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VETOED
10/12/74

DELIVERED TO THE
CLERK OF THE HOUSE
10/12/74 - 1:35 pm

THE WHITE HOUSE
WASHINGTON

ACTION

Last Day - October 12

October 10, 1974

MEMORANDUM FOR: THE PRESIDENT

FROM: KEN COLE

SUBJECT: Enrolled Bill H. R. 15323
Price-Anderson Act Amendments

Attached for your consideration is House bill, H. R. 15323 which amends the Price-Anderson Act. The basic Act assures the availability of funds for payment of claims in the event of a catastrophic nuclear incident. The amendment extends the Act for 5 years until August 1, 1982, and modifies its provisions, principally to affect gradual transfer of indemnification from government to private sources and to increase licensee's liability. Except for the final section, the bill generally parallels legislation proposed by the AEC and is acceptable.

The final section of the bill creates a unique and serious constitutional issue in that it provides that the legislation will not become effective until the Congress (a) receives a report from the Joint Committee on Atomic Energy following its review of the result of a reactor safety study now being completed by the AEC, and (b) then has a period of 30 days to pass a concurrent resolution disapproving the extension. Thus, the President is being asked to act on a bill before the Congress itself has completed action. Even if signed, the question of unconstitutionality would undermine the Price-Anderson structure, creating uncertainty that would jeopardize investments in utilities with nuclear plants.

AEC recognizes the constitutional problem but believes a veto would put future extension of the Act at risk and thus severely impede utility decisions to invest in nuclear power plants.



AEC has checked with Senator Pastore, who negotiated the Section 12 language with a group of strong Senate nuclear safety critics, and he feels very strongly that (1) there is no chance of getting a perfected bill during the current Congress, and (2) it will be very difficult to get an acceptable bill in the next Congress with a Joint Committee weakened by retirements and with Congressional nuclear safety critics growing in strength.

RECOMMENDATION

- . AEC and FEA recommend approval of the bill.
- . Roy Ash, Justice, Rog Morton, Bill Timmons, Phil Buchen and Ken Cole recommend disapproval of the bill. Roy Ash provides additional background information in his enrolled bill report (TAB A).
- . Bill Timmons recommends further that if you veto the bill that you call Senator Pastore and explain your reasons and try to enlist his help in getting an acceptable bill.

DECISION - H. R. 15323

Sign (Tab B) _____

Veto _____
(Sign veto message at
Tab C)

- . AEC
- . FEA

- . Roy Ash
- . Justice
- . Rog Morton
- . Bill Timmons
- . Phil Buchen
- . Ken Cole



THE WHITE HOUSE

WASHINGTON

OCT 11 1974

MEMORANDUM FOR THE PRESIDENT

FROM: ~~ROY L. ASH~~

SUBJECT: ENROLLED BILL H.R. 15323 -- PRICE-ANDERSON ACT AMENDMENTS

The AEC submitted a draft bill in March 1974 to extend and revise the Price-Anderson Act, originally enacted in 1957. The Act is designed to protect the public and the emerging nuclear industry by assuring funds for payment of claims in the unlikely event of a catastrophic nuclear accident. Without such a program, the threat of enormous liability claims would constitute a major, if not fatal, obstacle to nuclear power plant growth.

How necessary is the bill to us?

The present Act expires in 1977. However, because of long leadtimes required for design, site approval, and licensing of nuclear power plants (3-5 years), extension of the Price-Anderson Act is urgently required. Without assurance that plants can be insured beyond 1977, a hiatus in new commitments to nuclear plants is a real possibility, unless Price-Anderson coverage is extended promptly. Senator Pastore and the AEC argue that we will have difficulty getting the 94th Congress to pass a "clean bill" and therefore should accept this one.

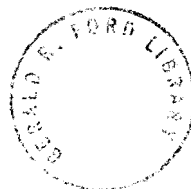
The main issues raised concerning Section 12

Section 12 would keep the bill from becoming effective until the Joint Committee on Atomic Energy submits a report to Congress on an AEC Reactor Safety Study for a 30 day review period. Justice argues that Section 12 is unconstitutional since it permits "repeal", after Presidential approval of the legislation, either by the Congress or by the Joint Committee.

Supporters of Section 12 believe that the Reactor Safety Study examines the rationale behind any extension of the Price-Anderson Act, and Congress should not act without a thorough review of the study. They recognize the possible threat to nuclear power growth, but believe "that adequately protecting the public in the event of a nuclear accident is a paramount concern and that all available information should be studied before passing such legislation."

Conclusion: A veto (on constitutional grounds) leading to a "clean bill" within several months would be acceptable.

Attachment: Enrolled Bill Memorandum



EXECUTIVE OFFICE OF THE PRESIDENT

OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

OCT 9 1974

MEMORANDUM FOR THE PRESIDENT

Subject: Enrolled Bill H.R. 15323 - Price-Anderson Act amendments
Sponsors - Rep. Price (D) Illinois and Rep. Hosmer (R)
California

Last Day for Action

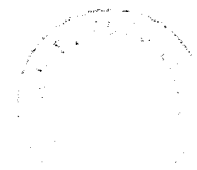
October 12, 1974 - Saturday

Purpose

To amend the Price-Anderson Act to provide for: (1) its extension for five years until August 1, 1982; (2) a gradual transfer of indemnification from Government to private sources; (3) an increase in the limit of licensees' liability; and (4) a limited extension of indemnity coverage outside the territorial limits of the United States.

Agency Recommendations

Office of Management and Budget	Disapproval (Veto message attached)
Atomic Energy Commission	Approval
Federal Energy Administration	Approval
Department of Justice	Disapproval (Veto message attached)
Council on Environmental Quality	No objection
Department of State	No objection to section on offshore coverage
Department of Housing and Urban Development	No objection
Environmental Protection Agency	No objection



Discussion

The Price-Anderson Act was enacted in 1957 and amended in 1965 and 1966. It was designed to protect the public and the emerging nuclear industry by assuring the availability of funds for the payment of claims in the unlikely event of a catastrophic nuclear incident. Among other things, that Act would indemnify nuclear licensees for their liability for damages in the event of a nuclear incident up to a total of \$560 million per incident. Originally, this figure represented \$500 million of Government indemnification, plus the \$60 million level of private insurance available in 1957.

The amount of private insurance available per incident has gradually risen, so that it now stands at \$110 million. Accordingly, the portion of the \$560 million which the Government would now be required to indemnify has been commensurately decreased to \$450 million.

Other features of that Act included no-fault liability by the licensee and provisions for the advance payment of claims immediately upon occurrence of a nuclear incident. The Act is scheduled to expire on August 1, 1977.

Because of the long lead times involved in planning new commitments to nuclear power plants and the need to anticipate contractual arrangements, the AEC submitted a draft bill to Congress in March 1974. The enrolled bill is a modified version of the AEC's proposal and would amend the Price-Anderson Act as follows:

- extends for an additional five years (from August 1, 1977 to August 1, 1982) the Commission's authority to require financial protection of and to provide indemnification for its licensees and contractors. The AEC draft bill proposed a 10-year extension.

The conference report makes clear, however, that Congress did not intend to imply that it would limit the duration of the insurance program established under the Act. That report asserts its intention that mandatory no-fault insurance, consolidation of claims in a single Federal court, advance payments of claims, contractor indemnity provisions and retrospective premium payments should be considered permanent. The extension to five years was intended to assure Congressional review, not to end Federal regulation of nuclear liability insurance.

- clarifies existing law to recognize that the total liability of a licensee may be covered by private insurance. The Commission is required by August 1, 1976, to determine the maximum amount of private liability insurance available. Considered in this determination would be any private insurance coverage funded by "deferred premiums." A "deferred premium" is one which nuclear facilities would be required to pay if a nuclear incident occurred which resulted in damages exceeding the amount of insurance in effect financed by prepaid premiums ("base layer of insurance").
- AEC would be authorized to approve private insurance plans which included a "base layer of insurance" funded by prepaid premiums and in addition a "secondary layer of insurance" funded, only if necessary and after an incident occurs, by deferred premiums paid on a pro rata basis by all nuclear facilities.

The bill would provide that such "deferred premiums" not exceed \$5 million chargeable to each facility. The Commission could establish lower premiums for individual facilities depending on size, location and other hazard factors and as the total number of reactors licensed increases. This latter provision would reflect the fact that as the number of participants paying deferred premiums increases, the pro rata share of each facility can be decreased.

The bill would also authorize the Commission to allow facilities to fulfill some or all of the indemnity coverage they are required to provide by means other than insurance and still be eligible for "deferred premium" coverage.

- requires the Commission to develop a plan to assure payment of deferred premiums. The Commission would be authorized to specify the terms on which the Government would guarantee their availability despite any defaults. Measures to assure reimbursement, such as liens on property and revenues of a defaulting licensee and automatic revocation of any license, would be permitted.

- revises the \$560 million limitation of liability of licensees to permit the Commission to increase the limitation if private insurance is available in excess of \$560 million.
- requires that after a nuclear incident that would probably result in private payment of public liability claims in excess of \$560 million, the Commission make a survey of the causes and extent of damage, report its findings to the Joint Committee on Atomic Energy, and make the findings available to the public. This section revises the Price-Anderson Act -- which required such a survey and report when any Government payments were probable -- to take into account the possibility that private indemnification could at some future time completely displace Government indemnification payments.
- broadens the definitions of "nuclear incident" and "persons indemnified" for the purpose of extending the indemnity provisions of the bill to offshore nuclear power plants and to shipments between licensees in the United States which are routed beyond territorial waters. In its views letter on the enrolled bill, AEC states that:

"These amendments will not, however, extend the Price-Anderson provisions to the import or export of nuclear material or activities conducted within the territorial limits of another nation or to any occurrence resulting from the use of a nuclear power reactor to propel a U.S. merchant ship."
- modifies existing law by specifically requiring that in the event of an extraordinary nuclear occurrence, the Federal court having jurisdiction over public liability suits would specifically establish, in its plan for disbursement of funds to injured claimants, a system of priorities between claimants and classes of claims to assure the most equitable allocation of available funds.
- requires the Commission to submit to the Congress by August 1, 1979, a report and recommendation concerning the need for continuation or modification of the Price-Anderson system based on relevant

conditions at the time, including the conditions of the nuclear industry, availability of private insurance, and the state of knowledge of nuclear safety among other factors.

- provides that the bill would become effective 30 days after the Joint Committee on Atomic Energy submits its evaluation to Congress of a study entitled "An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants" (the "Rasmussen Report") unless within that 30 days the Congress adopts a concurrent resolution disapproving in effect this bill.

Although the Rasmussen report will probably not be submitted to the Joint Committee until February or March 1975, the general findings of his study are already known and are favorable to this legislation. On May 16, 1974, in a statement before the Joint Committee on Atomic Energy, Dr. Rasmussen concluded: "...I believe that the proposal before you represents a reasonable way to phase out the Government responsibility for nuclear insurance and shift the responsibility to the insurance companies and the nuclear industry. I believe that the current \$560 million limit is a reasonable value at this time and will cover all combinations of circumstances which can reasonably be considered credible."

Thus, allowing time for evaluation of the report by the Joint Committee and the lapse of 30 days after submission of its evaluation to the Congress, the effective date of this bill is not likely to occur until mid-1975. We understand that Section 12 was deemed necessary by the bill's supporters to secure congressional approval. Environmentalists and other groups had argued that no legislation should be enacted until the Rasmussen report had been evaluated by interested independent parties. Twenty Senators supported this position.

