR IDENTIFICATION</u>	<u>IN EVIDENCE</u>
None.		

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PROCEEDINGS

CHAIRMAN HASKINS: Will counsel be seated please?
The hearing will now come to order.

Mr. Sager is present, and I believe he wants
some time to confer with one of his colleagues before
proceeding.

Mr. Sager, are you prepared to proceed, or do you
want some more time?

MR. SAGER: No, I need time to confer with my
clients and then probably with other counsel.

CHAIRMAN HASKINS: Very well.

How much time do you need, approximately?

MR. SAGER: Well, I would ask for at least a
half an hour.

CHAIRMAN HASKINS: All right. In response to
a request from counsel for the intervenors, we will recess
until ten o'clock.

MR. SAGER: Thank you very much.

(Whereupon, at 9:33 a.m., the hearing was
recessed, to reconvene at 10:00 a.m.)

(10 noon.)

CHAIRMAN HASKINS: The hearing will now resume.

As I stated earlier, I forgot whether it was this
morning or yesterday afternoon, Dr. Carson was on the stand.
We had not completed -- intervenors had not completed his

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1 cross-examination.

2 That is the next business before the Board.

3 However, the hour is getting late, and it's getting toward
4 lunch time, and I think we probably could not finish with
5 Dr. Carson before lunch; and, therefore, I suggest that we
6 now recess, have a luncheon recess, and return here at 1:30.

7 (Whereupon, at 12:03 p.m., the hearing in the
8 above-entitled matter was recessed, to reconvene at 1:30
9 p.m., this same day.)

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AFTERNOON SESSION

(2:00 p.m.)

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3 CHAIRMAN HASKINS: The hearing will now be in order.
4 Mr. Sager, Counsel for the Intervenor, do you have
5 a witness to present this afternoon?

6 MR. SAGER: Yes. We have Dr. Denenberg on Con-
7 tention No. 10 concerning cost-benefit analysis and the
8 insurance question.

9 I have discussed with other counsel Dr. Denenberg's
10 qualifications, and I believe that it is well known that
11 Dr. Denenberg has been and is presently the Commissioner of
12 Insurance for the Commonwealth of Pennsylvania.

13 I believe that all parties are willing to stipulate
14 that he is an expert, qualified as an expert witness, in the
15 matters of insurance.

16 MR. GITNER: So stipulated, Mr. Chairman.

17 MR. TROWBRIDGE: Agreed, Mr. Chairman.

18 CHAIRMAN HASKINS: Mr. Sager, are you prepared to
19 have the witness sworn?

20 MR. SAGER: Yes.

21 CHAIRMAN HASKINS: Dr. Denenberg, would you raise
22 your right hand?

23 Whereupon,

24 HERBERT S. DENENBERG

25 was called as a witness on behalf of the Intervenor and,

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ln2 1 having been first duly sworn, was examined and testified as
2 follows:

3 DIRECT EXAMINATION

4 BY MR. SAGER:

5 Q Dr. Denenberg, at my request, did you prepare
6 certain testimony?

7 A Yes, I did. I have a written statement.

8 Q Would you please read that direct testimony?

9 A Okay.

10 Mr. Chairman and members of the Licensing Board,
11 I am Herbert S. Denenberg, Insurance Commissioner of the
12 Commonwealth of Pennsylvania. I hold the degree of doctor of
13 philosophy in applied economic and insurance and I was,
14 prior to assuming my present position, professor of insurance
15 at the Wharton School of the University of Pennsylvania. I am
16 also an attorney.

17 In my capacity as State Insurance Commissioner I
18 recently conducted public hearings on the risk and the
19 insurability of nuclear power plants in Pennsylvania. These
20 hearings included testimony from the Atomic Energy Commission,
21 the nuclear insurance pools, utility companies, reactor
22 manufacturers and other groups which generally favor the
23 construction and operation of nuclear power plants; they also
24 included testimony by scientists, lawyers and other private
25 citizens who are deeply concerned about problems which these

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1 plants pose for the health and safety of the general public.

2 I wish to direct my brief remarks today to a
3 part of the tenth contention of the intervenors in this
4 proceeding; namely, to the assertion that insurance costs
5 have not been fully included in the NEPA review concerning
6 cost-benefit analysis and alternatives with respect to the
7 proposed nuclear power plant to be operated at Three Mile
8 Island near Harrisburg. This contention is one with which
9 I am in complete agreement.

10 To be fully accurate and meaningful for the
11 purposes it is intended to serve, the cost-benefit analysis
12 contained in the Environmental Statement for the Three Mile
13 Island plant should include a fully accurate and meaningful
14 statement of the costs relating to insurance which will be
15 incurred in the operation of the plant.

16 One such cost, the most readily apparent insurance
17 cost, is that which the utility companies operating the
18 plant will annually pay to private insurers and to the federal
19 government in order to maintain the \$560 million of liability
20 coverage which is mandated by the Price-Anderson Amendment
21 to the U. S. Atomic Energy Act. This direct cost to the
22 utilities will include, for Unit I alone, \$270,000 annually
23 in payment for \$95 million of coverage which will be provided
24 by private companies as well as \$76,050 annually in payment
25 for an additional \$465 million of coverage which will be

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1 provided by the federal government through the Atomic Energy
2 Commission. This represents a total minimum cost of \$346,050
3 annually, or nearly \$14 million over the 40-year anticipated
4 lifetime of the plant, for insurance coverage. The actual
5 final cost will of course be significantly greater, due to
6 the relentless toll of inflation.

7 In itself a substantial expense (and much greater
8 than a utility would expect to pay for liability coverage on
9 a conventional plant with the same generating capacity), this
10 direct cost incurred by the utilities is not, however, the
11 exclusive or even the principal cost to be incurred with
12 respect to insurance.

13 Under existing law, other more substantial
14 insurance costs will be incurred by the general public --
15 or by the federal government at the expense of the general
16 public -- rather than directly incurred by the utility
17 companies as their stated cost of doing business. These are
18 the hidden, unstated insurance costs which the public
19 absorbs in order to enable the utility companies to operate
20 nuclear reactors with the appearance of economy and profit,
21 including the two proposed for Three Mile Island, with the
22 appearance of economy and profit.

23 Although such public costs may be legal in the
24 context of present federal legislation on atomic energy, they
25 ought not to remain hidden from the public view and certainly

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2 Commission. This represents a total minimum cost of \$346,050
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23 Although such public costs may be legal in the
24 context of present federal legislation on atomic energy, they
25 ought not to remain hidden from the public view and certainly

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1 they ought not to be excluded from the comparative costing of
2 nuclear plants which is required by the National Environmental
3 Policy Act.

4 The first of these public costs for the
5 Three Mile Island plant is the governmental subsidization which
6 is involved in the U. S. Atomic Energy Commission's provision
7 to the utility companies of \$465 million in insurance pro-
8 tection in return for the utilities' payment of a flat rate
9 indemnity fee which does not adequately reflect the true value
10 of such coverage.

11 It is somewhat difficult to assess the market
12 value to the utilities of the AEC indemnification program
13 because the private insurance industry has been unwilling to
14 price, much less to provide, any coverage in excess of its
15 present maximum of \$95 million. Yet a rough indication of
16 the disparity between the rates charged by private insurers
17 and by the federal government can be seen in the fact that
18 the private insurance pools charge \$270,000 for their \$95
19 million of coverage while the AEC charges only \$76,050 for its
20 \$465 million of coverage. On the average, therefore, the
21 utility owners of Three Mile Island can be expected to pay a
22 minimum of \$2,340 per million dollars of coverage purchased
23 in the private insurance market; for coverage provided by the
24 AEC, their cost amounts to only \$164 per million dollars of
25 coverage.

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1 Customary insurance principles suggest that the
2 owners of Three Mile Island and of other reactors might
3 expect to pay proportionately more for the lower than for the
4 upper levels of their coverage, since it is likely that there
5 will be more claims presented against the lower level than
6 the upper levels of coverage. This principle is illustrated
7 by the fact that the utilities must pay a premium of \$32,500
8 for the first one million dollars of coverage provided by
9 private insurers compared with only \$1,000 per million for
10 coverage above \$40 million.

11 But it is highly unlikely that private insurers
12 would provide any coverage at whatever level for less than
13 \$1,000 per million, which is the amount designated by them
14 as the basic minimum charge for nuclear liability insurance.

15 Figured at this rate, the true value of the
16 \$465 million of coverage which will be provided by the
17 general public through the Atomic Energy Commission is no
18 less than \$463,000 annually. The difference between this
19 amount and the \$76,050 actually charged by the AEC is
20 \$388,950 annually, or \$15,558,000 over the anticipated 40-year
21 lifetime of the plant.

22 This is the first hidden public cost of nuclear
23 liability insurance which should be considered, but so far has
24 not been, in costing the Three Mile Island nuclear plant and
25 comparing it with alternatives.

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1 A second major cost of the Three Mile Island
2 plant which will be incurred by the general public rather than
3 by its utility company owners is that associated with (a)
4 compensation defects in the mandated \$560 million of insurance
5 coverage which supposedly is provided for the express purpose
6 of protecting the public; and (b) the arbitrary cut-off of
7 insurance benefits (as well as common law remedies) for all
8 damages in excess of \$560 million.

9 A good deal has been made of the \$560 million of
10 insurance "benefit" mandated by the Price-Anderson Act, but
11 it also needs to be pointed out that the actual recovery of
12 these benefits by injured parties is by no means assured.
13 Despite the enactment in 1966 of amendments designed to
14 liberalize the availability of benefits to the public, it
15 remains necessary nonetheless for injured parties to establish
16 a causal chain between radiation exposure or other harm
17 produced by nuclear products and the fact of their own
18 injury. But medical experts have clearly stated that
19 injuries resulting from radiation exposure may take as long
20 as 20 years or more to manifest themselves, and that when
21 they do, they may appear clinically identical to non-radiation
22 induced injuries.

23 The difficulty of legally establishing a causal
24 link with an incident of radiation exposure in such circum-
25 stances should be obvious, and it is equally obvious that the

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1 failure to overcome such obstacles will result in the denial
2 of compensation from the liability insurance coverage required
3 under the Price-Anderson legislation. In addition, legal
4 scholars have suggested that present law provides no
5 adequate means whereby injured parties are able to recover
6 compensation for life-shortening, for genetic damage, and for
7 other special types of injury which can result from accidental
8 radiation exposure.

9 The history of claims experience under nuclear
10 insurance thus far illustrates that the nuclear insurers will
11 not hesitate to attempt to disprove responsibility for
12 injuries attributed to the activities which they insure; after
13 all, it is in their business interest to do so. One current
14 case involves a claim for several million dollars in damages
15 for a laborer who handled faultily packaged radioactive
16 materials which, according to AEC-authenticated reports, leaked
17 a trail of radiation halfway across the eastern United States.

18 Yet responsibility for the severe cancerous condi-
19 tion which the worker manifested four years after this
20 exposure has been vigorously contested during five years of
21 legal proceedings by the nuclear insurance companies, who
22 assert that the illness might be attributable to other causes.

23 If not compensated or if inadequately compensated
24 from the liability insurance provided for this purpose, the
25 costs of radiation-induced injuries possibly resulting from

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1 the operation of the Three Mile Island plant will not
2 thereby cease to be real costs; they will simply join the list
3 of hidden costs of nuclear activity which must be eventually
4 absorbed by members of the public.

5 Serious as the obstacles to recovering compensa-
6 tion from the existing \$560 million of insurance coverage are,
7 however, an even greater public cost is embodied in the
8 arbitrary cut-off of insurance coverage for any possible
9 damages in excess of \$560 million. This limitation of
10 insurance protection, coupled with the abrogation of legal
11 liability of the plant owners and reactor manufacturers for
12 any claims in excess of \$560 million will constitute the
13 ultimate subsidization by the general public of the
14 Three Mile Island plant.

15 The plant owners will undoubtedly deny that this
16 capping of benefits and liability represents any real material
17 value to them or, conversely, any real cost to the public.
18 They will point proudly to the fact that no member of the
19 public (as opposed to workers in or associated with the
20 activity of the industry) has been killed, and no catastrophic
21 accidents have occurred, in 17 years of experience with
22 nuclear reactors.

23 And they will assert that on the basis of this
24 safety record and their continuing zeal to make reactors
25 uncommonly safe, the public would be foolish to worry about

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1 the financial consequences of an accident costing more than
2 \$560 million or, for that matter, any major accident at all.

3 All these arguments by the utilities are
4 irrelevant, of course. The utilities do not take their
5 own assurances about safety seriously enough to place their
6 corporate necks on the line by renouncing their exemption
7 from liability for a catastrophic accident, and in fact
8 they insist on the continuance of this exemption as a condition
9 of their operating nuclear plants.

10 If pressed, they will admit that a catastrophic
11 accident is both conceivable and possible. And if such an
12 accident occurs, the fact is that it will be the general
13 public -- and not the utilities and the reactor manufacturers
14 -- who must bear the cost.

15 The possible magnitude of a catastrophic accident
16 at a nuclear power plant has been twice studied by the
17 Brookhaven National Laboratory in behalf of the Atomic
18 Energy Commission. In 1957, prior to the Congressional
19 enactment of a \$560 million liability cut-off, the laboratory
20 reported that such an accident could conceivably cause 3,400
21 deaths, 43,000 personal injuries, and cost \$7 billion for
22 property damage alone.

23 In the early 1960s the Laboratory did an update of
24 its earlier study, an update whose conclusions were kept secret
25 from the public until June of this year. This revised study

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1 indicated that a catastrophic accident might cause 45,000
2 fatalities, 100,000 personal injuries, and cost \$17 billion or
3 more for property damage alone.

4 But the utilities will say that, whatever its
5 conceivable magnitude, a catastrophic accident is highly
6 improbable. Their 17 years of successful experience with
7 reactors proves this, they say.

8 I say, from the point of view of insurance
9 administration, that our 17 years of previous experience with
10 reactors tell us very little about their future safety record
11 or about the future probability of a catastrophic accident.

12 What we have seen so far is no more than the tip
13 of an iceberg. Do the utilities really believe that the
14 performance of 1,000 or more massive reactors as large or
15 larger than the 871 megawatt Unit I at Three Mile Island
16 can be safely predicted upon the early performance of a
17 handful of reactors, many of them much smaller than those now
18 being built?

19 The private insurance industry supposedly has
20 some expertise in evaluating the probable frequency and the
21 magnitude of accidental occurrences in order to provide for
22 their compensation and to make a profit in the bargain. In the
23 matter of nuclear insurance, it is my judgment that the
24 limitations of experience and the pressure of public policy
25 have rendered the private insurance pools uncharacteristically

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1 servile to the "party line" on safety of the industry which
2 they are insuring. Yet, some of the actions as opposed to
3 the public rhetoric of these private insurers is extremely
4 instructive.

5 In contrast with much higher levels of liability
6 coverage which they have been willing to market for some
7 areas of conventional risk, the private insurers have warily
8 limited their coverage of nuclear risk to \$95 million, a
9 sum which is the merest pittance in terms of their assets and
10 overall financial capacity. I might insert at this point in
11 all major cities a single company might have more than \$2
12 billion on the line.

13 The normal appeal of a volume business with
14 extensive profit, it appears, will not induce them to provide
15 coverage for even the mandated \$560 million of nuclear
16 liability, and much less for any coverage beyond that level.

17 And how do the private insurers actually assess
18 their risk for nuclear accidents in excess of \$40 million,
19 that is for the range of accidents which begin to justify the
20 terms "major" or "catastrophic"? Taking into consideration an
21 allowance for profit and operating expenses, their \$1,000
22 per million minimum premium charge for this upper level
23 coverage amounts to an implicit judgment of an approximate
24 1/1700 probability of a major accident, a working probability
25 assessment which is much less conservative (or assuring) than

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1 the rhetorical estimates of some nuclear proponents.

2 My own view is that this probability assessment
3 may deserve to be still less conservative than it is. But if
4 we assume for the sake of discussion that it is a
5 reasonable judgment, and if we apply it to the revised
6 Brookhaven Laboratory figures on the possible magnitude of
7 a catastrophic accident, we will begin to get some idea of
8 the possible cost to the public of the existing ceiling on
9 nuclear accident liability above \$560 million.

10 The Brookhaven revised study contains a \$17 billion
11 estimate of possible property damages due to a catastrophic
12 accident. It also estimates possible deaths of 45,000 and
13 personal injuries of 100,000. If we apply what I would
14 regard as conservative individual and societal costs of
15 \$300,000 per fatality and \$100,000 per radiation injury, we
16 can calculate that the cost of deaths and injuries might be
17 \$13.5 billion and \$10 billion respectively, for total costs
18 of \$40.5 billion for a catastrophic nuclear accident.

19 If, using the principles of actuarial science
20 which are the basis for insurance decisions, we were to
21 combine these figures on probability and magnitude of a
22 possible nuclear accident in order to design a realistic
23 insurance program to meet this need, we would calculate an
24 insurance premium of at least \$23.5 million per year per
25 reactor.

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1 But clearly the utility companies, which have
2 heretofore expressed strong opposition to even a modest increase
3 in the scope of their present liability, will be unwilling
4 and probably also unable to purchase such coverage. And
5 clearly, too, an insurance industry which now balks at raising
6 its nuclear coverage above even the \$100 million level, will
7 be unwilling and also unable to extend that coverage to
8 provide realistically for a possible \$40.5 billion accident.

9 In the absence of such insurance, and with the
10 cut-off of liability at \$560 million which now prevails, we
11 must calculate instead a public subsidy to the nuclear
12 industry, and a hidden cost to the general public, of \$23.5
13 million per year in consequence of the proposed licensing of
14 a nuclear plant at Three Mile Island. This public cost, I
15 might add, is in itself more substantial than the \$23.3 million
16 figure which the owners have projected as the entire annual
17 operating cost of the proposed plant.

18 Mr. Chairman, I believe that the entire series of
19 undisclosed but quite real insurance-related costs which I have
20 described in this statement must be included in any accurate
21 cost-benefit or risk-benefit analysis of the Three Mile
22 Island plant. I believe that when these costs are
23 properly included, it will become apparent that the licensing
24 of this plant would be unwise and unwarranted.

25 My own personal and professional judgment is that

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1 on purely economic and insurance grounds, the licensing of
2 the proposed plant under present circumstances would constitute
3 a blatant and inexcusable act of fiscal irresponsibility and
4 a basic violation of the public trust.

5 However, even if its owners were willing
6 and able to provide sufficient insurance coverages to protect
7 the financial interest of the public, I would judge that the
8 price, in human and moral terms, is still too much to pay.
9 There are some risks which not even the skillfully applied
10 monetary balm of insurance can make acceptable, and I judge
11 that this is plainly one of them.

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1 CHAIRMAN HASKINS: Thank you, Dr. Denenberg,
2 for a very thought-provoking statement.

3 MR. SAGER: Doctor -- if I may, Mr. Chairman?

4 BY MR. SAGER:

5 Q Is there anything to add?

6 A Yes. Today, of financial necessity the
7 intervenors have been forced to agree to a compromise, in
8 order to get the utilities to install a charcoal filter
9 to reduce low-level radiation, the intervenors had to
10 agree to withdraw immediate objection to the licensing
11 of this plant.

12 This shows that once again the nuclear establish-
13 ment has ransomed the public interest for its own benefit.
14 In order to get a safety device which should be mandatory
15 to protect the health of the public, the nuclear establish-
16 ment forced the intervenors to drop their objections by
17 using financial coercion.

18 MR. GITNER: Mr. Chairman, may I ask at this
19 point how long the statement is going to take -- if
20 Mr. Denenberg knows?

21 THE WITNESS: Forty more seconds.

22 MR. GITNER: Is it more than one page?

23 THE WITNESS: I have a half a page to go.

24 Seemingly, the Atomic Energy Commission has
25 especially designed procedures to lock out the little guy. He

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1 can't afford the high legal cost of fighting the billion
2 dollar atomic establishment, no matter how wrong that nuclear
3 establishment happens to be.

4 Here, despite the merits of their contentions, the
5 Intervenors had to give in to a one-sided compromise because
6 they could not afford the legal fees to carry on.