Section 12 was a House floor amendment which was amended by the Joint Committee before Senate action took place. The Joint Committee's report to the Senate commented adversely on the Section as follows:

"The Joint Committee does not believe that this amendment was necessary. The Rasmussen Study, under the direction of Dr. Norman C. Rasmussen of the Massachusetts Institute of Technology, does not deal with insurance or indemnity for nuclear incidents. It is a safety study of the probabilities and consequences of accidents involving nuclear power reactors. As such, its only relation to the Price-Anderson Act is as a possible guide as to the extent and scope of risk to the public in determining the amount of protection required. It will provide no information at all concerning the mechanism for providing the protection.

"Professor Rasmussen has appeared before the Joint Committee on two occasions. He assured the Joint Committee in public testimony, which is included in appendix II to this report, that the total of public and private indemnity provided for by the bill is adequate to cover any credible accident which might occur. He reaffirmed this point in a reappearance before the committee for the markup session on H.R. 15323 on June 13. He has testified that the report will show that the likely consequences of a nuclear accident involving a core meltdown will not be a major catastrophe, as is commonly assumed, but will be no worse than a major airplane crash, and will generally be less than that. The Rasmussen Study will show, in effect, that the Price-Anderson Act provides an even more conservative degree of protection than was thought when it was enacted.

"The rationale given for Section 12 is that the results of the Rasmussen Study are not yet available, and that they are intimately related to this bill's provisions. Neither of the assumptions is true. The conclusions insofar as they relate to the Price-Anderson Act are already public. The technical detail supporting the report's conclusions is beyond the ken of the layman and is massive in its volume. This detail is not essential to and cannot be expected to

contribute to a congressional decision. An informed critique of the report by the scientific peers of the investigators will take many months and cannot reasonably be expected to alter the conclusions so drastically as to affect this legislation.

"The most curious aspect of Section 12 is its potential deferral of the transfer of responsibility to the nuclear industry which is the key feature of this legislation. This is a transfer which has been almost universally urged for years. An unexpected delay in the Rasmussen report could have the result, under Section 12, of postponing the phase-out of the Government's liability.

"Despite the dubious basis underlying Section 12, the Joint Committee has perfected the amendment rather than deleting it, in order to assuage the doubts of those members of Congress who are not satisfied with the Joint Committee's review and Dr. Rasmussen's testimony. The provision of Section 12 is very unlikely to delay the actual implementation of this bill. The draft report is expected to be released for public comment in mid-August, and the final report, taking these comments into account, is expected about January, 1975. The Commission's rulemaking proceeding to implement this bill would be unlikely to be completed before mid-1975 at the very earliest. The Joint Committee considers that the language of Section 12 would prohibit the Commission from implementing a rule concerning the deferred premium provisions of the bill prior to a Joint Committee report to Congress on the Rasmussen Study, but would not prohibit initiation of a Commission rulemaking proceeding before that time."

* * * * *

With the exception of section 12, the bill is acceptable to AEC although the Congress made a number of modifications in its original proposal. Absent section 12, there would be no question that all agencies would recommend approval or have no objection.

Justice believes that section 12 presents a constitutional issue of such uniqueness and severity and is so unsound as a matter of policy that it recommends veto of the bill. Its reasons are set forth in its attached views letter.

Basically, its position is that the President is being asked to act on a bill before Congress itself has completed action, and it views this as fundamentally inconsistent with constitutional legislative requirements. While Presidents have frequently approved encroachment provisions in vitally needed legislation, Justice believes that "...both the novelty and severity of the encroachment, and the effects of its unconstitutionality argue against a similarly tolerant attitude in this case. We think it particularly important to scotch this new type of encroachment on Executive prerogative when it has first appeared, because its potential use is enormous." Justice also makes the significant point that "the unconstitutionality of Section 12 may destroy the entire Price-Anderson Act structure and impair the validity of the financial guarantees it provides."

AEC in its views letter on the enrolled bill recognizes that the provisions of section 12 may raise a constitutional question. It believes, however, that the bill should be signed because the chance of obtaining reenactment if the bill were vetoed is so risky that it is not willing to take that chance of losing the Price-Anderson Act and impairing or terminating nuclear power growth. It believes that the forces opposing an extension of the Act are sufficiently strong that it was only by the inclusion of section 12 that it was possible to get the bill enacted. However, AEC staff will tomorrow explore with Senator Pastore the question of whether in his view it would be possible to get Congress to reenact the bill in a form which would be acceptable to the Administration.

In summary, there is general agreement among Justice, AEC and OMB that section 12 is bad law and raises a constitutional question. The key issue, therefore, is whether the bill should be signed because of the risk of losing an extension of the Price-Anderson Act and because of the importance of that Act to the future of the nuclear power industry, despite the possibility the Act may be found unconstitutional at a future time and despite the highly undesirable precedent that section 12 would establish.

We sympathize with AEC's concern about getting the bill re-enacted in acceptable form, but concur with Justice that the bill should be vetoed for the following reasons:

(1) the question of unconstitutionality of section 12, which cannot be cured by approval of the bill.

(2) the possibility that section 12 may eventually, because of its unconstitutional nature, undermine the whole

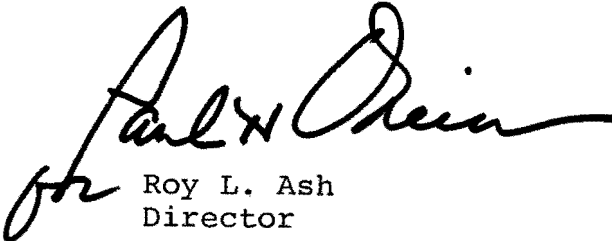
Price-Anderson structure. It is difficult to believe that this question will be overlooked by the industry and that it will not influence investment decisions. Moreover, it throws in jeopardy the insurance coverage of third parties who may be injured by a nuclear incident.

(3) the highly undesirable precedent section 12 would set and the likelihood that Congress would adopt this device in a variety of situations to the ultimate great detriment of sound government.

(4) the importance of the Price-Anderson Act to the nuclear power industry should produce intense pressure from that industry on the Congress to reenact the bill in acceptable form.

We have prepared an edited version of Justice's proposed draft of a veto message. In particular, we think that message should urge prompt reenactment of the bill since time is of the essence. Early enactment will provide the needed assurance to utilities to proceed expeditiously with their plans for developing new nuclear power plants.

If you should conclude that approval is warranted under all the circumstances, we would recommend against the issuance of a signing statement. However, you should instruct AEC and Justice to intensively explore the problem section 12 raises to determine what would be the most appropriate course of action to remove the constitutional infirmity in the Act.



Roy L. Ash
Director

Enclosures

TO THE HOUSE OF REPRESENTATIVES:

I am returning without my approval H.R. 15323, "To amend the Atomic Energy Act, as amended, to revise the method of providing public remuneration in the event of a nuclear incident, and for other purposes."

The first eleven sections of the bill basically carry out recommendations of the Atomic Energy Commission, and I would be glad to approve them if they stood alone.

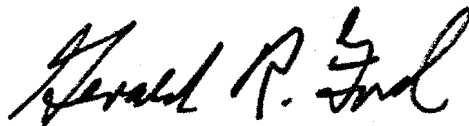
Section 12, however, would provide that "the provisions of this Act shall become effective thirty (30) days after the date on which the Joint Committee on Atomic Energy submits to the Congress an evaluation of the Reactor Study, entitled 'An Assessment of Accident Risks in the U. S. Commercial Nuclear Power Plants,' AEC Report Number WASH-1400, except that it shall not become effective if within the thirty (30) day period after the Joint Committee submits its evaluation, the Congress adopts a concurrent resolution disapproving the extension of the Price-Anderson Act." The import of this section is that after I have approved the bill, the Joint Committee and the Congress would further consider whether it should ever become effective.

I cannot approve legislation under these circumstances -- if, indeed, the bill can properly be called legislation rather than merely the expression of an intent to legislate. The presentation of a bill to me pursuant to Article I, section 7 of the Constitution amounts to a representation by Congress that, as far as it is concerned, the legislation is ready to become effective, subject perhaps to some

extrinsic condition precedent, but not to further congressional deliberation. Here, however, Congress in effect requests my approval before it has given its own.

In this instance, the clear constitutional infirmity of the bill not only affects my powers and duties but directly endangers substantial and important private rights. If the bill is unconstitutional, it will remain unconstitutional despite my signing it. As a result, a sure source of funds for prompt payment of public liability claims, a primary objective of the Price-Anderson Act, would be in doubt. The uncertainty over nuclear liability protection would also adversely affect that private investment which will be necessary as nuclear power assumes its vital role in meeting the nation's energy requirements. The public interest would not be served by approving legislation which creates these uncertainties.

I urge the Congress to reenact the bill promptly so as to remove the problems which Section 12 now raises.



THE WHITE HOUSE,
October 12, 1974

THE WHITE HOUSE

WASHINGTON

RUSH

LOG NO.: 643

MEMORANDUM

Date: October 10, 1974

Time: 9:30 a.m.

FOR ACTION: ✓ Michael Duval
Phil Buchen
Bill Timmons
Paul Theis
NSC/S

cc (for information): Warren K. Hendriks
Jerry Jones
Glenn Schleede

FROM THE STAFF SECRETARY

DUE: Date: Today, October 10, 1974

Time: 4:00 p.m.

SUBJECT: Enrolled Bill H.R. 15323 - Price-Anderson amendments

ACTION REQUESTED:

___ For Necessary Action

XX For Your Recommendations

___ Prepare Agenda and Brief

___ Draft Reply

___ For Your Comments

___ Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

Thank you.

*Recommend Vote
David of Schleede*



PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Warren K. Hendriks
For the President

THE WHITE HOUSE
WASHINGTON

RUSH
LOG NO.: 643

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Date: October 10, 1974

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FOR ACTION: Michael Duval
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ACTION REQUESTED:

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- For Your Recommendations
- Prepare Agenda and Brief
- Draft Reply
- For Your Comments
- Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

Thank you.

*Concur in
recommendation
to vats
D.C.*



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Warren K. Hendriks
For the President

ACTION MEMORANDUM

Date: October 10, 1974

Time: 9:30 a.m.

FOR ACTION: ~~Michael Duval~~
~~Phil Buchen~~
~~Bill Timmons~~ - after copy
~~Paul Theris~~
NSG/S

cc (for information): Warren K. Hendriks
Jerry Jones
Glenn Schleede

TO ~~FROM~~ THE STAFF SECRETARY

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ACTION REQUESTED:

For Necessary Action

For Your Recommendations

Prepare Agenda and Brief

Draft Reply

For Your Comments

Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

10/10 Thank you.

★ VETO. BUT TP SHUD KNOW PASTORE
PROMISES NO NEW LEGISLATION IF VETOED.
QUESTION: CAN WE LIVE WITHOUT BILL?
IF TP VETOES, I RECOMMEND HE CALL
PASTORE & EXPLAIN REASONS. THIS COULD
HELP GET A NEW BILL. B.T.

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

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Warren K. Hendriks
For the President



THE WHITE HOUSE

ACTION MEMORANDUM

WASHINGTON

LOG NO.: 643

Date: October 10, 1974

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FOR ACTION: Michael Duval

Phil Buchen

Bill Timmons

Paul Theis

ASC/S

comments cc (for information): Warren K. Hendriks
Jerry Jones
Glenn Schleede

FROM THE STAFF SECRETARY

DUE: Date: Today, October 10, 1974

Time: 4:00 p.m.

SUBJECT: Enrolled Bill H.R. 15323 - Price-Anderson amendments

ACTION REQUESTED:

For Necessary Action

For Your Recommendations

Prepare Agenda and Brief

Draft Reply

For Your Comments

Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

Thank you.



PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

K. R. COLE, JR.
For the President

THE WHITE HOUSE
WASHINGTON

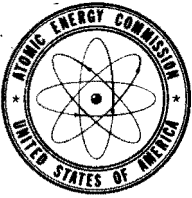
10/10/74

TO: WARREN HENDRIKS



RL

Robert D. Linder



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

OCT 4 1974

Mr. Wilfred H. Rommel
Assistant Director for
Legislative Reference
ATTN: Mrs. Louise Garziglia
Legislative Reference Division
Office of Management and Budget

Dear Mr. Rommel:

The Atomic Energy Commission is pleased to respond to your request for its views and recommendations on Enrolled Bill H.R. 15323, a bill "[t]o amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes."

The Atomic Energy Commission recommends that the President sign the Enrolled Bill.

The Commission believes that enactment of the bill will continue to assure the availability of a sure source of funds for the payment of public liability claims arising in the unlikely event of a catastrophic nuclear incident while phasing out Government indemnity for most licensed commercial facilities as increased private funds become available.

The principal effect of section 1 would be to amend the definitions of "nuclear incident" and "person indemnified" to permit the Commission to extend the provisions of the Price-Anderson Act to certain activities outside of the territorial limits of the United States involving licensed nuclear facilities. These amendments will assure Price-Anderson coverage of ocean shipments of new or spent fuel between Commission licensed facilities while outside United States' waters and coverage of floating nuclear power plants licensed by the Commission but situated beyond the territorial limits of the United States. These amendments will not, however, extend the Price-Anderson provisions to the import or export of nuclear material or activities conducted within the territorial limits of another nation or to any occurrence resulting from the use of a nuclear power reactor to propel a U.S. merchant ship.

Section 2 retains the present statutory requirement that certain Commission licensees must supply financial protection to cover liability claims resulting from a nuclear incident, but no longer requires that Government indemnity be provided for such licensees, thereby allowing the phase-out of Government indemnity as private funds become available to replace it.

Section 3 revises the method by which required financial protection must be provided in order to effectuate the phase-out of Government indemnity. Financial protection will consist of a primary "layer" which may be supplied through private liability insurance or any other method acceptable to the Commission and a secondary "layer" which must be supplied through private liability insurance available under an industry retrospective rating plan providing for premium charges to be deferred until public liability from a nuclear incident appears likely to exceed the amount of primary financial protection required. By August 1, 1976, the Commission must establish the amount of the deferred premium to be charged at not less than \$2 million nor more than \$5 million per facility.

Licenses of large power reactors must still maintain financial protection equal to the maximum amount available from private sources while the Commission may require lesser amounts of financial protection of other licensees. The Commission is authorized, with respect to the secondary layer of financial protection to set deferred premiums for individual facilities at amounts less than the maximum depending on such factors as the facility's size and location. The Commission is also authorized to establish an amount which the aggregate deferred premiums for each facility for a single year may not exceed. Requirements to assure the availability of funds to pay public liability claims up to the limitation on liability in the event of a nuclear incident must be established by the Commission. To meet this requirement, the Commission is authorized to reinsure or indemnify licensees and the nuclear liability insurance companies or otherwise guarantee the availability of funds to meet any assessment of deferred premiums. The Commission will have the right to a lien on the assets of a licensee to assure reimbursement of Government monies expended on his behalf to pay such deferred premiums.

Sections 4, 5, and 9 of the bill extend for an additional five years (from August 1, 1977 until August 1, 1982) the Commission's authority to require financial protection of and indemnify its licensees and its contractors.

Section 6 revises the limitation on liability provisions of the Price-Anderson Act so that the limit is no longer fixed at \$560 million. For any licensee required to maintain more than \$560 million in financial protection, the limitation on liability for that licensee is equal to the amount of financial protection which he is required to maintain.

Section 7 of the bill authorizes the Commission to reduce the indemnity fee charged to licensees for Government indemnification as the amount of financial protection required by the Commission increases. Section 8 requires that



after a nuclear incident that will probably result in public liability claims in excess of \$560 million, the Commission must make a survey of the causes and extent of damage, report its findings to the Joint Committee on Atomic Energy, and make the findings available to the public. These sections of the bill modify the existing law to take into account increases in the amount of financial protection required of licensees and the phase-out of Government indemnity.

Section 10 modifies the existing law by specifically requiring that in the event of an extraordinary nuclear occurrence, the Federal court having jurisdiction over public liability suits specifically establish in its plan for disbursement of funds to injured claimants a system of priorities between claimants and classes of claims to assure the most equitable allocation of available funds.

Section 11 of the bill requires the Commission to evaluate operation of the Price-Anderson system as it will be modified by the bill and submit a report to the Congress, including Commission recommendations for modification or termination of the system, by August 1, 1979.

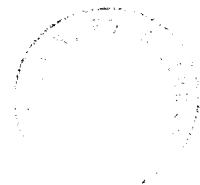
Section 12 provides that the provisions of the bill shall become effective 30 days after the Joint Committee on Atomic Energy submits its evaluation to Congress of the reactor study entitled "An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants" (AEC Rep. No. WASH-1400), the so-called "Rasmussen Report", unless within 30 days after the Joint Committee's report the Congress adopts a concurrent resolution disapproving the extension of the Price-Anderson Act.

The Commission recommends signature of the Enrolled Bill by the President in view of the need for continuation of the protection offered by the Price-Anderson system, the significant improvements in that system contained in this legislation and the phase-out of Government indemnity which would be effected thereby. While it is recognized that the provisions of section 12 might raise a Constitutional question, the possibility is a contingent one at best and is far outweighed by the need for, and improvements in, the Price-Anderson system which will be met by this legislation.

Sincerely,



Chairman



Department of Justice
Washington, D.C. 20530

OCT 9 1974

Honorable Roy L. Ash
Director, Office of Management
and Budget
Washington, D. C. 20503

Dear Mr. Ash:

In compliance with your request, I have examined a facsimile of the enrolled bill H.R. 15323, "To amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes."

The enrolled bill primarily would amend section 170 of the Atomic Energy Act, commonly referred to as the Price-Anderson Act. The Price-Anderson legislation was originally enacted to assure the availability of funds to satisfy liability claims in the event of a nuclear accident and to eliminate the deterrent to the use of atomic energy for power production posed by the prospect of such large liability. Broadly, these purposes have been achieved in the following manner. First, persons licensed to operate nuclear power reactors or other production and utilization facilities are required to have and maintain financial protection in the form of insurance or otherwise to cover liability claims resulting from a nuclear incident involving the facility. Generally the amount of financial protection required is equal to the amount of liability insurance available from private sources. Financial protection may include private insurance, private indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures. Second, the Atomic Energy Commission is required to indemnify licensees against liability claims in excess of the financial protection required, up to \$500,000,000. Finally, the public liability of indemnified licensees is limited to the sum of the amount of financial protection required and the amount of indemnity, not to exceed \$560,000,000.

The Price-Anderson Act originally authorized the Commission to indemnify licensees for whom licenses were issued prior to August 1, 1967. This authority was subsequently extended by Public Law 89-210 to licenses issued prior to August 1, 1977. The enrolled bill would extend the basic Price-Anderson system for another ten-year period with three major changes: (1) a phasing out of governmental indemnity, (2) an increase in the amount to which liability is limited, and (3) an extension of indemnity coverage to certain nuclear incidents occurring outside the territorial limits of the United States.



You have specifically asked us to direct our attention to section 12 of the bill, which provides as follows:

The provisions of this Act shall become effective thirty (30) days after the date on which the Joint Committee on Atomic Energy submits to the Congress an evaluation of the Reactor Study, entitled "An Assessment of Accident Risks in the U.S. Commercial Nuclear Power Plants," AEC Report Number WASH-1400, except that it shall not become effective if within the thirty (30) day period after the Joint Committee submits its evaluation, the Congress adopts a concurrent resolution disapproving the extension of the Price-Anderson Act.

The effect of this section is to enable a Committee of Congress and the two Houses of Congress to prevent the bill from ever becoming effective after it has been approved by the President: the former by not submitting an evaluation report, and the latter by passing a concurrent resolution disapproving extension of the Price-Anderson Act. For the reasons explained below, it is the view of this Department that section 12 is unconstitutional, and unsound as a matter of policy.

This provision violates the well-established principle that Committees of Congress cannot perform a legislative function (37 Op A.G. 56, 58 (1933)) and that concurrent resolutions of Congress not presented to the President cannot have any legal effect outside the confines of the Capitol. U.S. Constitution Art. 1, Sec. 7, clauses 2 and 3; S. Rept. 1335, 54th Cong. 1st Sess., p. 6. Beyond this, however, the bill has an aspect which to our knowledge is unprecedented. Past provisions for vetoes by concurrent resolution or by Committees have had the intended effect of controlling Executive action or of terminating existing legislation. Section 12 would prevent legislation presented to the President from ever becoming effective. In this the clause is unique, and raises a serious challenge to the integrity of the legislative process.

The presentation of legislation to the President pursuant to Article I, Section 7 constitutes a representation to the President by the Congress that the legislation is ready to become law -- its effectiveness subject, on occasion, to external conditions precedent, but not to further deliberation by the Congress. Here, however, Congress takes the position that the President should approve the bill, but that Congress will await its examination of a Reactor study before it determines whether the legislation should take effect. Contrary to the Constitutional scheme, it seeks to force the President to make his final decision on the matter before the Congress -- and, in the circumstances of this case, to expend his veto option without having before him certain material so relevant that the Congress is unwilling to act without it. We cannot see how the President can be expected to approve the bill in this posture.



We realize, of course, that Presidents have frequently approved encroachment clauses in vitally needed legislation, especially in appropriation and authorization acts. For a recent example see President Nixon's statement of August 5, 1974, relating to the Department of Defense Appropriation Authorization Act of 1975, 10 Weekly Compilation of Presidential Documents 1007 (1974). In our view, however, both the novelty and severity of the encroachment, and the effects of its unconstitutionality argue against a similarly tolerant attitude in this case. We think it particularly important to scotch this new type of encroachment on Executive prerogative when it has first appeared, because its potential for future use is enormous. It is an attractive device for shifting initial responsibility for legislation to the President, and for giving Congress the political credit for legislation which it has not definitively passed. The doubtful constitutionality of encroachment clauses that have been allowed to pass in other statutes rarely affects private rights of citizens. Here, however, the unconstitutionality of section 12 may destroy the entire Price-Anderson Act structure and impair the validity of the financial guarantees it provides.

The Department of Justice recommends against Executive approval of the bill.

Sincerely,



W. Vincent Rakestraw
Assistant Attorney General
Office of Legislative Affairs





THE GENERAL COUNSEL OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D. C. 20410

OCT 8 1974

Mr. Wilfred H. Rommel
Assistant Director
Legislative Reference
Office of Management and Budget
Washington, D. C. 20503

Attention: Mrs. Garziglia

Dear Mr. Rommel:

Subject: H. R. 15323, 93d Congress, Enrolled Enactment

This is in response to your request for our views on the enrolled enactment of H. R. 15323, an Act "To amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes."

The enrolled enactment would extend until August 1, 1982 provisions of the Atomic Energy Act regarding availability of funds for payment of claims arising from a nuclear incident. This enactment would also provide for the phasing out of Government indemnity under that Act proportionate to the increase in the amount of a secondary source of insurance under a retrospective rating plan providing for deferred premiums to cover damages in excess of the primary source of insurance.

The AEC would be directed to establish measures to assure that deferred payments will be paid when called for, and for these purposes would be authorized to provide reinsurance or otherwise guarantee such payments. The enactment would



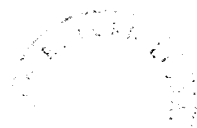
also allow for an increase, under limited conditions, in the total amount of liability arising from a single nuclear incident, and would extend indemnity protection outside U. S. Territorial limits to AEC-licensed nuclear facilities and to nuclear materials in transit between AEC-licensed facilities.