7 This shows the public interest is not being
8 protected because all the money and resources are with
9 the utilities. It is also tragic that the Atomic Energy
10 Commission has not guaranteed these issues can be considered,
11 and that it has not guaranteed that Intervenors can properly
12 present vital issues.

13 So I would suggest that the AEC do two things:

14 First, require such filtration devices on all
15 things; and second, the AEC should force consideration of
16 all issues affecting the public.

17 CHAIRMAN HASKINS: Dr. Denenberg, does that
18 complete your prepared statement?

19 THE WITNESS: Yes, it does.

20 CHAIRMAN HASKINS: Do you have anything you wish
21 to add at this time?

22 MR. DENENBERG: No.

23 CHAIRMAN HASKINS: Mr. Sager, do you have any
24 questions of the witness?

25 MR. SAGER: I have no further direct.

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CHAIRMAN HASKINS: Dr. Denenberg, as you know, it is the custom of the Licensing Board to give the other parties an opportunity for cross-examination. Whether they have questions or not, I don't know.

I will first call on Mr. Trowbridge, counsel for the Applicant.

MR. TROWBRIDGE: Mr. Chairman, I have no cross-examination of this witness for the reason that, as agreed among counsel, the next order of business after this will be the presentation of our own testimony on the subject of insurance.

I do wish to record for the record my resentment over the statement, supplemental statement, made by this witness if the substance of that statement was known to counsel for the Intervenors.

CHAIRMAN HASKINS: Well, the Board notes your statement, Mr. Trow-ridge, and the Board will evaluate the supplemental statement and the main statement, of course, for its consideration.

Mr. Gitner, counsel for the Regulatory Staff, do you have any questions at this time?

MR. GITNER: Mr. Chairman, as you know, and the other parties know, we have given a notice of deposition for Mr. Denenberg. We would like to reserve our right to move to strike such portions of the testimony at a later

1 date that we feel are inadmissible or irrelevant to these
2 proceedings under the Board's prehearing conference order.

3 We would ask that we also be allowed to recall
4 Mr. Denenberg at a later time to cross-examine him and to
5 also present rebuttal testimony on the points that he has
6 raised.

7 At this time I would also enter our objection to
8 the supplemental statement of Mr. Denenberg. I feel that
9 it is somewhat out of place to discuss whatever reasons
10 Mr. Denenberg believes the settlement was reached, and we
11 would also object to his statement for the record that the
12 public interest is not being protected by the Atomic Energy
13 Commission.

14 Other than that, we have nothing more at this
15 time, Mr. Chairman.

16 CHAIRMAN HASKINS: Thank you, Mr. Gitner.

17 Mr. Adler? Do you have any questions?

18 MR. ADLER: Mr. Chairman, we have no questions
19 nor additional comments.

20 CHAIRMAN HASKINS: Thank you.

21 Mr. Sager?

22 MR. SAGER: Counsel for the intervenors did not
23 hear the statement that was made by Dr. Denenberg.

24 However, I believe that it should be observed for the
25 record Commissioner Denenberg has held public hearings

1 concerning the matters that he set forth in his statement, and
 2 I believe that in that respect attention and great weight
 3 should be paid to proposals and recommendations made by the
 4 Commissioner.

5 Thank you.

6 CHAIRMAN HASKINS: I will ask the Board members
 7 if they have any questions.

8 Dr. Livingston?

9 DR. LIVINGSTON: No questions.

10 DR. LYMAN: No questions, Mr. Chairman.

11 CHAIRMAN HASKINS: Thank you, Dr. Denenberg.

12 I think that concludes your presentation this afternoon.

13 THE WITNESS: If I may just make a brief
 14 statement?

15 CHAIRMAN HASKINS: Yes, indeed.

16 THE WITNESS: I simply must say that I thought
 17 this was an ideal forum in which to comment on the
 18 settlement and I also thought it was an ideal forum on which
 19 to comment upon the performance of the Atomic Energy
 20 Commission.

21 I thank you for your attention.

22 CHAIRMAN HASKINS: Okay. Thank you.

23 (Witness excused.)

24 CHAIRMAN HASKINS: Mr. Sager, do you have any other
 25 witnesses at this time?

1 MR. SAGER: No, sir.

2 CHAIRMAN HASKINS: Mr. Trowbridge, do you have
3 any other witnesses?

4 MR. TROWBRIDGE: By agreement of counsel,
5 Mr. Chairman, Mr. McVey, our next witness, would be next in
6 order.

7 CHAIRMAN HASKINS: Yes. Would you call him at
8 this time.

9 MR. TROWBRIDGE: Yes.

10 Mr. McVey, would you come forward.

11 MR. TROWBRIDGE: Mr. McVey, would you state your
12 full name and address and present business affiliation?

13 MR. MC VEY: My name is James R. McVey. I live
14 at 41 Willow Avenue, North Plainfield, New Jersey. I am
15 currently an Assistant Vice President of the Frank B. Hall
16 & Company, Insurance Brokers, at 88 Pine Street, New York.

17 CHAIRMAN HASKINS: Could you speak up a little,
18 Mr. McVey?

19 MR. TROWBRIDGE: It will be necessary for you
20 to speak quite loudly, particularly since your back is to
21 the people here.

22 MR. MC VEY: Thank you.

23 MR. TROWBRIDGE: Mr. Chairman, would you
24 swear the witness?

25 CHAIRMAN HASKINS: Yes.

1 Whereupon,

2 JAMES MC VEY

3 was called as a witness on behalf of Applicant, and, having
4 been first duly sworn, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. TROWBRIDGE:

7 Q Mr. McVey, I show you three pages of paper clipped
8 together. The second and third pages are entitled, up in
9 the right-hand corner, "Confidential Resume".

10 I regret the word "confidential". It is
11 obviously the resume of James R. McVey, as it says.

12 The first sheet is entitled "Supplement to
13 Resume".

14 MR. GITNER: Excuse me, Mr. Trowbridge.

15 The Staff would stipulate to Mr. McVey's
16 qualifications and his resume may be bound into the record
17 as if read.

18 MR. SAGER: We will so stipulate, also.

19 MR. TROWBRIDGE: All right.

20 In that case I will amend that slightly if it
21 may be copied in the record as if read.

22 CHAIRMAN HASKINS: May we strike the word
23 "confidential"?

24 MR. TROWBRIDGE: Yes, please do.

25 CHAIRMAN HASKINS: Very well.

(The text of the document follows:)

SUPPLEMENT TO RESUME

James R. McVey

41 Willow Ave.

North Plainfield, N.J. 07060

Telephone #201-755-2968

PERSONAL

Fifty-three years old, born September 25, 1920, New York City.

Married - Four children, ages 19, 18, 13, and 11.

Present security clearance - LX.

EXPERIENCE

Frank B. Hall & Co. of N.Y., Inc. - May 1973 to present
International Insurance Brokers.

Position - Assistant Vice President and Manager of Nuclear
Department.

Marsh & McLennan - September 1967 to May 1973 - International
Insurance Brokers.

Position - Nuclear Consultant

Act as advisor and consultant to clients in matters
pertaining to Nuclear Property and Liability Insurance.

RESUME

James R. McVey

98 East Avenue

Westerly, Rhode Island 02891

1408 293

1 Telephone: 401-496-1019

2 PERSONAL

3 Forty-six years old, born 1920, New York City, New York.

4 Married. Four children, ages 13, 12, 7 and 4.

5 Five feet, four inches tall, 165 pounds, excellent health.

6 Willing to relocate and travel as required.

7 Conversant in French.

8 Honorably discharged in 1946 as a Sergeant from the U.S.

9 Air Force.

10 Present security clearance is Secret.

11 EDUCATION

12 Polytechnic Institute of Brooklyn - B.S.M.E., 1954

13 Brooklyn College - One year of Liberal Arts

14 Mohawk College - Two years of Pre-Engineering

15 OBJECTIVES

16 Increased growth potential and responsibility in Mechanical
17 Engineering as an Assistant Chief of Senior Project Engineer.

18 EXPERIENCE

19 General Dynamics Electric Boat Division, Groton, Conn. 1965
20 to 1967. This division produces nuclear and conventional
21 powered vessels for the government. Employed as:

22 Senior Project Engineer:

23 Responsible for formulating technical specifications of pumps,
24 distilling plants and administrative specifications for
25 the NR-1 Project.

1 Reviewing and approving procedures and technical manuals of
2 equipment for which I am responsible.

3 Performing technical evaluation of proposals which requires
4 familiarity with military specifications.

5 Reviewing designs and performing necessary calculations
6 such as shaft critical speeds, stress and heat balances.

7 Assisting other departments as Technical Consultant
8 and maintaining liaison with the customer and vendors.

9 Reporting to Mr. R. H. Dudda.

10 Dresser Industries, Industrial Valve and Instrument Division,
11 Alexandria, Louisiana. Formerly Manning, Maxwell and Moore.

12 1960 to 1965. This division manufactures valves for the
13 petro-chemical industry and employs approximately 700
14 people, started as Project Engineer and promoted to
15 Resident Engineer.

16 As Resident Engineer:

17 Responsible for and supervised the activities of several
18 engineers, draftsmen and clerks.

19 Requiring the ability to deal with people at all levels
20 both within the company and within the customer's plants.

21 Maintained all technical correspondence with foreign
22 licensees in Europe, Mexico and Japan including travel to
23 these countries as required.

24 Designed and supervised installation of a Steam Flow Facility
25 which received A.S.M.E. certification and was appointed

1 Official Observer.

2 Responsible for the modification and or complete redesign
3 of safety valves for various conventional and nuclear appli-
4 cations.

5 Served on the American Petroleum Institute's Manufactur
6 Sub-Committee for Safety Relief Devices.

7 Conducted extensive tests for a Pilot Operated Boiler Valve
8 at the Naval Boiler and Turbine Laboratory, Philadelphia, Pa.
9 Reporting to Mr. H. E. Ferrill.

10 As Project Engineer:

11 Responsible for the development of new safety valve designs,
12 from inception through test, including cost analysis
13 and pilot run.

14 Requiring knowledge of Thermodynamics, Materials, Stress
15 Analysis, Fluid Flow, Spring Design and Basic Elec-ric
16 Engineering.