The Department of Housing and Urban Development has no objection to approval of the enrolled enactment.

Sincerely,



Robert R. Elliott



FEDERAL ENERGY ADMINISTRATION

WASHINGTON, D. C. 20461

October 7, 1974

MEMORANDUM FOR: Wilfred H. Rommel
Assistant Director for
Legislative Reference
Office of Management and Budget

ATTN: Ina Garten

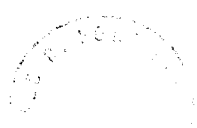
FROM: Robert E. Montgomery *by [Signature]*
General Counsel

SUBJECT: Enrolled Bill Report on H.R. 15323
"To amend the Atomic Energy Act of
1954, as amended, to revise the
method of providing for public re-
muneration in the event of a nuclear
incident, and for other purposes."

This is in response to your request for the views of the Federal Energy Administration on the subject enrolled bill.

H.R. 15323 would amend section 170 of the Atomic Energy Act to require licensees of nuclear facilities to secure additional "deferred premium" liability insurance. The AEC would be authorized to guarantee the payment of deferred premiums. In addition, the duration of section 170's "indemnification" and "financial protection" provisions would be extended from 1977 to 1982.

The FEA recommends that the President sign H.R. 15323 into law.



EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL ON ENVIRONMENTAL QUALITY
722 JACKSON PLACE, N. W.
WASHINGTON, D. C. 20006


October 8, 1974


MEMORANDUM FOR W. H. ROMMEL, ASSISTANT DIRECTOR
FOR LEGISLATIVE REFERENCE
OFFICE OF MANAGEMENT AND BUDGET

ATTENTION: MRS. GARZIGLIA

RE: H.R. 15323 (Enrolled) -- To amend the
Atomic Energy Act of 1954, as amended,
to revise the method of providing for
public remuneration in the event of a
nuclear incident, and for other purposes.

The Council on Environmental Quality has no objection
to Presidential signature of the above enrolled bill.


Gary L. Widman
General Counsel





DEPARTMENT OF STATE

Washington, D.C. 20520

OCT 4 - 1974

Honorable Roy L. Ash
Director
Office of Management and Budget
Washington, D. C. 20503

Dear Mr. Ash:

This is in response to Mr. Rommel's request for the views of the Department of State on an enrolled bill (H.R. 15323) "To amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes."

The primary purpose of the enrolled bill is to extend the life of the Price-Anderson Act, which is otherwise due to expire on August 1, 1977. The Price-Anderson Act limits the liability of licenses of civil nuclear installations to \$560,000,000 for damages for each nuclear incident, and provides for indemnification by the Atomic Energy Commission for liability incurred in excess of the amount of private insurance the Commission requires the licensee to obtain. H.R. 15323 would continue the Act until August 1, 1982, begin a phase-down of government indemnity participation, and increase reliance upon private sector insurance. On the merits of these primary aspects of the enrolled bill, we defer to the views of the Atomic Energy Commission since these provisions do not affect the areas of responsibility of the Department of State.

Of interest to the Department of State is the extension of the coverage of the Act to certain activities undertaken by licensees on the high seas. In particular, indemnity, agreements or other financial protection would be required for incidents involving offshore stationary nuclear power reactors and nuclear materials transported on the high seas from one person licensed by the Atomic Energy Commission to another person so licensed. As the Conference Committee Report clearly indicates, this

extension of coverage was not intended, and does not include, exports of nuclear materials or nuclear materials used for the propulsion of ships.

The Department of State considers that the extension of Price-Anderson Act coverage to offshore activities, as limited in this bill to stationary power reactors and ocean carriage of nuclear substances, is unobjectionable from the point of view of our foreign relations.

Thank you for this opportunity to comment.

Cordially,



Linwood Holton
Assistant Secretary
for Congressional Relations



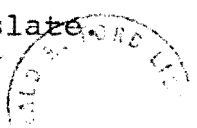
TO THE HOUSE OF REPRESENTATIVES

^{ok}
I am returning without my approval H.R. 15323, "To amend the Atomic Energy Act, as amended, to revise the method of providing public remuneration in the event of a nuclear incident, and for other purposes."

The first eleven sections of the bill basically carry out recommendations of the Atomic Energy Commission, and I would be glad to approve them if they stood alone.

Section 12, however, would provide that "the provisions of this Act shall become effective thirty ^{or} (30) days after the date on which the Joint Committee on Atomic Energy submits to the Congress an evaluation of the Reactor Study, entitled "An Assessment of Accident Risks in the U. S. Commercial Nuclear Power Plants", AEC Report Number WASH-1400, except that it shall not become effective if within the thirty (30) day period after the Joint Committee submits its evaluation, the Congress adopts a concurrent resolution disapproving the extension of the Price-Anderson Act." The import of this section is that after I have approved the bill, the Joint Committee and the Congress ^{would} will further consider whether it should ever become effective.

I cannot approve legislation ^{under} in these circumstances-- if, indeed, the bill can properly be called legislation rather than merely the expression of an intent to legislate. The presentation of a bill to me pursuant to Article I, ^{ok} section 7 of the Constitution amounts to a representation by Congress that, as far as it is concerned, the legislation is ready to become effective, subject perhaps to some



extrinsic condition precedent, but not to further congressional deliberation. Here, however, Congress in effect requests my approval before it has given its own.

In this instance, the clear constitutional infirmity of the bill not only affects my powers and duties but directly endangers substantial and important private rights. If the bill is unconstitutional, it will remain unconstitutional despite my signing it. Compensation for injuries incurred as a result of the operation of new atomic facilities will not be assured, and the enormous private funds which I anticipate will be invested in the future in reliance on the Act will be at risk. I see no justification for incurring these dangers by signing the present bill.

I urge the Congress to reenact the bill promptly so as to remove the problems which Section 12 now raises.

As a result, a sure source of funds for prompt payment of public liability claims, a primary objective of the Price-Anderson Act, would be in doubt. The uncertainty over nuclear liability protection would also adversely affect ^{that} private investment which will be necessary as nuclear power assumes its vital role in meeting ~~the~~ nation's energy requirements. The public interest would not be served by approving legislation which creates these uncertainties.

THE WHITE HOUSE

October 1974



THE WHITE HOUSE
WASHINGTON

RUSH
LOG NO.: 643

ACTION MEMORANDUM

Date: October 10, 1974

Time: 9:30 a.m.

FOR ACTION: Michael Duval
Phil Buchen
Bill Timmons
✓ Paul Theis
NSC/S

cc (for information): Warren K. Hendriks
Jerry Jones
Glenn Schleede

FROM THE STAFF SECRETARY

DUE: Date: Today, October 10, 1974

Time: 4:00 p.m.

SUBJECT: Enrolled Bill H.R. 15323 - Price-Anderson amendments

ACTION REQUESTED:

For Necessary Action

For Your Recommendations

Prepare Agenda and Brief

Draft Reply

For Your Comments

Draft Remarks

REMARKS:

Please return to Kathy Tindle - West Wing

Thank you.



1974 OCT 10 AM 10 19

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Warren K. Hendriks
For the President

To Warren
10-10-74
8:45 a.m.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

OCT 9 1974

MEMORANDUM FOR THE PRESIDENT

Subject: Enrolled Bill H.R. 15323 - Price-Anderson Act amendments
Sponsors - Rep. Price (D) Illinois and Rep. Hosmer (R)
California

Last Day for Action

October 12, 1974 - Saturday

Purpose

To amend the Price-Anderson Act to provide for: (1) its extension for five years until August 1, 1982; (2) a gradual transfer of indemnification from Government to private sources; (3) an increase in the limit of licensees' liability; and (4) a limited extension of indemnity coverage outside the territorial limits of the United States.

Agency Recommendations

Office of Management and Budget	Disapproval (Veto message attached)
Atomic Energy Commission	Approval
Federal Energy Administration	Approval
Department of Justice	Disapproval (Veto message attached)
Council on Environmental Quality	No objection
Department of State	No objection to section on offshore coverage
Department of Housing and Urban Development	No objection
Environmental Protection Agency	No objection



REVISING AND AMENDING THE PRICE-ANDERSON
INDEMNITY PROVISIONS OF THE ATOMIC ENERGY
ACT OF 1954

AUGUST 20, 1974.—Ordered to be printed

Mr. PRICE of Illinois, from the committee of conference,
submitted the following

CONFERENCE REPORT

[To accompany H.R. 15323]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 15323) to amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its amendments numbered 1, 2, and 3.

That the House recede from its disagreement to the amendments of the Senate numbered 4, 5, 6, 7, 8, 9, and 10; and agree to the same.

MELVIN PRICE,
CHET HOLIFIELD,
JOHN YOUNG,
TENO RONCALIO,
MIKE McCORMACK,
ORVAL HANSEN,
MANUEL LUJAN, Jr.,

Managers on the Part of the House.

JOHN O. PASTORE,
STUART SYMINGTON,
ALAN BIBLE,
GEORGE D. AIKEN,
WALLACE F. BENNETT,

Managers on the Part of the Senate.



JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE

The managers on the part of the House and the Senate at the conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 15323) to amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes, submit the following joint statement to the House and the Senate in explanation of the effect of the action agreed upon by the managers and recommended in the accompanying conference report:

AMENDMENTS NOS. 1 AND 2

The Senate amended the bill by changing the definition of "extraordinary nuclear occurrence" in subsection 11j. of the Atomic Energy Act of 1954, as amended, to include incidents involving source, special nuclear material, or byproduct material "illegally diverted from its intended place of confinement." The conferees agreed to eliminate this amendment because the feasibility and ramifications of such inclusion require detailed study. In particular the role of private insurance in relation to Governmental indemnity, as well as their relationship to safeguard regulations, requires further consideration. The conferees expect the Atomic Energy Commission to conduct a study of this problem and report to Congress with recommendations by early next year. The Joint Committee will then conduct hearings to determine what, if any, legislative changes are required.

The Senate recesses.

AMENDMENT NO. 3

The House bill extended the definition of nuclear incidents, as used in subsection 170 c. of the Atomic Energy Act, dealing with AEC licensees, to include occurrences outside the United States or any other nation (e.g. on the high seas) involving material licensed by the AEC which is used in connection with the operation of a licensed stationary production or utilization facility (floating nuclear power plant) and/or moves outside the territorial limits of the U.S. in transit from one AEC licensee to another.

The Senate amendment replaced the House provision with language extending the definition to include any extraordinary nuclear occurrence outside the U.S. or any other nation which involves material licensed by the AEC other than for import or export or for nuclear ship propulsion. The substantive effect of this provision is believed to be the same as the effect of the House language. However, the conferees agreed to the House language because of the possibility that the Senate language might bring under the definition some unanticipated types of events.

The Senate recesses.

AMENDMENTS NOS. 4, 5, 6, 8, AND 9

The House bill provided for a 10-year extension of the Price-Anderson provisions of the Atomic Energy Act, to 1987, with an AEC study and report to Congress in 1983.

The Senate amendment provided for only a 5-year extension, to 1982, with the study and report due in 1979.

The conferees agreed to the Senate amendments. However, the conferees wish to stress that there are a number of features of the Price-Anderson Act which should be viewed as permanent. These include the mandatory insurance coverage, the no-fault provisions, the provisions for consolidation of claims in a single federal court and for advance payment of claims, the contractor indemnity provisions, and the mandatory retrospective premium system. These elements make up a pattern of public protection which must be continued. The provision for termination in 1982 should be viewed as a device to ensure that Congress will reassess the situation prior to that time and make revisions as required, rather than as a Congressional intent to bring to an end the federal regulation of nuclear liability insurance.