17 Designed and developed a new line of Low Pressure Safety
18 Valves which have been A.S.M.E. certified and commercially
19 marketed.

20 Assisted in the development of a Thermo-Lip Disc for
21 an electrically operated valve which has been awarded a
22 patent, numbered 3,174,713.

23 Responsible for the analysis and resolution of field
24 problems.

25 Westinghouse Electric Company, Bettis Atomic Laboratory,

1 Pittsburg, Pa., 1955 to 1960. This division produces the
2 reactors for the nuclear submarines and employs approxi-
3 mately 5,000 people. Started as a Junior Engineer and
4 progresses through four grades to Engineer.

5 As Engineer:

6 Responsible for formulating specifications for filters,
7 pressure valves, heat exchangers, pumps, piping and valves.
8 Established a Lead Bonding procedure for Shielded Pressure
9 Vessels.

10 Contributed to the Development of a High Pressure Ceramic
11 to Metal Seal for Electrical Heaters.

12 Maintained technical liaison between vendors, the Navy,
13 and shipyards.

14 (End of document.)

15 BY MR. TROWBRIDGE:

16 Q Mr. McVey, did you prepare a statement
17 relating to nuclear insurance the the nuclear insurance
18 program for this proceeding?

19 A Yes, sir, I did.

20 Q Would you, Mr. McVey, proceed to read that
21 statement?

22 CHAIRMAN HASKINS: Mr. Trowbridge, just a
23 moment. We are just at the point where I am wondering if
24 Mr. McVey would prefer to stand at the podium, in which
25 event perhaps his voice would project more towards the

1 people in the back of the room.

2 THE WITNESS: Thank you.

3 Mr. Chairman and Members of the Licensing Board;
4 my name is James McVey. I am an officer of Frank B. Hall &
5 Company of New York, Insurance Brokers, and Manager of
6 their Nuclear Department.

7 I hold a bachelor of Science of Mechanical
8 Engineering degree from the Polytechnic Institute of
9 Brooklyn.

10 On August 14- 16, 1973 I attended the hearings
11 before Commissioner Herbert S. Denenberg of the Pennsylvania
12 Insurance Department relating to nuclear insurance. Among
13 the witnesses testifying before Commissioner Denenberg
14 was Mr. Joseph Marrone, who presented testimony concerning
15 the history, operations and premium rates and refund policies
16 of Nuclear Energy Liability Insurance Association,
17 commonly known as "NELIA". Mr. Marrone has been General
18 Manager of NELIA since 1967.

19 I have read the testimony presented to this
20 Board by Commissioner Denenberg. In his testimony,
21 Commissioner Denenberg made certain statements and draws
22 certain inferences with respect to the cost of nuclear
23 liability insurance which are not correct, and which I
24 believe reflect a misunderstanding of the testimony that was
25 presented to him at the hearings which he held in August.

1 Commissioner Denenberg states on page 2 of his
2 testimony that the annual premium cost for nuclear liability
3 insurance for Three Mile Island Unit No. 1 will be \$270,000
4 annually in payment for the \$95 million for coverage to be
5 provided by NELIA, and \$76,050 annually in payment for an
6 additional \$465 million of coverage which will be provided
7 by the Federal Government through the Atomic Energy
8 Commission. He goes on to state that this represents a
9 total minimum cost of \$346,050 annually, or nearly \$14 million
10 over the 40-year anticipated lifetime of the plant for
11 insurance coverage.

12 In presenting this figure, Commissioner Denenberg
13 has ignored completely the Industry Credit Rating Plan
14 about which Mr. Marrone testified before him on August 15.
15 Under that plan, about 73 cents of every premium dollar paid
16 to NELIA is placed in a reserve fund which is disbursed to
17 NELIA to pay loss and loss expense or to pay refunds to
18 insureds. Such refunds are made after a ten-year waiting
19 period. NELIA effectively began its operations in 1957
20 when the nuclear power industry was also just beginning.
21 In the years 1957 through 1963 a total of \$5,312,500
22 of the premiums received by NELIA were placed in the reserve
23 fund and, at the conclusion of the ten-year waiting period,
24 \$5,128,044 or 96.5 percent of the sum placed in the reserve
25 was refunded to insureds by NELIA. Stated another way, the

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1 refunds were equivalent to approximately 70 percent of the
2 total premium paid. I shall also point out that similar
3 data, through 1972, are contained in Table 8-2 of the
4 WASH-1250 report of the AEC, dated July 1973, referred to
5 by Commissioner Denenberg in his testimony.

6 If one applies this experience to his \$2 70,000
7 initial annual premium for NELIA coverage for the Three
8 Mile Island unit, the net annual premium would be approxi-
9 mately \$81,000, or an average of approximately \$852 per
10 million dollars of coverage for the \$95 million of coverage
11 provided by NELIA.

12 Stated another way, Commissioner Denenberg has
13 overstated by more than three times the net cost of the
14 insurance coverage to be provided by NELIA, even though he
15 had the correct information available to him in Mr.
16 Marrone's testimony and in the AEC publication on which he
17 relies for other data.

18 This overstatement is perpetuated in other aspects
19 of Commissioner Denenberg's testimony. He recognizes at
20 page 3 of his testimony that customary insurance principles
21 suggest that the owners of reactors might expect to pay
22 proportionately more for the lower, and less for the upper,
23 levels of their coverage, since it is unlikely that there will
24 be more claims presented against the lower than the upper
25 levels of coverage.

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1 He illustrates this principle by stating that
2 the initial annual premium for the first \$1 million of
3 coverage provided by NELIA is \$32,500 compared with only
4 \$1,000 per \$1 million of coverage for coverage above
5 \$40 million. But again, he has ignored the operation
6 of the Industry Credit Rating Plan. Assuming, on the basis
7 of past experience, a refund of 70 percent of initial
8 premiums, the net cost for NELIA coverage would be \$9,750
9 for the first \$1 million of coverage and \$300 per \$1
10 million of coverage for coverage above \$40 million.

11 Commissioner Denenberg goes on to state that it
12 is "highly unlikely" that private insurers would provide
13 any coverage above \$95 million for an annual premium of
14 less than \$1,000 per million, and he then applies his
15 assumed \$1,000 per \$1 million of coverage figure to the
16 \$465 million of coverage provided by the AEC to derive what
17 he characterizes as "the true value" of such coverage, which
18 he states to be no less than \$465,000 annually. He then
19 takes the difference between this amount and the \$76,050 charged
20 by the AEC, or \$388,950 annually, and derives a figure of
21 \$15,588,000 over the anticipated 40-year lifetime of
22 the Three Mile Island Unit No. 1.

23 The trouble with Commissioner Denenberg's
24
25

1 arithmetic is that it is based on incorrect premises. As I
2 have just demonstrated, Commissioner Denenberg should know
3 that the actual net premium cost of the insurance provided
4 by NELIA for the band of coverage between \$40 million and
5 \$95 million has been \$300 per \$1 million of coverage
6 and not the \$1,000 assumed by him.

7 Secondly, I know of no basis for his assumption
8 concerning the rate that NELIA would charge for insurance
9 coverage for the band of coverage now provided by the AEC.
10 NELIA does not have, at the present time, insuring capability
11 to cover that band and, therefore, there has been no reason
12 for NELIA to consider what the appropriate rate would be.

13 However, applying the same insuring principles
14 that Commissioner Denenberg cites, it is "highly unlikely"
15 that, if NELIA were in a position to cover the band between
16 \$95 million and \$560 million, the net annual cost per
17 \$1 million of coverage would be less than that for the band
18 between \$40 million and \$95 million.

19 Another basic error in Commissioner Denenberg's
20 computations is that he uses figures for Three Mile Island
21 Unit No. 1 alone and does not take into account the fact
22 that that unit is part of a proposed two-unit development,
23 with the second unit having a slightly larger electrical
24 capacity.

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25 NELIA has quoted initial premium rates of

1 \$304,750 for the first unit and of \$132,212.50 for the
2 second unit, or a total for the two units of \$436,962.50,
3 with the exposure applicable to each unit being \$95 million,
4 but with the total site coverage being \$95 million.

5 In other words, if an incident should occur in
6 either unit, there would be coverage up to \$95 million.
7 But, if there should be simultaneous incidents in both
8 units, the total coverage would be limited to \$95 million.

9 However, the NELIA insurance coverage from the first
10 dollar of coverage up to \$95 million for an incident at
11 either unit clearly invites greater insurance risks than
12 the risks involved in the AEC coverage. For the band of
13 coverage between \$10 million and \$95 million, the initial
14 annual premium rate for the second unit is \$250 per \$1 million
15 of coverage and this is subject to the Industry Credit
16 Rating Plan so that if refunds continue at the 70 percent
17 rate, the net premium for the band between \$10 million and
18 \$95 million would be \$75 per million.

19 By contrast, I should point out that the
20 charge made by the AEC for its indemnity is not subject to
21 refund. Thus, for the Three Mile Island station, the AEC's
22 net annual charge of \$164 per million of coverage for the
23 \$465 million band of coverage between \$95 million and \$560
24 million is actually more than twice the net premium charge
25 of \$75 per \$1 million of coverage for the band between

1 \$10 million and \$95 million that, based on a 70 percent
2 refund, one can reasonably anticipate for Three Mile Island
3 Unit No. 2.

4 Another way of approaching this might be to take
5 an average of the net premium cost for the NELIA coverage
6 between \$40 million and \$95 million for Three Mile Island
7 Unit No. 1 and for Three Mile Island Unit No. 2. As I
8 have stated, a reasonable estimate is \$300 for \$1 million
9 of coverage for Unit No. 1 and \$75 per \$1 million of coverage
10 for Unit No. 2, or an average for the two units of \$187.50
11 per million. Certainly, in this light, the AEC charge
12 of \$164 per \$1 million of coverage for coverage between
13 \$95 million and \$560 million does not appear to me to
14 have any element of subsidy.

15 The private insurance pools do not yet have the
16 capacity to provide \$465 million of coverage on top of the
17 \$95 million of basic coverage they are already providing,
18 although they have increased their coverage by more than
19 50 percent since NELIA first began its operation.

20 However, if they had such insuring capacity, based
21 on the data that I have just presented, I do not believe
22 that the net premium cost for insurance coverage in the
23 range between \$95 million and \$560 million would be likely
24 to be in excess of an average of \$164 per million of coverage
25 for that band, and particularly so if the non-insurance

1 underwriting cost were eliminated.

2 As I stated, approximately 73 percent of the premium
3 dollar received by NELIA is placed in a reserve, with
4 the other 27 percent being used for administrative and
5 engineering costs, premium taxes, acquisition costs, and
6 the like, including profit. Consequently, in order to
7 measure the true insurance cost on a private pool basis as
8 an equivalent of the insurance cost of the government
9 indemnity, it would not be appropriate to use 80 percent
10 of the attributed private pool net premium rate. This does
11 not give any weight to the fact that the government's
12 cost of capital is necessarily less than that of any
13 private insurance pool so the government can be recovering
14 its full cost of providing the indemnity and yet charge a
15 lower rate than any private pool must charge.

16 The balance of Commissioner Denenberg's testimony
17 is not really directed to insurance matters or the cost of
18 insurance. Thus, Commissioner Denenberg first extrapolates
19 his wholly erroneous \$1,000 assumed premium rate per million
20 dollars of coverage into an implicit judgment that there
21 is a 1/1700 probability of a major nuclear incident, and
22 then applies this figure to the Bookhaven studies concerning
23 the possible damage that could occur if there were to be a
24 major nuclear accident, and his assumed cost per nuclear-
25 caused fatality and injury.

1 He then applies his assumed \$1,000 per million
2 premium rate figure again to arrive at insurance premium cost.
3 I know nothing in the Brookhaven report or in the insurance
4 industry's premium practices that would support any
5 such assumptions as to the probability of a major nuclear
6 catastrophe.

7 My understanding is that the Brookhaven studies
8 were premised upon the view that the probabilities of major
9 nuclear catastrophe were so slight as to preclude
10 quantification, and that they merely sought to measure the
11 possible damage that could occur in the event of such a major
12 nuclear catastrophe.

13 Certainly, based on my experience in the
14 nuclear insurance industry, I believe that there is no basis
15 for Commissioner Denenberg's attribution to NELIA of any
16 assumption of the probability of the occurrence of a major
17 nuclear incident. Instead, I believe that NELIA's rates
18 and rating plan are based on the assumption that a major
19 nuclear incident is so unlikely as to wholly be outside
20 the range of probability studies.

21 The concluding paragraph of Commissioner Denenberg's
22 statement indicates that he was not really presenting his
23 testimony as indicating some deficiency in the insurance
24 aspects of the cost-benefit analysis or risk-benefit
25 analysis for the Three Mile Island Plant, and he was really

1 taking the opportunity of testifying before you to state his
2 views as an individual that nuclear plants should not be
3 built.

4 Certainly if he were talking in insurance terms,
5 and wished to be comprehensive about a cost-benefit or
6 risk-benefit analysis, he would also have found it necessary
7 to address himself to the insurance costs associated with
8 alternative means of meeting the energy requirements on the
9 area to be served by the Three Mile Island Plant.

10 For example, the insurance cost for coal miners
11 will rise approximately tenfold over the next four years
12 and even more thereafter, as a result of the shifting
13 to the coal industry from the Federal Government of the
14 cost of the black lung program.

15 Specifically, I have read the testimony of
16 Mr. Carl Bagge, President of the National Coal Association,
17 before Congress on the subject of the projected insurance
18 cost of providing black lung coverage. He indicated that
19 the insurance cost of such coverage for 100 miners would
20 be increased by about \$500,000 annually. Since it would
21 take about 1,500 miners to produce the coal equivalent
22 of the Three Mile Island Unit No. 1 output, this would mean
23 an insurance cost for this element along of about \$6.5
24 million annually.

25 I do not know how Commissioner Danenberg would

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1 compute the insurance cost equivalent of assuring
2 continuing and indeed increased oil supply from foreign
3 countries if nuclear plants are not permitted to operate and
4 if anticipated nuclear generation must be replaced by oil-
5 fired generation, but his approach would indicate that this,
6 too, should be quantified; one might well ask, for example,
7 whether there would be the counterpart of a National War
8 Risk insurance cost.

9 Likewise, I do not know how he would quantify
10 the insurance costs of the additional hazards to health, and
11 the impact on the economy of the nation, if operating permits
12 are not granted for nuclear generating stations and this
13 were to force a sharp curtailment in the use of energy in
14 the nation.

15 I would respectfully suggest that Commissioner
16 Denenberg is going well beyond insurance matters when he
17 addresses himself to the issue of whether the Price
18 Anderson Act should provide a limit of liability and, if
19 so, where that limit should be.

20 This is a matter which is to be reviewed by
21 Congress in the near future, and which is the subject of
22 ongoing studies being made for the AEC.

23 I believe that it presents policy issues on
24 which many will wish to be heard, but I don't
25 believe that it is a subject to which insurance principles

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and techniques can be applied in any meaningful way.

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1 MR. TROWBRIDGE: Thank you.

2 CHAIRMAN HASKINS: Does that conclude Mr. McVey's
3 testimony?

4 MR. TROWBRIDGE: It does, Mr. Chairman.

5 THE WITNESS: Yes, sir.

6 CHAIRMAN HASKINS: Mr. Gitner, do you have any
7 questions?

8 MR. GITNER: No, Mr. Chairman, we do not.

9 CHAIRMAN HASKINS: Mr. Sager, do you have any ques-
10 tions?

11 MR. SAGER: Yes, I do.

12 CROSS-EXAMINATION

13 BY MR. SAGER:

14 Q Sir, do you recognize that the present state of the
15 industry makes it necessary to have a federal program which
16 would be commonly known as the Price-Anderson Act to establish
17 an insurance base for the risk and hazards of nuclear power
18 plants?

19 MR. TROWBRIDGE: I'm sorry. Might I ask the reporter
20 to read back that question?

21 CHAIRMAN HASKINS: The reporter will read back the
22 question.

23 (The reporter read from the record as requested.)

24 CHAIRMAN HASKINS: Do you understand the question?

25 MR. TROWBRIDGE: I have no objection to the question.

2
1 if the witness thinks he can respond to it.

2 THE WITNESS: I recognize that the Price-Anderson is
3 the current basis upon which most of the insurance is provided
4 for the nuclear power plants. The basic coverage, however, the
5 first level, up to 95 million, is provided by private industry.

6 BY MR. SAGER:

7 Q Do you recognize that the Price-Anderson Act at
8 this time--considering the number of reactors in operation
9 and the data concerning the risk of nuclear power plant opera-
10 tion, it would be necessary to have the Price-Anderson Act-type
11 of coverage?

12 MR. TROWBRIDGE: Mr. Chairman, implicit in that
13 question was the inference that there was some material somewhere
14 on the risk, and I don't believe that material exists. It needs
15 to be identified for the witness.

16 MR. SAGER: Let me just withdraw the question and
17 present it in a different manner.

18 BY MR. SAGER:

19 Q In your opinion, sir, is there available to date and
20 presently a private insurance pool that would insure those risks
21 for the operation of nuclear power plants as insured under the
22 Price-Anderson Act?

23 A No. I am not aware of any.

24 Q It is your opinion, is it not, sir, that there should
25 be an insurance base for any damages that might arise from

3
1 the operation of the nuclear power plants, is it not?

2 MR. TROWBRIDGE: Mr. Chairman, I don't believe that
3 question is within the scope of the testimony. This witness
4 has not testified as to whether he thinks as a matter of public
5 policy there should or should not be either insurance or Price-
6 Anderson or limitation of liability. He has, instead, stated
7 at the end of his testimony that these are matters for
8 Congressional review and policy-making and decision, which
9 policy-making and decision to date is reflected in a law known
10 as the Price-Anderson Law, and, of course, the Atomic Energy
11 Act.

12 I don't think this witness is open to cross-examina-
13 tion on a matter to which he has not testified.

14 MR. SAGER: Mr. Chairman, I disagree. On page nine
15 and ten of the prepared testimony, he certainly gets into
16 policy considerations with regard to his testimony.

17 MR. TROWBRIDGE: Would you read, Mr. Sager, what you
18 are referring to as the basis for your contention?

19 CHAIRMAN HASKINS: Yes, please do so, Mr. Sager.
20 Read the basis.

21 MR. SAGER: "One might well ask," and I quote, "For
22 example, whether there would be a counterpart of a National War
23 Risk Insurance Clause. Likewise, I do not know how they would
24 quantify the insurance costs of the additional hazards to health
25 and the impact on the economy of the nation if operating permits

1 are not granted for nuclear generating stations, etc."

2 Certainly this witness presents testimony concerning
3 policy considerations as to insurability of nuclear power plants.

4 MR. TROWBRIDGE: Mr. Chairman, the context of the
5 material quoted by Mr. Sager is that portion of Mr. McVey's
6 testimony which suggests that if Commissioner Denenberg were to
7 do a complete cost-benefit analysis, he would also have to
8 take into account the costs of possible insurance associated
9 with other forms of generation, and he identified merely the
10 types of insurance risks or costs which he suggests by that
11 to be considered by Mr. Denenberg, and that is all that this
12 witness has done.

13 CHAIRMAN HASKINS: I think the objection will be sus-
14 tained, Mr. Trowbridge.

15 BY MR. SAGER:

16 Q Sir, do you believe that at this particular point,
17 that without the limitations set forth in the Price-Anderson
18 Act as to the amounts of coverage in case of a nuclear accident,
19 that the insurance costs on a premium basis would remain at
20 the same level as under the Price-Anderson Act?

21 MR. TROWBRIDGE: Did you understand the question?

22 THE WITNESS: I wonder if you would repeat that,
23 please.

24 BY MR. SAGER:

25 Q Do you believe that if the insurance costs were --

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5
1 excuse me -- the premiums for the insurance with reference to
2 the operation of nuclear power reactors were covered by private
3 industry without any limitations on the amount that might be
4 recovered in case of an accident and damages resulting from
5 the operation of a nuclear power plant, do you think that the
6 premiums would remain at the same level that they now exist
7 under the Price-Anderson Act?