The House recedes.

AMENDMENT No. 7

The House bill included language which prohibited any indemnification for nuclear incidents occurring in any nation other than the United States. The conferees agreed to the Senate amendment deleting this provision. The Atomic Energy Act already precludes any indemnification for licensed activities in other nations, and it was considered essential that the Commission retain its authority to indemnify its contractors for activities carried out in other nations for the benefit of the United States.

The House recedes.

AMENDMENT No. 10

The House bill identified the study which must be completed before the bill's provisions go into effect as "The Reactor Safety Study, announced by the Atomic Energy Commission on June 27, 1973".

The Senate amendment corrected this to read "The Reactor Safety Study, entitled 'An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants,' AEC Report Number WASH-1400". The Senate amendment also added a provision enabling Congress to prevent the effectuation of this Act by a concurrent resolution passed

within 30 days after submission of the Joint Committee's report to Congress on its evaluation of the AEC report WASH-1400.

The House recedes.

MELVIN PRICE,
CHET HOLIFIELD,
JOHN YOUNG,
TENO RONCALIO,
MIKE McCORMACK,
ORVAL HANSEN,
MANUEL LUJAN, JR.,

Managers on the Part of the House.

JOHN O. PASTORE,
STUART SYMINGTON,
ALAN BIBLE,
GEORGE D. AIKEN,
WALLACE F. BENNETT,

Managers on the Part of the Senate.



REVISING AND AMENDING THE PRICE-
ANDERSON INDEMNITY PROVISIONS OF
THE ATOMIC ENERGY ACT OF 1954,
AS AMENDED

REPORT

BY THE

JOINT COMMITTEE ON ATOMIC ENERGY

[To accompany H.R. 15323]



JULY 23, 1974.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1974

JOINT COMMITTEE ON ATOMIC ENERGY

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 JOHN O. PASTORE, Rhode Island, *Vice Chairman*

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JOHN YOUNG, Texas	STUART SYMINGTON, Missouri
TENO RONCALIO, Wyoming	ALAN BIBLE, Nevada
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 JAMES T. RAMEY, *Consultant*
 JANE R. MAPES, *Special Counsel*
 LAWRENCE F. ZENKER, *GAO Consultant*
 CHRISTOPHER C. O'MALLEY, *Printing Editor*

(II)

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(III)

REVISING AND AMENDING THE PRICE-ANDERSON
INDEMNITY PROVISIONS OF THE ATOMIC ENERGY
ACT OF 1954, AS AMENDED

JULY 23, 1974.—Ordered to be printed

Mr. PASTORE, from the Joint Committee on Atomic Energy,
submitted the following

REPORT

[To accompany H.R. 15323]

The Joint Committee on Atomic Energy, having considered H.R. 15323, to amend Sections 11 and 170 of the Atomic Energy Act of 1954, as amended, hereby reports favorably thereon, with amendments, and recommends that the bill do pass.

The amendments to the bill (H.R. 15323) adopted by the Joint Committee in open mark-up session, July 22, 1974, are as follows:

Page 2, lines 10 through 20: Delete all the material in these lines and substitute therefor the words: "And provided further, That as the term is used in subsection 170 c., it shall include any such occurrence outside the United States if such occurrence arises out of or results from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material licensed pursuant to chapters 6, 7, 8, and 10 of this Act, other than for import or export or for nuclear ship propulsion, which takes place outside the territorial limits of the United States or any other nation."

Page 8, lines 1 through 4: Strike the material beginning with the colon in line 1 and ending with the word "States" in line 4.

Page 10, lines 12 through 16: Strike the words, "announced by the Atomic Energy Commission on June 27, 1973" and substitute therefor the words "entitled 'An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants', AEC Report No. WASH-1500".

I. BACKGROUND

The Price-Anderson Act was enacted in 1957, and extended and amended in 1965 and 1966. The Act was designed to protect the public and the emerging nuclear industry by assuring the availability of

funds for the payment of claims in the unlikely event of a catastrophic nuclear incident. Among other things, the Act provides funds for public liability in the event of a nuclear incident up to a total amount of \$560 million. This figure represents the sum of the amount of Government indemnity fixed at \$500 million by the Congress, and the then-existing (1957) maximum available private liability insurance, \$60 million. The amount of private insurance has gradually risen, so that it stands now at \$110 million; the Government's indemnity has commensurately decreased to \$450 million. Other features included in the Act by the amendments of 1966 are no-fault liability and provisions for accelerated payment of claims immediately upon occurrence of a nuclear incident.

Since the enactment of the Price-Anderson Act, there has not been a single accident which has resulted in indemnity payments for public injury under its provision. This outstanding safety record has been accompanied by a gradual growth in the nuclear power industry which is now accelerating at a rapid pace. Thus the Price-Anderson Act has served well its dual purpose of protection of the public and elimination of a potential deterrent to the establishment of a nuclear industry.

The Act is scheduled to expire on August 1, 1977. Because of the long-lead times involved in planning new commitments to nuclear power, the Joint Committee has been urged to consider the matter of extension and possible modification of the Act during the present session of Congress in order to prevent an unwarranted disruption in the planning process for nuclear powerplants, such as might result from uncertainty over the future of the Price-Anderson Act. In order to permit early consideration in the current Congress, the Joint Committee in July 1973, requested the Commission to submit studies and alternative proposals in the indemnity area. In response to this call, the Atomic Energy Commission filed a broad based staff study in January 1974 and the Columbia University Legislative Drafting Fund submitted an independent review sponsored by the Atomic Industrial Forum. Months of informal interchange among members of the Joint Committee, the Atomic Energy Commission, and their staffs, and representatives of private industry and the general public culminated in public hearings beginning on January 31, 1974. On April 22, 1974, the Atomic Energy Commission forwarded to the Congress proposed legislation which was introduced as H.R. 14408 by Chairman Melvin Price of the Joint Committee on Atomic Energy on April 25, 1974, and as S. 3452 by Senator John O. Pastore, Vice-Chairman of the Joint Committee, on May 7, 1974. Additionally, a related bill, S. 3254 was introduced by Senator Mike Gravel on March 27, 1974.

Following public hearings, held on May 9, 10, 14, 15, and 16, 1974, the full committee met in executive session on June 11, 1974, and after careful consideration voted to submit a committee bill in lieu of the above-mentioned measures. The bill was introduced on June 11, 1974, by Chairman Price (for himself and Mr. Hosmer) as H.R. 15323. The Joint Committee met again on June 13, 1974, in open session and voted to report favorably on the bill with amendments by a roll call vote of 11 to 2. On July 10, the House of Representatives considered H.R. 15323 and passed the bill with three amendments by a vote of 360-43. The bill was messaged to the Senate and referred to the Joint Committee on July 11. The Joint Committee met again in open session on July 22 and voted without dissent to delete two of the three House

amendments, to perfect the third, and voted 9 to 1 to report the bill favorably to the Senate.

II. HEARINGS

Public hearings on the possible modification or extension of the Price-Anderson Act were held on January 31, March 27 and 28, 1974, and hearings on H.R. 14408, S. 3254 and S. 3452 were held on May 9, 10, 14, 15, and 16, 1974. An informal planning committee, drawn from the Joint Committee staff, the Atomic Energy Commission, the legal profession, the commercial power and insurance industries, and public citizen groups, assisted the Committee and staff in regard to the scope of the hearings and potential witnesses.

The following witnesses from the Atomic Energy Commission appeared before the Joint Committee to present testimony or to assist in the development of the record: Dr. Dixie Lee Ray, Chairman; William O. Doub, Commissioner, Marcus Rowden, General Counsel; L. Manning Muntzing, Director of Regulation; and Jerome Saltzman, Deputy Chief, Office of Antitrust and Indemnity, Directorate of Licensing.

Other non-governmental witnesses who appeared one or more times are:

Elmer Dee Anderson, Private Citizen, Valparaiso, Indiana.

Dr. W. H. Arnold, Jr., General Manager, PWR Systems Division, Westinghouse Electric Company.

George K. Bernstein, Federal Insurance Administrator, HUD.

Arthur C. Gehr, Atomic Industrial Forum.

Frank P. Grad, Director, Legislative Drafting Research Fund, Columbia University.

Harold P. Green, Professor of Law, National Law Center, George Washington University.

Gerald R. Hartman, Professor of Insurance and Risk, Temple University.

Joseph F. Hennessey, Bechhoefer, Snapp and Trippe, Washington, D.C.

Larry Hobart, Assistant General Manager, American Public Power Association.

Mrs. Judith H. Johnsrud, Central Pennsylvania Committee on Nuclear Power.

Dr. Chauncey Kepford, York, Pennsylvania, representing the Environmental Coalition on Nuclear Power.

Hubert H. Nexon, Senior Vice-President, Commonwealth Edison Company, representing Edison Electric Institute.

Norman C. Rasmussen, Department of Nuclear Engineering, Massachusetts Institute of Technology.

Charles A. Robinson, Jr., Corporate Counsel, National Rural Electric Cooperative Association.

Mrs. Laurie R. Rockett, Greenbaum, Wolff and Ernst, New York City, New York.

Ms. Ann Roosevelt, New York, on behalf of Friends of the Earth.

Richard A. Schmalz, Hartford Insurance Group, representing Nuclear Electric Liability Insurance Association.

Chauncey Starr, Electric Power Research Institute.

Clark Swann, New Park, Pennsylvania.

Martin Victor, V. P. and Secretary, Babcock & Wilcox Company.

Richard Walker, Partner, Arthur Andersen & Company.

Bruce L. Welch, Director Environmental Studies, Friends Medical Science Research Center, Inc.

III. PROVISIONS OF CURRENT ACT

The Price-Anderson Act is incorporated in the Atomic Energy Act in Sections 2, 11, 53, and 170. Its major provisions are described below.

The Atomic Energy Commission must require as a condition for certain licenses, including those for nuclear power plants, that the licensee maintain financial protection for payment of third party liability claims in the event of a nuclear accident, in the amount required by the Commission. The AEC may also at its discretion require the protection for its contractors and other types of licensees. For any power reactor with an electric capacity of 100 Mwe or more the Commission must require financial protection equal to the maximum available from private sources. Currently this is \$110 million.

The Commission is also required to execute an indemnity agreement with its contractors and with each licensee required to maintain financial protection, agreeing to indemnify the licensee and any other parties liable for claims arising from a nuclear incident above the amount required, up to \$500 million. The indemnity agreement extends for the life of the license (usually 40 years for power reactors).

The aggregate liability for damages arising from a nuclear incident is limited to \$560 million within the U.S. and \$100 million plus the financial protection required of the licensee for incidents occurring outside the U.S. All vendors, architect-engineers, subcontractors, and other parties are protected from liability by the omnibus feature of the licensee insurance and the Government indemnity.

Non-profit educational institutions licensed to operate reactors are exempted from the financial protection requirement and are indemnified by the Commission for payment of claims exceeding \$250,000, in an amount up to \$500 million.

Damages to offsite property of the licensee are covered by the insurance and indemnity.

The Commission may require the inclusion in any insurance contract or other proof of financial protection and in its indemnity agreements of provisions waiving any defenses based upon conduct of the claimant or fault of the indemnified person, charitable or governmental immunity, or statutes of limitations which are shorter than a specified duration. The waivers apply in any instance where the Commission determines there has been an extraordinary nuclear occurrence, as defined by the Commission.

Provisions are also included for prompt payments to injured parties and for consolidation of all claims into a single Federal district court.