8 MR. TROWBRIDGE: Mr. Chairman, may I ask for further
9 clarification? I think the question needs further clarification.
10 He is talking about levels of insurance premiums. Is he talking
11 about level per billion dollars, or the levels of total
12 insurance premiums, say, annually, in which case he would be
13 asking the witness, as I understand the question, whether he
14 thought the total annual premium for an unlimited liability
15 coverage would be different or more than the present annual
16 cost for a policy with a \$95 million limit.

17 If that is the question, I have no objection to the
18 witness answering it, but I think the question needs clarifica-
19 tion as to what he means by "the premium level".

20 CHAIRMAN HASKINS: As I understand the question, what
21 Mr. Sager is saying is absent Price-Anderson and absent the
22 relatively low rates which a utility pays under Price-Anderson,
23 if the entire insurance burden had to be borne by private
24 companies, would the premiums in terms of dollars per million
25 be the same as they are now. Is that correct?

6
1 MR. SAGER: Yes.

2 THE WITNESS: Without Price-Anderson, assuming
3 the same amount of limit available, 565 million --

4 MR. SAGER: That is not an assumption to the question.

5 THE WITNESS: You want unlimited liability?

6 BY MR. SAGER:

7 Q Yes.

8 A I would say that in my opinion, the current premiums
9 would not in the lower levels materially change. If you are
10 talking about unlimited liability above those currently
11 available, in my time, I could not forecast what the premiums
12 might be.

13 I mean, this is a study on which I -- an area in
14 which nobody has really studied.

15 Q Now, isn't it a fact that it is difficult to estimate
16 what the actual premiums would be with unlimited liability
17 because we do not know statistically the actual cost of
18 damages that arise from the operation of nuclear power generating
19 plants?

20 A Under what conditions would you assume? I think you
21 would have to clarify the conditions under which we would have
22 unlimited liability and extreme exposure.

23 Q Since those statistics are not available, that
24 calculation could not be made, is that not so?

25 A Presumably, yes.

7
1 Q And isn't it a fact that in the history of insurance --
2 and you have related the Black Lung Disease experience of the
3 coal miners -- as the technology of an industry increases and
4 experience is gathered and statistics-gathering is established
5 with reference to the accidents and health matters of that
6 particular industry, that generally the health insurance has
7 increased in the particular industry, as for the Black Lung
8 Disease of the coal miners?

9 A You say the health has increased --

10 Q No, the insurance premiums have increased because
11 we statistically are able to ascertain and discern what actual
12 damages and costs are accompanying a particular industry.

13 A If you -- if studies reveal that there is a causal
14 relationship between, in effect, the occurrence -- and the
15 studies show that sickness is a result of, say, a certain cause --
16 if they can tie these two together, and the exposure is greater
17 than initially anticipated, then it would be expected that there
18 would be an increase in the premiums chargeable for such
19 coverage.

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Q And in order to establish a pool of information -- in order to establish the statistical information to get these damage and cost figures, isn't it necessary to have years of experience in monitoring programs and also studies relating to the impact of the industry and the health and property costs?

A Yes, there would have to be such studies.

Q And isn't it a fact that to date in the nuclear power industry that statistical pool is not available?

A I'm not aware of that.

Q Well, sir, again, could you, without limiting liability, give us your opinion to date as to what the premium per million dollars would be for the operation of Three Mile Island Unit 1 without -- with an unlimited liability ceiling?

A I think my answer would have to be the same as tried, the same type of question. You're talking about, I would say, basically for the amount of coverage they now have, I do not believe that the premium charges would change materially if at all.

When you're speaking about limits of liability above that currently available, as I say, I would not be in a position to answer your question.

Q And that's because the statistics are not available?

A This is correct.

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1 Q And, well, sir, would you expect that the premium
2 costs would change if monitoring of low level radiation
3 effluents from a plant were correlated with health hazards,
4 injuries and resulating costs?

5 A I can't answer your question because I don't know
6 what you mean by low level.

7 There is a great deal of controversy in the
8 industry today as to what is low level.

9 Q Well, sir, if, in fact, it were shown that
10 radiation effluents that were normally discharged from a
11 nuclear installation created certain detrimental health
12 effects which are related in costs and damage figures, isn't
13 it a fact that the premiums for insurance that would cover
14 those costs would necessarily have to go up?

15 MR. TROWIBRIDGE: Mr. Chairman --

16 THE WITNESS: That's a hypo.

17 MR. TROWBRIDGE: -- I suggest that the
18 questioning has gone far beyond the scope of any reasonable
19 cross-examination. There is nothing in the -- certainly
20 nothing in the testimony nor nothing even in the record of
21 this proceeding and recitation to the fact that there is
22 any such correlation and I don't see how a hypothetical
23 question, if it could be established there is a correlation
24 between low level radiation and population effects, would
25 there be an increase in insurance rate -- I don't think

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1 this is relevant to the area of cost-benefit analysis that is
2 in contention nor to the testimony of this witness.

3 CHAIRMAN HASKINS: Objection sustained.

4 BY MR. SAGER:

5 Q Sir, did you take into account any -- let me
6 strike that.

7 Finally, sir, it's a fact that if there were an
8 accident of a nuclear power plant that would require payments
9 out of the fund established under the National Energy Liability
10 Insurance Association, that the refunds would be so limited?

11 A Yes, for the period involved.

12 Q And, indeed, if there were an accident that would
13 require the exhaustion of that fund during the period involved
14 and there were no refund, then Dr. Denenberg's figures are
15 completely correct as to the cost of the insurance for that
16 period; is it not so?

17 A Yes, but Dr. Denenberg is speaking of a 40-year
18 period. Are you talking of a 40-year period?

19 Q Sir, can you give me reasonable assurance right
20 here and now on a guarantee that there will be no accident
21 within each ten-year period of a 40-year period?

22 MR. GITNER: Objection. It's beyond the competency
23 of this witness to testify to that type of a fact.

24 CHAIRMAN HASKINS: Objection sustained.

25 MR. SAGER: I have no further questions.

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1 CHAIRMAN HASKINS: Mr. Adler, do you have any
2 questions?

3 M. ADLER: Yes, just a couple.

4 BY MR. ADLER:

5 Q Mr. McVey, is there any reason for you to believe
6 that this 70 percent refund figure -- this money that was
7 refunded between '57 and '63 when there were just a few
8 nuclear reactors in operation would be identical or similar
9 in the future?

10 A It should continue based upon -- it should continue.

11 Q In other words, with the increased number of
12 reactors in operation, the increased possibility of accidents
13 would not have a bearing on the 70 percent refund figure?

14 A It would vary somewhat, but I don't think it
15 would vary materially from the numbers we are talking about
16 right now based upon current experience.

17 Q On page 8 of your testimony, you say that
18 Commissioner Denenberg relies on this erroneous one thousand
19 dollars assumed premium rate per million dollars coverage
20 and then extrapolates that to obtain a 1/1,700 probability?

21 A Yes.

22 Q If we took your assume premium rate of \$300 per
23 million, would it be proper to extrapolate in this manner and
24 arrive at a probability?

25 A For purposes of comparison, I would say that we

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1 could probably take the \$300 per million and arrive at a
2 figure, a probability number. I don't know what method he
3 utilized to arrive at these figures.

4 Q Do you think that probability would be accurate?

5 A I would have to see the basis on which Mr. Denenberg
6 made his assumption.

7 MR. TROWBRIDGE: Could we have a clarification?
8 Are you talking about that this would represent the
9 probability of a major nuclear accident dividing -- I'm not --
10 with whatever piece of arithmetic Commissioner Denenberg did
11 substituting his \$100 for \$1,000?

12 MR. ADLER: Right.

13 MR. TROWBRIDGE: And you're asking whether that
14 would express the probability of a major nuclear accident?

15 MR. ADLER: Right.

16 MR. TROWBRIDGE: Thank you.

17 I have no objection to the witness responding
18 to that question.

19 THE WITNESS: I don't know whether or not.

20 The number which would be derived if he
21 used \$300 per million would be correct.

22 BY MR. ADLER:

23 Q Then are you not only criticizing Dr. Denenberg's
24 \$1,000 assumed premium rate but the method of extrapolating?

25 A I have no idea whether the method he used or not

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was correct. I don't know what his method was.

But I don't know. I can't criticize it.

MR. ADLER: I have no further questions.

CHAIRMAN HASKINS: Thank you, Mr. Adler.

Are there any other questions for this witness?

Mr. McVey, you may be excused, and thank you very much.

MR. TROWBRIDGE: Mr. Chairman, I would like to suggest --

MR. GITNER: Mr. Chairman --

CHAIRMAN HASKINS: Just a minute, Mr. Trowbridge has the floor.

MR. TROWBRIDGE: Do you want to go first?

MR. GITNER: Yes, the Staff would just like to reserve its right to present rebuttal testimony and testimony on this subject at a later time if the need so arises.

CHAIRMAN HASKINS: On the testimony of Mr. McVey?

MR. GITNER: Yes.

CHAIRMAN HASKINS: Very well.

MR. TROWBRIDGE: Mr. Chairman, we are at a point where counsel are prepared to submit to the Board a joint motion and joint stipulation.

Does the Board wish to ask any questions of the parties prior to that event?

CHAIRMAN HASKINS: No, I don't believe so. But the

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Board will take a ten-minute recess before we proceed with the next motion.

MR. TROWBRIDGE: Would the Board like to have before it for that recess the material which we will present to the Board?

CHAIRMAN HASKINS: No, I think we can look at it later.

Thank you.

(Recess.)

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1 CHAIRMAN HASKINS: The hearing will now resume.

2 Mr. Gitner, do you have enough members of your legal
3 staff here to proceed?

4 MR. GITNER: Yes, sir.

5 CHAIRMAN HASKINS: Mr. Trowbridge, you were speaking,
6 I believe, at the end. Did you have something else to say?

7 MR. TROWBRIDGE: Yes. Why don't I provide the
8 Board now with copies of the motion and stipulation which
9 counsel for all parties have signed, and then to the Board by
10 way of a piece of mechanics. We have signed at least four
11 copies of this. Each of the parties will retain one signed
12 copy and we will be happy to give the remaining signed copy
13 either to the Chairman or the reporter, whichever the Chairman
14 considers appropriate.

15 I believe Mr. Sager would like the privilege of giving
16 a brief description of the stipulation.

17 CHAIRMAN HASKINS: Well, Mr. Trowbridge, I suggest
18 that the Board take two or three minutes to read the stipula-
19 tion and then we will hear Mr. Sager.

20 MR. TROWBRIDGE: Very well, Mr. Chairman.

21 (Pause.)

22 CHAIRMAN HASKINS: Very well, Mr. Sager, could we
23 proceed?

24 MR. SAGER: Mr. Chairman and members of the Board,
25 the Intervenors, the Applicant, which is Metropolitan Edison

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1 Company, Jersey Central Power and Light Company and Pennsylvania
2 Electric Company, and the Atomic Energy Commission Staff have
3 entered into an agreement which is subject to the approval of this
4 Board in order to become effective.

5 CHAIRMAN HASKINS: Just a minute.

6 Mr. Seiffert, would you please refrain from reading
7 the Wall Street Journal during the proceeding?

8 MR. SEIFFERT: Pardon me, sir.

9 MR. SAGER: The stipulation essentially provides
10 that the Intervenors oppose the issuance of an operating license
11 for the facility. However, the Intervenors, in order to
12 accomodate certain interests which they believe are for the
13 betterment of the public, have agreed in consideration of the
14 Applicant's designing, ordering and installing within Unit 1
15 an 18,000 CFM charcoal kidney filter system which, in essence,
16 members of the Board, is a filter treatment plant for the
17 containment building and which the Intervenors believe will
18 reduce low level radiation by ten times the point of approximately
19 one-tenth of the proposed low level radiation during normal
20 operation.

21 As the Board is aware, this was virtually the
22 position and contention of the Intervenors as set forth in
23 contention number 7, that such a filter system should be added
24 to the facility.

25 The Applicants have agreed to design or to install

1 that kidney filter and the kidney filter would be installed as
2 soon as is reasonably practicable but not later than the
3 first scheduled refueling outage if, indeed, the Applicants were
4 to obtain operating permission for unit 1.

5 I can't emphasize enough and I want it to be made
6 clear, as stated in the stipulation, the Intervenors oppose
7 the issuance of an operating license for the facility. However,
8 in consideration of the agreement, the Intervenors will and
9 hereby withdraw as parties to this proceeding, recognizing, then,
10 that the Safety and Licensing Board, if it approves this par-
11 ticular stipulation, would be in a position to make rulings
12 and findings of fact in accordance with the regulations of the
13 Commission.

14 The Intervenors, however, do reserve certain rights.
15 As the Board knows, there is presently pending litigation
16 before the United States Court of Appeals for the Third Circuit
17 styled Citizens for a Safe Environment, et al., vs. AEC, in
18 which the present Intervenors are asking for financial and
19 technical assistance.

20 The Intervenors reserve the right, if they were
21 to obtain a favorable decision directly or indirectly whereby
22 they would obtain financial and technical assistance, that
23 they would be able to go ahead; they intend to proceed with
24 the contentions that they had previously filed on August 7,
25 1972 and September 6, 1972.

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1 We recognize that the Applicants and Staff on their
2 part reserve the right to oppose institution or prosecution
3 of any proceedings or litigation by Intervenor for the
4 revocation, suspension, or modification of the operating license.

5 The Intervenor further reserve the rights, those
6 rights that would be accorded to any individual, group or
7 organization under the Atomic Energy Act, the Administrative
8 Procedure Act and the AEC regulations to seek a revocation,
9 suspension or modification of an operating license if the same
10 is issued, after issuance of the same.

11 The agreement and the stipulation came after
12 considerable soul-searching on the part of all parties; I can
13 state especially for the members of the Environmental Coalition
14 and the Citizens for a Safe Environment.

15 We felt that it would be better for the public to
16 be assured that the low-level radiation from the operation of
17 the plant would be limited by a factor of ten to a point of
18 one-tenth of that which is proposed by the Applicant to date.

19 We felt that under the circumstances, and with the
20 limitations that have been imposed upon us by financial and
21 technical assistance that we did not have, that this was the
22 best way in our judgment that we could protect the public, again,
23 with our limited resources.

24 Again, we believe that the stipulation does reflect
25 that the Intervenor have accomplished something of great

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1 magnitude for the protection of the health, welfare and safety
2 of the community. Indeed, I am told by the Applicant that the
3 kidney filter in question would cost probably in excess of
4 \$300,000 plus the additional expenses for shutting down the
5 plant, and so forth.

6 I wish to thank all parties for their cooperation
7 and the Board for giving us the time and being patient with
8 us in order to work out this agreement.

9 Again, on behalf of my clients, I must state and
10 emphasize for the record that we do oppose the issuance of
11 an operating license for the facility.

12 Thank you.

13 (Stipulation follows:)

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UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
METROPOLITAN EDISON COMPANY, et al) Docket No. 50-289
)
(Three Mile Island Nuclear Station,))
Unit 1))

STIPULATION

Pursuant to Sections 2.753 and 2.759 of the U.S. Atomic Energy Commission's Rules of Practice, 10 CFR Part 2, and subject to the approval of the Atomic Safety and Licensing Board ("Board"), the parties, Metropolitan Edison Company, Jersey Central Power & Light Company and Pennsylvania Electric Company ("Applicants"), Citizens for a Safe Environment and Environmental Coalition on Nuclear Power ("Intervenors"), and the AEC Regulatory Staff ("Staff"), in consideration of the mutual agreements contained herein, hereby agree as follows:

1. Intervenors oppose the issuance of an operating license for the facility. However, in consideration of the agreements herein, Intervenors hereby agree to withdraw as parties to this proceeding, with respect to the issuance of an operating license for the Three Mile Island Nuclear Station, Unit 1 ("facility") to be made upon proper findings by the Staff's Director of Regulation pursuant to 10 CFR 50.57, and subject to the conditions and agreements herein.

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2. Applicants agree to design, order and install within the facility an 18,000 cfm charcoal kidney filter system ("kidney filter") for treatment of the containment atmosphere. The Applicants agree to design the kidney filter to meet AEC licensing requirements. The kidney filter shall be installed not later than the first scheduled refueling outage after commencement of operation. It is the intention of the Applicants to install the kidney filter as soon as is reasonably practicable, but not at the expense of delaying commencement of operation. If reasonably practicable, the kidney filter shall be installed prior to commencement of operation, or, if further reasonably practicable, during any long outage which may occur prior to the first scheduled refueling outage. The Applicants further agree to use the kidney filter prior to purge of the containment in accordance with reasonable procedures in order to reduce radioactive iodine releases from the containment. To that end, Applicants agree to make those operating procedures a part of their formal operating procedures.

3. Intervenors agree not to oppose, through any hearing process or other litigation, the issuance of an operating license prior to the commencement of operation of the facility. However, Intervenors do not acknowledge any agreement to support the issuance of such operating license. Furthermore, Intervenors reserve the right to seek a revocation, suspension, or modifica-

tion of the operating license after commencement of operation. The parties recognize that the Intervenor may, after commencement of operation, raise the issues stated in their Petition For Intervention and Addendum thereto, dated August 7, 1972, and September 6, 1972 respectively if they obtain a favorable decision from the litigation now pending before the United States Court of Appeals for the Third Circuit (Citizens for a Safe Environment, et al v. A.E.C., Case No. 73-1312).

The Intervenor further reserve the rights accorded to any individual, group, or organization under the Atomic Energy Act, the Administrative Procedure Act and the AEC regulations to seek the revocation, suspension, or modification of the operating license after issuance of same.

Applicants and Staff reserve their right to oppose the institution or prosecution of any proceeding or litigation by Intervenor for the revocation, suspension or modification of the operating license.

4. Intervenor, Applicants, and the AEC Regulatory Staff agree to file a joint motion to obtain the approval of the Board of Intervenor's withdrawal subject to the conditions agreed to herein. In addition, Applicants and Staff agree to file a joint motion to obtain an order of the Board terminating this proceeding upon filing of this stipulation.

5. This stipulation shall be filed with the Board and shall not become effective until the entry of the orders sought by the motions referred to in paragraph 4 above.

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6. The obligations of the parties hereunder shall survive the entry of such orders.

7. The parties, including the members, officers, and the employees thereof, shall not in any way, either directly or indirectly, take any action in contravention of this stipulation and agreement.

This stipulation entered into this _____ day of November, 1973, subscribed to by the attorneys as authorized by the parties:

For Intervenors:

For Applicants:

For the Staff:

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1 CHAIRMAN HASKINS: Please stay there, Mr. Sager.

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2 The Board has one or two questions.

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3 MR. TROWBRIDGE: Mr. Chairman, might I say -- add
4 something here to the stipulation?

5 CHAIRMAN HASKINS: Please do.

6 MR. TROWBRIDGE: Only two aspects. I think Mr. Sager
7 has correctly stated the right of the Intervenor to seek the
8 revocation, suspension or modification of an operating license
9 if it's issued, as well as our right to oppose any such
10 effort.

11 I don't recall that Mr. Sager covered one
12 aspect of the stipulation which is not only the present
13 withdrawal from this proceeding but one element of the
14 stipulation is that through AEC hearings or otherwise the
15 Intervenor will not seek whatever their views of the plant
16 are by hearing process or litigation to prevent in the first
17 instance the issuance of an operating license; that is, they
18 will not take legal measures toward that.

19 And the second matter, Mr. Chairman, is one which
20 the Board itself will decide; and it was discussed
21 briefly at a conference but I would like to state that the
22 view I expressed in the conference with the Board, that
23 under the Commission's regulations further findings -- and
24 there will have to be further findings both on safety and
25 environmental issues -- will be made by the Director of

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1 Regulations rather than this Board in the event that the
2 Board accepts this stipulation and issues the orders
3 requested.

4 Having said that, Mr. Chairman, I have no further
5 comment.

6 CHAIRMAN HASKINS: Mr. Gitner?

7 MR. GITNER: Yes, sir.

8 We have a number of points we'd like to make
9 on behalf of the Commission. The Commission's position that
10 this stipulation which we have joined can in no way be
11 construed as AEC policy requiring the installation of this
12 kidney filter.