IV. STUDIES

Various groups have studied the problem of nuclear insurance and indemnity in the past year, and several reports and proposals were reviewed by the Atomic Energy Commission and the informal planning Committee headed by former AEC Commissioner James T. Ramey, serving as a consultant to the Joint Committee. The studies and proposals and related material are included in a Joint Committee Print of March 1974 entitled, "Selected Materials on Atomic Energy Indemnity and Insurance Legislation."

The major studies were those by the Atomic Energy Commission and by the Legislative Drafting Research Fund of Columbia University. The latter, an independent study, resulted in a report December 12, 1973, entitled "Major Issues of Financial Protection in Nuclear Activities". Among the proposals which are included in the Joint Committee print and which were discussed in the AEC and Columbia studies was a proposal by the nuclear liability insurance pools for a retrospective premium insurance plan. This plan, modified somewhat, became the basis of legislation submitted to the Congress by the Atomic Energy Commission, subsequently introduced by Chairman Price in the House as H.R. 14408, and by Vice Chairman Pastore in the Senate as S. 3452; and which was further modified by the Joint Committee into the bill now being reported.

Other proposals included a Commission staff study proposal for a contingent fee system, and proposals by former AEC General Counsel Joseph Hennessey, Professor Harold Green, and former Pennsylvania Insurance Commissioner Herbert S. Denenberg. These proposals are not discussed in this report, but can be found in the committee print described above, and were discussed during the hearings.

Senator Gravel's bill constituted an additional proposal which was considered in developing this legislation.

V. NEED FOR LEGISLATION

The Price-Anderson Act applies only to licenses issued prior to August, 1977. Nuclear power plants now in the planning and design phases would not receive construction permits until about 1977-1978. Thus there is uncertainty as to whether these plants would receive protection in the form of Government indemnity. Reactor manufacturers and architect-engineers are already requiring escape clauses in their contracts to permit cancellation in the event some form of protection from unlimited potential liability is not provided. Action is required soon to prevent disruption in utility plans for nuclear power.

The study by the Columbia University Legislative Drafting Research Fund examined the situation that would prevail if the Price-Anderson Act were to be allowed to expire. The study concluded that the resulting legal situation in the event of a nuclear incident would be chaotic. Injured parties would be subject to whatever tort law prevailed in the State in which the incident occurred or in which they suffered harm. There would be wide variation in the grounds for recovery, the standards of proof, and the defenses available to the defendants. Recovery would be uncertain and could be delayed for many years. The potential for unlimited liability might drive smaller manufacturers, architect-engineers, and component suppliers out of the nuclear business and could serve as a deterrent to entry by other firms. The report's conclusions were summarized as follows:

The primary defect of this alternative is its failure to afford adequate protection to the public in terms of providing either a secure source of funds or a firm basis of legal liability. While it does have the theoretical advantage of placing no legal limit on amount of protection available, as a practical matter, the public would be less assured of compensation than under the Price-Anderson Act. Adoption of this alternative would also,

for the reasons discussed in Chapters 3 and 4, tend to discourage the participation of industry in the nuclear field. If in other respects Congress adopts a policy of continued encouragement, inaction with respect to financial protection will not advance, and will probably impede, this policy.

Assuming no significant change in the insurance patterns of the industry, this alternative also fails to meet the criterion of efficient and equitable cost allocation through risk spreading. With the possible exception of the approximately 100 million dollars insured by the insurance pools, the entire risk of an accident would fall, under the law of most states, either on the victim who was barred from recovery by a technical defense, failure of proof, or inability of the defendant to pay a judgment, or on the particular utility involved and possibly its contractors or suppliers, and on their consumers. And the entire cost would arise after the accident had occurred. This alternative thus makes use of little, if any, intertemporal and, initially, virtually no interpersonal spreading. Interpersonal spreading might be achieved later as the companies held liable shifted the cost onto their consumers. Although the allocation of liability to the industry does appear to meet the third criterion of internalization, to the extent that victims of an accident are unable to recover from the industry, even this criterion is not met. Finally, because of the potential problems plaintiffs may encounter in seeking damages under state law, recovery is likely to involve excessive time and expense. In sum, this alternative meets only one of the four basic criteria, that of internalization of costs, and meets that only in part.

The Joint Committee has received numerous letters from companies and organizations in the nuclear industry, urging extension of the Price-Anderson Act in its present or a modified form. These letters as well as testimony at the hearings have stressed the importance of the Act in removing a deterrent to development of the nuclear industry, and the need for prompt action to clarify the situation that will prevail after 1977.

VI. DISCUSSION OF BILL

The bill provides for a ten-year extension of the Price-Anderson Act and for three major changes—(1) phase out of Government indemnity, (2) increase in limit of liability and (3) extension of indemnity coverage outside the territorial limits of the United States for certain limited activities.

The details of the bill are described below.

A. PHASEOUT OF GOVERNMENT INDEMNITY

Deferred Premium System

The bill provides specific authorization for the commission to establish by rule, regulation or order the terms and conditions of the financial protection required of nuclear licensees. AEC is directed, under this authority, to require participation, by licensees who are

required to maintain the maximum amount of financial protection, in an insurance retrospective rating plan whereby in the event of a nuclear incident resulting in damages exceeding the base layer of insurance, each licensee would be assessed a deferred premium which would be a prorated share of the excess damages. A maximum amount would be established which the retrospective premiums for each facility could not exceed. If, for instance, at some time in the future, a maximum level of \$3 million per reactor were set and a total of 100 reactors had been licensed up to that time, then \$300 million would be available at that time to provide for payment of damages in this secondary layer over and above the base insurance. As more reactors were licensed, the secondary layer would increase proportionately. The Commission will set the maximum premium by rule.

The Commission would continue to provide indemnity for payment of damages exceeding the combined primary and secondary layers, up to a total of \$560 million. As the secondary layer increased, it would gradually phase out the government indemnity. The date at which this would occur would depend on the amount set as the maximum premium and on the rate at which reactors were licensed. The tables in the appendix to this report illustrate how this phase out would occur for various premium levels.

The Joint Committee expects the Commission to require present licensees to enter into the retrospective premium plan under its authority to establish the maximum financial protection required. The committee believes that this authority is sufficient to require the participation of such licensees in the plan. Exclusion of these licensees would result in confusion and would delay the date at which Government indemnity can be eliminated.

The Joint Committee has from the time of the inception of the Price-Anderson Act endorsed the concept of the assumption by the nuclear industry of the risks associated with nuclear incidents. The industry in its early stages of development, however, was not capable of assuming this unique risk, which has generally been considered to have extremely low probability but potentially large consequences. While the probabilities of severe nuclear accidents appear now to have been over estimated, the industry is just now reaching the point where the government's role can be phased out without the possibility of unduly disrupting the industry's development or of leaving the public with inadequate provision for relief from the highly improbable severe nuclear incident which the Act is designed to protect against. The Commission's proposal as embodied in the Joint Committee bill is considered the most expeditious means for the transfer of responsibility. An abrupt termination of Government protection is not considered appropriate at this time, in light of the still relatively small number of nuclear reactors now licensed.

Premium Amounts

The Joint Committee desires that the Government indemnity be phased out as soon as is reasonably feasible. Consequently, the bill provides that the Commission must set the level of the standard maximum deferred premium at no less than \$2 million per facility. The bill also establishes an upper level for the premium of \$5 million per facility. This limitation was considered necessary to assure that smaller utilities are not hampered in efforts to raise capital by a too-

high potential liability. The bill thus establishes a range within which the Commission shall set the maximum premium taking into consideration the objectives on which these statutory limits were based and other pertinent factors. The range was further intended to enable the termination of the Government indemnity between about 1981 and 1985. The Commission is directed to consider this time frame as a guideline in establishing the premium.

The Commission is authorized to establish a maximum deferred premium lower than the standard premium for any facility based upon such considerations as size and location. This authorization is included to permit such variations if the Commission finds they are warranted.

The legislation provides for a target date of August 1, 1976 for completion of Commission action to implement the deferred premium plan. This should provide ample time for a rulemaking proceeding.

Assurance of Premium Availability

Authority and direction has also been provided for the Commission to establish measures to ensure that the deferred premiums will be paid when they are called for following a nuclear incident. The Commission is directed to assure these payments to the maximum extent possible through the resources of the nuclear and insurance industries. Representatives of insurance companies indicate that the insurance pools could provide coverage for up to \$30 million in defaults initially, and that this sum could be increased later. The Joint Committee believes the industry and the AEC should make every effort to provide additional coverage by insurance and industry.

In order to prevent a potential gap between the public protection pledged and actual payments made, the bill includes authorization for the Commission to serve as the ultimate assurance to the public for these payments, to the extent necessary. This may be done through reinsurance, guarantees, or other means. If the Commission should determine that a guarantee of payment is essential, authority has been provided to permit recovery by the Government from the defaulting licensee of any payments made on its behalf.

State Constitutional Problem

During the hearings on this legislation, a potential constitutional problem was raised as to public power organizations. Public power representatives testified that the retrospective premium arrangement might be construed to be in violation of some State constitutions, which prohibit a State or a subdivision or agency of a State, such as a municipal utility, from lending its credit or making expenditures for other than public purposes. They suggested that preemption of this field by the Federal Government or explicit establishment of the premium system as a condition to obtaining a nuclear powerplant license might resolve the problem.

The Committee feels that the language of Section 170, as amended by this bill, is clear in its establishment of participation in the retrospective premium system as a firm requirement of a licensee required to maintain the maximum financial protection.

The bill strengthens the language of Section 170 to stress the Federal preemption of nuclear powerplant licensing and the public purposes of the premium system. Furthermore, the deferred premium should not be interpreted as establishing a responsibility by one licensee for a liability or debt of another. The potential deferred premiums are considered by the Joint Committee to have fundamentally the same status as any other such insurance premium. The bill authorizes the Commission to establish a maximum limit on the amount of deferred premiums which can be charged to a facility in any one year. The purpose of this provision is to clarify the status of the premiums and to ensure that they can not be construed as the lending of credit and thus raise constitutional problems for some publicly owned utilities.

The bill includes requirements that the retrospective premium plan be available to licensees who elect to provide the basic financial protection through some means other than insurance, and a provision that the maximum financial protection required shall be that available under reasonable terms and conditions. The Commission is thus authorized not to require available insurance to the degree that it determines the rates or terms of such insurance to be unreasonable.

B. INCREASE IN LIMIT ON LIABILITY

The bill does not provide for an immediate change in the \$560 million limit on total liability arising from a nuclear incident. That limit is retained until the total of primary insurance and assessable retrospective premiums reaches the level necessary to completely replace the Government indemnity. From the point, as the primary and secondary levels rise, the limit on liability would be allowed to rise correspondingly. No ultimate limitation on the level to which this coverage could rise is provided for. At a premium level of \$3 million per reactor, the overall limit would be projected to reach a billion dollars in about 1987, and rise to \$1,346,000,000 in 1990. The Commission would have the continuing authority to establish a rule reducing the standard maximum premium as appropriate when it determines that the total financial protection has risen to an amount above which further increases are not necessary.

The Joint Committee does not feel that any increase in or elimination of the limit is necessary or appropriate at this time. As the Joint Committee pointed out when the Act was first proposed:

"The limit of the Commission's responsibility under these (indemnity) agreements is to be \$500 million. This limit could be subject to upward revision by the Congress in the event of any one particular incident in which, after further congressional study, the Congress felt more appropriations would be in order.

* * * * *

"Subsec. e limits the liability of the persons indemnified for each nuclear incident to \$500 million, together with the amount of financial protection required. Of course, Congress can change this act at any time after any particular incident. The Joint Committee wanted to be sure that any such changes in the act would be considered by it in the light of the particular incident."