13 It is our position that as designed prior to the
14 installation of the kidney filter the plant meets all 10 CFR
15 Part 20 radioactive levels and requirements and that the
16 releases as they are now constitute only a very small fraction
17 of the Part 20 permissible limits.

18 A further point is that the Staff has attempted
19 to provide the Intervenors and all members of the public
20 with whatever material and technical assistance that we have
21 been able to, and we will continue to do so in the future.

22 One further point is that this stipulation should
23 be in no way construed as our endorsement of Mr. Sager's
24 statement that radioactive releases will be reduced tenfold.
25 We are not certain what level they will be reduced, and we are

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1 taking no position nor are we making any endorsement as to
2 how much these levels will be reduced.

3 That is all, Mr. Chairman.

4 CHAIRMAN HASKINS: Thank you.

5 MR. SAGER: Mr. Chairman, if I may, it should be
6 noted on the record that the Commonwealth of Pennsylvania
7 has not participated in this stipulation.

8 As I understand, however, and the Commonwealth
9 can speak for itself, that there is no objection to the
10 filing of this stipulation.

11 CHAIRMAN HASKINS: That was my next question.

12 Mr. Adler, do you acquiesce in this stipulation
13 on behalf of the Commonwealth?

14 MR. ADLER: We have no objection to the stipula-
15 tion; that's correct.

16 CHAIRMAN HASKINS: Mr. Sager, a couple of points.

17 This stipulation addresses itself primarily to the
18 operating license, but I assume that it also covers the
19 issues relating to the construction permit as to whether it
20 should be continued, modified, terminated, et cetera?

21 MR. SAGER: Yes, the intention is that the utility
22 would be seeking to operate the facility although we oppose
23 same.

24 CHAIRMAN HASKINS: Well, I understand that.

25 MR. SAGER: Yes, and it does encompass that.

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1 CHAIRMAN HASKINS: But by withdrawing from the
2 proceeding, you withdraw from every phase of the proceeding,
3 including those environmental issues relating to possible
4 modification under the construction permit.

5 Now, the next point, in the event that the Board
6 grants your motion, that would terminate this case; is that
7 correct?

8 MR. SAGER: That would terminate the case.

9 However, there are the reservations set forth in
10 the stipulation in order to preserve the right of the
11 intervenors with respect to reopening the case in the event
12 that we get a favorable decision from the Court of Appeals.

13 MR. TROWBRIDGE: After the issuance of the
14 operating license.

15 CHAIRMAN HASKINS: I would suppose that you would
16 have that right in any event.

17 In other words, if the Board were to dismiss this
18 proceeding and the operating license was granted, if you
19 should be accorded funds from whatever source and you were
20 desirous of trying the 70-odd issues that we have discussed
21 earlier, you would be at perfect liberty to start a new
22 proceeding and move that the operating license be suspended
23 or terminated and have an appropriate proceeding to consider
24 that.

25 MR. TROWBRIDGE: Yes, sir, Mr. Chairman, that is our

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understanding, and the stipulation was intended to make it perfectly clear that Intervenor's were not giving up that right as a result of the stipulation.

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1 CHAIRMAN HASKINS: Well, I think they have that
2 right as a matter of law, Mr. Trowbridge.

3 MR. TROWBRIDGE: I think they might be able to
4 stipulate it away, but they have not.

5 MR. GITNER: See, they have made it clear that they
6 have not waived the right to petition the Commission at any
7 time, Mr. Chairman, on that matter.

8 CHAIRMAN HASKINS: Yes. I think Mr. Trowbridge put it
9 very well. They could stipulate the right away but they have not
10 done so, so they retained it, as any other citizen would retain
11 the right to petition the Commission to shut down a plant or
12 to discontinue an operating license.

13 MR. SAGER: We also retain the additional rights,
14 if any, that we have as a result of the pendency of the liti-
15 gation now and the order of the Commission and the seeking of
16 the reversal of the order of the Commission.

17 And I don't want to get into legal arguments, and
18 there is a provision for preserving the rights of the Applicant's
19 position in defense of their rights as well as the Staff, but
20 it clearly is the purport and the intent that if the Intervenors
21 have any rights that would be afforded to them as a result of a
22 favorable decision coming from the litigation before the Third
23 Circuit Court of Appeals, that the Intervenors would certainly
24 state their position to be that we are in a different situation
25 than the ordinary citizen.

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1 We have filed these contentions. We were limited
2 in proceeding with the contentions because of financial and
3 technical assistance not forthcoming. If that were to be
4 forthcoming, we believe that we are in a position now to seek
5 a reopening of the hearing in a manner different than the ordinary
6 citizen's petition that might be afforded to him under the
7 Atomic Energy Commission rules and regulations, the Atomic
8 Energy Act, and the Administrative Procedure Act.

9 We want to distinguish those two particular posi-
10 tions, and that is reflected in the paragraph under number 3.

11 MR. TROWBRIDGE: Mr. Chairman, that seems to me a
12 very good statement of the intent. As a lawyer, were I in
13 Mr. Sager's shoes and as the result of the litigation now
14 before the Third Circuit Court of Appeals, were the result a
15 requirement for financial assistance to the Intervenor, I
16 would, as a lawyer, feel that I was in a better position than
17 most others to submit a petition to the Commission.

18 That does not mean we won't oppose the petition or
19 argue the matter, but I think it is perfectly proper to
20 reserve here not only his citizen's right to petition the
21 Commission to reopen the matter of our operating license but to
22 reserve his right to do so on the basis of any success Inter-
23 venors may have in their litigation.

24 CHAIRMAN HASKINS: Thank you. Now, during the
25 presentations by Mr. Denenberg and Mr. McVey, certain

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1 reservations were made with respect to their testimony and
2 the right to depose them or to cross-examine them.

3 Does this stipulation terminate those reservations?

4 MR. TROWBRIDGE: If accepted by the Board, I under-
5 stand it would.

6 MR. GITNER: What Mr. Trowbridge says is correct.

7 CHAIRMAN HASKINS: I have some concluding remarks to
8 make, but before then I will call on my fellow Board members for
9 any questions or comments.

10 Dr. Livingston?

11 DR. LIVINGSTON: I have a comment but I don't know that
12 it is one that will involve any of the legal and technical
13 problems here.

14 That comment goes something like this, that it was the
15 hope that I had as a member of this Board to be able to be
16 informed about things that were perhaps not up to quality
17 standards in this particular installation, arguments both for
18 and against these, and it was my hope that the Board would be
19 able to hear enough information to be able to judge what they
20 might be able to do to improve the safety situation with regard
21 to the plant once it was in operation through some sort of
22 reservations that we might make in our final order.

23 I thought of this as part of the function of the
24 Board. I could say that I, therefore, feel a little bit sorry
25 that this opportunity to study further the situation here in this

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1 plant has been taken away from the Board. Thank you.

2 CHAIRMAN HASKINS: Well, it hasn't been taken away
3 from the Board yet. It is under consideration.

4 Dr. Lyman?

5 MR. LYMAN: I have nothing, Mr. Chairman. Thank you.

6 CHAIRMAN HASKINS: Mr. Sager, Mr. Trowbridge and
7 Mr. Gitner, the Board is always pleased when parties can
8 reach a settlement, and I know it has not been easy.

9 As you know, the Commission under Part 10 of Section
10 2.759 has a particular paragraph encouraging settlements, and
11 we could sit here for three weeks and try these issues one by
12 one, and I think it is sparing of the time of the witnesses
13 and of counsel and the Board that you have reached this apparent
14 result.

15 The Board is not going to rule on this stipulation from
16 the bench. We are not going to rule on it today. We shall take
17 it home tonight and consider it, and shall rule on it promptly.

18 To you, Mr. Sager, I would like to say on behalf of
19 the Board that you have fought this case very hard on behalf
20 of your clients and that you have represented the Intervenors
21 aggressively and well in the fashion in which you see it.

22 Therefore, I would say that the witnesses who have
23 waited so patiently throughout this part of the week are now
24 excused, that this phase of the hearing will be concluded, and
25 the Board will shortly recess. However, I would like to meet

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1 with counsel briefly across the hall before they disperse.

2 Do you have something further, Mr. Gitner?

3 MR. GITNER: Are we going to keep the court reporter
4 available, Mr. Chairman. Are you going to recess the hearing
5 at this point, as to the question of the adjournment?

6 CHAIRMAN HASKINS: No, I do not plan to recess the
7 hearing. I plan to adjourn the hearing. But I would like to
8 talk to counsel after the adjournment.

9 Is there anything further that should be said
10 before we adjourn?

11 MR. TROWBRIDGE: No, Mr. Chairman. I had planned to
12 and would like to, while we are still on the record, pay my
13 respects to Mr. Sager. It has been many months now that I
14 have had meetings and discussions with Mr. Sager. I have
15 found it both a challenging and a rewarding experience, and
16 I think his professional capabilities have in large part made
17 possible the resolution of matters between us.

18 I would also like to express my appreciation for
19 the role of AEC counsel throughout this licensing proceeding.
20 I would single out Mr. Olson because, among the counsel, he has
21 been the one who has been steadily, almost, with us, and who has
22 participated and been at all times cooperative, helpful and
23 constructive in this period of time.

24 And I, like Mr. Sager, would also like to thank the
25 Board for its patience and understanding during the long recesses

6
1 we have had.

2 DR. LYMAN: Before you close, Mr. Chairman, I would
3 like to return to Mr. Trowbridge the copy of the prepared testi-
4 mony related to the industrial security plan which he sent
5 me. I would feel more comfortable if he had that.

6 MR. TROWBRIDGE: I would be glad to have that back.

7 DR. LIVINGSTON: I will also return that to you.

8 MR. TROWBRIDGE: Thank you.

9 CHAIRMAN HASKINS: I will do likewise, Mr. Trowbridge,
10 but I have so many papers I cannot readily find it at this
11 moment.

12 Is there anything further that should come before this
13 Board this afternoon while we are still on the record?

14 I repeat again, I would like to meet with counsel
15 for all the parties and also the Commonwealth of Pennsylvania
16 briefly across the hall upon adjournment.

17 Very well, the hearing will now be adjourned.

18 (Whereupon, at 4:05 p.m. the hearing was adjourned.)
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