At the time of the extension of the Act in 1965, the Joint Committee reiterated this point when it said:

"In the event of a national disaster of this magnitude, it is obvious that Congress would have to review the problem and take appropriate action. The history of other natural or man-made disasters, such as the Texas City incident, bears this out. The limitation of liability serves primarily as a device for facilitating further congressional review of such a situation, rather than an ultimate bar to further relief of the public."

Testimony on the preliminary results of the Reactor Safety Study under the direction of Professor Norman Rasmussen of the Massachusetts Institute of Technology has indicated that the probabilities of a nuclear incident are much lower and the likely consequences much less severe than has been thought previously (See Section VII of this report). The likelihood of an accident with damages exceeding \$560 million appears to be quite remote. However, the bill does permit the limit to increase once the retrospective premiums assessable have completely replaced the government indemnity.

C. EXTENSION OF INDEMNITY COVERAGE OUTSIDE UNITED STATES TERRITORIAL LIMITS

The bill amends the definitions of "nuclear incident" and "person indemnified" in section 11 of the Atomic Energy Act to permit the Commission to extend the provisions of the Price-Anderson Act to certain activities outside the territorial limits of the United States conducted by commission contractors or involving licensed nuclear facilities or licensed activities. The bill does not include under Price-Anderson indemnity coverage the import or export of nuclear material or facilities or activities conducted within the territorial limits of another nation, nor any occurrence resulting from the use of a nuclear power reactor to propel a U.S. merchant ship, although nuclear material transported on such a ship as cargo could be covered by the Price-Anderson indemnity provisions in the same manner as cargo carried in ships powered by fossil fuel.

The existing definitions of "person indemnified" and "nuclear incident" do not permit indemnity protection for activities licensed by the Atomic Energy Commission if the nuclear incident occurs outside the territorial limits of the United States, with the exception of the now retired nuclear ship Savannah. There are two situations in which the protection afforded by the Price-Anderson Act with respect to licensed activities would be extended to nuclear incidents occurring outside the territorial limits of the United States. The first situation involves ocean shipments of new or spent fuel which may move outside the territorial limits of the United States during ocean transit from one licensed nuclear facility to another. The second situation involves nuclear facilities which are physically located outside of the territorial limits of the United States but whose construction and operation are licensed by the Atomic Energy Commission, such as a floating nuclear power plant located beyond the limits of the territorial sea of the United States. The legislation would authorize the Atomic Energy Commission to extend price-Anderson indemnity protection to such shipments and such facilities.

Any indemnification agreements relating to these activities would be administered in the same manner as the Commission would administer the Price-Anderson Act with respect to other licensed activities.

The present definition of "nuclear incident" as applied to Commission contractors provides indemnity protection only if an occurrence outside the United States involves "a facility or device" owned by, and used by or under contract, with the United States. The amended definition would resolve any possible ambiguities concerning the Commission's authority to indemnify its contractors for any occurrence during the course of transporting source, special nuclear, or byproduct material outside the United States.

With the apparent advent of offshore nuclear powerplants, it is essential that the protection intended by the Price-Anderson Act not be thwarted by the incidental fact of location beyond the U.S. territorial limits. Likewise, the shipment of nuclear materials from one licensed facility to another within the United States should be included in the Act's coverage regardless of whether the facility or route involved is located or involves transportation outside the territorial limits.

Testimony at the hearings on this bill included suggestions that nuclear merchant ships be included in the act's coverage. The Joint Committee has not included those activities in this bill. The urgency of such inclusion is not considered sufficient to warrant legislation without a more detailed examination. The Joint Committee's decision not to take this action at this time is in no way intended to preclude further consideration at a later time.

D. ADDITIONAL CONSIDERATIONS

Activities Covered by Price-Anderson Act

Financial protection and indemnity for plutonium processing facilities is discretionary with the Commission under the present law. One witness at the hearings, a representative of a company which operates such a facility, proposed that these provisions of the Price-Anderson Act be made mandatory for such facilities. The Commission does not at this time require financial protection of such licensees or extend indemnity coverage to them. However, private liability insurance is available. The Commission has indicated that it will undertake a thorough review of this matter. The Joint Committee has not proposed a legislative change in this area, pending the outcome of this review. The Commission is urged to give appropriate consideration to this matter.

Transportation of nuclear materials is not specifically provided for under the Price-Anderson Act, although carriers are generally covered either as AEC contractors or under the omnibus aspects of licensee financial protection and indemnity. The Association of American Railroads has proposed that transportation be specifically covered because of gaps in the existing system for such situations as transportation of materials for a shipper or receiver not required to maintain financial protection. Although insurance is available to carriers, it is limited to the amount of \$60,000,000. The Joint Committee has not proposed legislation to deal with this matter, but

encourages the Commission to review the situation to determine if procedural or legislative changes are in order.

Priorities Between Claimants and Types of Claims

The Joint Committee has included in the legislation a direction and authorization for the court which develops the plan for distribution of funds in the event of a nuclear incident which appears to have resulted in damages exceeding the limit on liability to establish priorities between classes of claims and claimants. The Joint Committee wishes to assure that in such a case, where the immediate recovery by claimants may be less than the full amount of their losses, the distribution of funds will be made in such a manner as to compensate first for the most severe and the most readily computable losses. Thus claims for actual losses to property, for actual and reasonable medical expenses, for loss of wages, and other such losses may merit higher priority than such claims as those for alleged pain and suffering, emotional harm, and loss of consortium. Likewise, losses otherwise compensated for, while not precluded from recovery (under the collateral source rule) in most jurisdictions, should be accorded lower priority than uncompensated losses. The Joint Committee also believes that as a matter of equity, in cases where less than full compensation will be made through the amounts immediately available from insurance and government indemnity, losses to offsite property of the licensee of the responsible facility should be accorded lower priority than losses to third parties. The court is authorized to establish such additional priorities as are deemed desirable and equitable to further the principles described above.

The above provisions are in no way intended to create any causes of action not in accordance with existing law or to derogate any existing causes of action. Nor should these provisions be construed as a retreat from the belief expressed on many occasions by this Joint Committee that Congress is committed to thoroughly review the situation and to provide additional relief in the remote event of a nuclear incident involving damages in excess of the limit on liability. The priorities are not intended to preclude ultimate relief for claims of secondary priority, but rather to assure that early relief is applied where most needed.

E. EXPLANATION OF AMENDMENTS

Amendment to Section 1

The Joint Committee has amended section 1 of the bill by reinstating the original language provided for section 11 q. of the Atomic Energy Act of 1954. The House amendment to this section did not make a substantive change in the bill's provisions, but the Joint Committee feels the original language is somewhat preferable.

Amendment to Section 6

The Joint Committee has amended Section 6 by deleting the proviso, added by an amendment on the House floor, that the indemnification provisions of the Price-Anderson Act shall not apply to any nuclear incident occurring in any country other than the

United States. This amendment was redundant insofar as its intended effect and potentially deleterious in other respects.

The apparent intent of the amendment's author was to prevent any potential indemnification for accidents resulting from nuclear power plants supplied by U.S. manufacturers to other nations such as Egypt or Israel. Such reactors could not be indemnified under the Act as it was before the amendment. These reactors are not licensed by or under contract with the Commission and thus are not within the provisions of section 170.

Furthermore, subsection 11(q) of the Atomic Energy Act, as amended by this bill, provides that a nuclear incident, for the purposes of the insurance and indemnification provisions of the Act, is defined, in relevant part, as "any occurrence, . . . within the United States . . ." (emphasis supplied). The only exceptions to this limitation to incidents within the U.S. are the three provisos in subsection 11(q) which allow indemnification for incidents occurring outside the United States only if they involve the following:

(1) Subsection 1701 (the nuclear ship *Savannah*, now being decommissioned).

(2) Source, byproduct, or special nuclear material owned by, and used by or under contract to the United States, and involved in activities under contract for the benefit of the United States.

(3) Occurrences outside the territorial limits of the U.S. and all other nations (i.e., on the high seas), involving either offshore floating nuclear power plants or transportation of source, special nuclear, or byproduct material from one AEC licensee to another. This proviso specifically excludes both import and export from the coverage it provides. It also excludes nuclear ship propulsion.

Obviously, none of the exceptions involves reactors in other nations. Thus the House amendment to Section 6 was not needed to effect an exclusion of such reactors.

The amendment is undesirable for several reasons. It would weaken the Commission's ability to conduct extraterritorial operations by prohibiting the Commission from indemnifying parties injured by Commission activities in other nations. It would serve as a deterrent to participation by contractors in the Commission's military and space programs, and thus have a harmful effect on the national security. Furthermore, this language would preclude the inclusion of nuclear ships within the Act's provisions. The Committee has taken pains to make it clear that, although these ships are not now included, this issue remains open for further consideration.

The Joint Committee believes that the Commission's overseas indemnification authority for its own activities is essential. Accordingly, it has deleted the proviso added by the House to H.R. 15323.

Section 12

Section 12 of the bill was also added on the House floor. It provides that the provisions of this Act shall not come into effect until the "Reactor Safety Study announced by the Atomic Energy Commission on June 27, 1973 has been completed and the Joint Committee has reported to the Congress its evaluation of the results of such Study." The apparent intent of this amendment was to defer the effect of the bill until the Commission's Rasmussen Study has been completed.

There was no announcement of this study on the indicated date, so this section has been amended so as to properly identify the intended report.

The Joint Committee does not believe that this amendment was necessary. The Rasmussen Study, under the direction of Dr. Norman C. Rasmussen of the Massachusetts Institute of Technology, does not deal with insurance or indemnity for nuclear incidents. It is a safety study of the probabilities and consequences of accidents involving nuclear power reactors. As such, its only relation to the Price-Anderson Act is as a possible guide as to the extent and scope of risk to the public in determining the amount of protection required. It will provide no information at all concerning the mechanism for providing the protection.

Professor Rasmussen has appeared before the Joint Committee on two occasions. He assured the Joint Committee in public testimony, which is included in appendix II to this report, that the total of public and private indemnity provided for by the bill is adequate to cover any credible accident which might occur. He reaffirmed this point in a reappearance before the committee for the markup session on H.R. 15323 on June 13. He has testified that the report will show that the likely consequences of a nuclear accident involving a core meltdown will not be a major catastrophe, as is commonly assumed, but will be no worse than a major airplane crash, and will generally be less than that. The Rasmussen Study will show, in effect, that the Price-Anderson Act provides an even more conservative degree of protection than was thought when it was enacted.

The rationale given for Section 12 is that the results of the Rasmussen Study are not yet available, and that they are intimately related to this bill's provisions. Neither of the assumptions is true. The conclusions insofar as they relate to the Price-Anderson Act are already public. The technical detail supporting the report's conclusions is beyond the ken of the layman and is massive in its volume. This detail is not essential to and cannot be expected to contribute to a congressional decision. An informed critique of the report by the scientific peers of the investigators will take many months and cannot reasonably be expected to alter the conclusions so drastically as to affect this legislation.

The most curious aspect of Section 12 is its potential deferral of the transfer of responsibility to the nuclear industry which is the key feature of this legislation. This is a transfer which has been almost universally urged for years. An unexpected delay in the Rasmussen report could have the result, under Section 12, of postponing the phase-out of the Government's liability.

Despite the dubious basis underlying Section 12, the Joint Committee has perfected the amendment rather than deleting it, in order to assuage the doubts of those members of Congress who are not satisfied with the Joint Committee's review and Dr. Rasmussen's testimony. The provision of Section 12 is very unlikely to delay the actual implementation of this bill. The draft report is expected to be released for public comment in mid-August, and the final report, taking these comments into account, is expected about January, 1975. The Commission's rulemaking proceeding to implement this bill would be unlikely to be completed before mid-1975 at the very earliest. The Joint Committee considers that the language of Section 12 would

prohibit the Commission from implementing a rule concerning the deferred premium provisions of the bill prior to a Joint Committee report to Congress on the Rasmussen Study, but would not prohibit initiation of a Commission rulemaking proceeding before that time.

VII. SAFETY OF NUCLEAR FACILITIES

Nuclear power plants contain large amounts of intensely radioactive materials which are produced by nuclear processes which take place during their operation. Practically all of these materials are produced and contained inside the reactor fuel. Multiple barriers are provided in nuclear plants to assure that undue amounts of radioactivity are not released to the environment in the event of malfunctions or accidents within the plant. The primary barriers are the reactor fuel itself; the cladding material which encases the fuel; the reactor pressure vessel and primary coolant boundary; and finally the outside containment system. In addition to these multiple barriers, each nuclear facility is equipped with a multiplicity of special safety systems and devices which are intended to either prevent accidents or mitigate their potential consequences. Extensive quality assurance programs covering all facets of each facility are followed to assure the initial establishment and continuing maintenance of plant integrity. A comprehensive description of nuclear power plants, their safety features, and the Government regulatory system is included in the AEC report "The Safety of Nuclear Power Reactors (Light Water Cooled) and Related Facilities"—WASH-1250.

As a result of this careful approach to the design and operation of nuclear power plants, coupled with a vigorous Government regulatory system, the overall safety record of the commercial nuclear power industry has been excellent. While there have been a number of minor malfunctions in operating plants, to date no accidents have occurred which have resulted in deaths or injuries to the general public. Notwithstanding this record, the risk of major accidents cannot be said to be zero. There remains a small but finite probability that an accident may occur that could result in the release of major amounts of radioactivity to the environment.

In most human endeavors, it is possible to estimate the probability and consequences of major accidents based on past experience (statistics). In the case of nuclear power plants, due to the lack of major accident experience, numbers representing probabilities of severe accidents and associated consequences must be deduced or inferred by some indirect means. For the past decade or so, a number of individuals and groups have been exploring methods for estimating such probabilities. Until the early 1970's it has not been thought possible through statistical means to adequately estimate probabilities of reactor accidents, although it was believed that component failure statistics were feasible. Notwithstanding these considerations, the results of these studies have generally supported the judgments made by experts that the probabilities of severe reactor accidents are exceedingly low.

The improvements in the development of statistical methods in the space program and defense program in the past ten years have led to the belief that adequate statistical probabilities can be developed for nuclear plants. Perhaps the most comprehensive effort in this area so far is an AEC sponsored study which has been conducted over the

past year and a half under the direction of Dr. Norman Rasmussen, Professor of Nuclear Engineering at the Massachusetts Institute of Technology. The Joint Committee has been closely following the conduct of this study, and has received testimony from Dr. Rasmussen on two occasions. In this most recent appearance before the committee, Dr. Rasmussen concluded his statement with the following remarks pertinent to considering the Price-Anderson legislation:

In summary I believe that the proposal before you represents a reasonable way to phase out the Government responsibility for nuclear insurance and shift the responsibility to the insurance companies and the nuclear industry. I believe that the current \$560 million limit is a reasonable value at this time and will cover all combinations of circumstances which can reasonably be considered credible. The National Safety Council now reports that accidents in the U.S. are currently causing 100,000 fatalities per year and an economic loss of 30 billion dollars per year. Any reasonable estimate of probability and consequences of nuclear accidents indicates that they would not have a significant impact on this already large accident burden that society bears.

Although the Rasmussen study is not yet complete, general conclusions have been reached which confirm that the probability of major reactor accidents involving reactor core malfunctions is, indeed, quite small. It has been concluded that the most likely consequence of a core melt accident, which itself is highly unlikely, would be quite modest, in comparison with the catastrophic results generally discussed as the "worst case" accident. In fact, the likely consequences of a core melt would be no worse than many other kinds of accidents such as fires and airplanes crashes that society has experienced. While nuclear accidents with more severe consequences could be postulated, the study indicates that the probability of such events is extremely low and would require a highly unlikely combination of circumstances.

While the safety record of nuclear powerplants to date has been excellent, the increasing number of plants expected in the future dictates the need for industry and Government to be vigilant and strengthen their performance to assure that nuclear power plants will continue to provide a safe and reliable source of electrical energy. Over the years, the Joint Committee has devoted major attention, through the conduct of many hearings* and other means, to assure that nuclear power activities are carried out in a safe and environmentally acceptable manner. In this regard, the committee has strongly supported the major reactor safety research efforts underway in industry and Government to further increase understanding and knowledge in this field. The Congress has authorized a funding level of approximately \$100 million in fiscal year 1975 for such efforts. It is expected that the information from these programs will help provide an improved basis for estimating the probability and consequences of hypothetical major reactor accidents, and assist in preventing or mitigating the consequences of such highly unlikely accidents.

*Most recently, the Joint Committee held very comprehensive hearings on the subject of nuclear reactor safety. Testimony was received from representatives of the Government, the nuclear community, environmental organizations, other scientific and technical experts in the field and the public at large. The hearings were held on the following dates: Jan. 23, 1973; Sept. 25, 26, 27 and Oct. 1, 1973; and Jan. 22, 23, 24, and 28, 1974.

VIII. COMPARISON WITH OTHER FEDERAL PROGRAMS OF DISASTER ASSISTANCE AND INSURANCE

The Joint Committee examined the posture of other Federal programs for relief from disaster. The Federal government has become increasingly involved as the major underwriter of relief for losses due to natural disasters, principally flooding, hurricane and tornado damage. For example, in a ten-year period ending in 1972, allocations from the President's disaster fund totaled just over \$1.25 billion. In the first 2½ years of the Disaster Relief Act of 1970, 104 major disasters were declared, triggering expenditures from the President's fund of about \$1 billion, plus loans from two separately administered programs in excess of \$2 billion.

Recent legislation affecting both the Federal Disaster Assistance Administration¹ and the National Flood Insurance Program² has altered the Government's response to natural disaster, by emphasizing the role of insurance as the primary means of compensation for loss. In this sense, there is consistency with the amendments to the Price-Anderson legislation which are the subject of this report, whereby increased reliance is being placed upon private insurance pools and the licensees of nuclear facilities themselves for financial protection with a concomitant decrease in governmental involvement.

The Government's approach is consistent also in its emphasis on loss prevention. The National Flood Insurance Program, for example, provides for mandatory land use criteria for new construction within flood-prone areas. In the nuclear energy field, the rigid licensing process enforced by the Atomic Energy Commission and the surveillance activities of its regulatory division represent an unprecedented program of loss prevention.

It is clear from this examination that the Federal Government remains in the business of compensation in many fields, whether as reinsurer, coinsurer, indemnitor or provider of disaster relief. Insurance concepts become less valid as the frequency of events decreases and as the potential consequences increase.

With respect to the amendments to the Atomic Energy Act under consideration, it is envisioned that the Federal Government will retain its role as indemnitor for the uninsured portion of the statutory amount of \$560 million, and, after the combined totals of basic and excess insurance reach that figure and are allowed to float upward, as the ultimate guarantor for defaulted retrospective premiums, while retaining subrogated rights against the defaulting licensees.

It is important to note that of all of these Federal programs, only the Price-Anderson legislation provides for compensation to the public for personal injury as well as property damage. All of the other insurance and assistance programs are geared solely to property damage.

Finally, it should be pointed out that the panoply of Federal resources, other than monetary compensation, is available in the event of a large-scale nuclear accident, just as it would be in cases of natural disasters.

¹ P.L. 93-288, "Disaster Relief Act of 1974."

² P.L. 93-324, "Flood Disaster Protection Act of 1973."

IX. COST OF LEGISLATION

In accordance with section 252(a) of the Legislative Reorganization Act of 1970 (Public Law 91-510), the Joint Committee has determined that, with the exception of minimal administrative costs associated with determining the terms and conditions acceptable in the proposed retrospective premium plan, the Atomic Energy Commission will incur no additional costs as a result of carrying out this legislation; except that in the event of a nuclear incident involving a contractor or a licensee with whom an indemnity agreement has been executed, and resulting in damages exceeding the amount of financial protection required, the Commission may incur costs of up to \$500,000,000 for each such incident. The probability of such an incident occurring is considered extremely low. The potential cost to the Government of such an incident involving a licensee other than a nonprofit educational institution will be reduced over a period of years until it reaches essentially zero during the period 1981-1985. The potential liability for an incident involving a contractor or nonprofit educational institution will remain at a maximum of \$500,000,000 per incident. In addition, there will be potential costs to the Government in the event of defaults on retrospective premiums for which the Government serves as reinsurer, or as guarantor in cases where full recovery back against the defaulter is not possible.

X. SECTION-BY-SECTION ANALYSIS

Section 1 of the bill would amend subsection 11q. of the Atomic Energy Act of 1954, as amended, to alter the definition of "nuclear incident" as that term is used in subsection 170 d., by substituting the words "source, special nuclear, or byproduct material" for "a facility or device". Its purpose is to gain specificity and consistency. Section 1 of the bill would also amend subsection 11 q. to specially define "nuclear incident" as that term is used in subsection 170 c. The purpose of this amendment is to extend the full aggregate indemnity to offshore nuclear power plants and to shipments between licensees in the United States which are routed beyond territorial waters.

Section 1 of the bill would also amend subsection 11 t. of the Atomic Energy Act of 1954, as amended, by broadening the definition of "person indemnified", as that term is used in subsection 170 c., to include nuclear incidents outside the United States. This change preserves consistency within the Act. Section 1 would further amend subsection 11 t. by an alternative description of a "person indemnified" as a person "who is required to maintain financial protection". This provides for the situation in which the \$560 million limit on liability is provided wholly by private insurance protection, in which case the execution of an indemnity agreement may no longer be required.

Section 2 of the bill would amend subsection 170 a. of the Atomic Energy Act of 1954, as amended, by substituting the word "may" for "shall" in the second sentence. The purpose of this change is to provide consistency with subsection 170 c., as amended. Additional language has been added in the first sentence of subsection 170 a. to emphasize the public purposes of the Price-Anderson provisions, as stated in subsection 2 i. of the Act.

Section 3 of the bill would amend subsection 170 b. of the Atomic Energy Act of 1954, as amended, to provide authority for the Atomic Energy Commission to regulate the terms and conditions of nuclear liability insurance. This section requires the Commission by August 1, 1976, to include in determining the maximum amount of private liability insurance available any deferred premium plan which meets certain requirements. Any such plan must have a standard maximum retrospective premium within the range of \$2 million to \$5 million for each licensed facility required to maintain the maximum financial protection available from private sources. In addition, participation in the secondary layer must not be conditioned on provision of the basic financial protection through insurance means. This assures that an individual licensee may fulfill some or all of its base liability by means other than insurance and yet be eligible for the retrospective coverage.

Section 3 further requires the Commission to develop a plan to assure payment of such deferred premiums when due in the event of a nuclear incident, and authorizes the Commission to provide reinsurance or guaranty to assure the availability of funds despite any defaults in retrospective assessments. This provides, in effect, that the full amount to pay any liability will be available promptly with the government undertaking the burden of later recovery from the defaulter. In connection with the recovery of such funds, Section 3 authorizes the Commission to specify the terms of any guaranty agreement as appropriate to permit reimbursement, including liens on property and revenues of a defaulting licensee, and automatic revocation of any license.

Section 4 of the bill would amend subsection 170 c. of the Atomic Energy Act of 1954, as amended, by changing the date "August 1, 1977" wherever it appears to "August 1, 1987". The purpose of this amendment is to extend for 20 years the Price-Anderson legislation as it pertains to AEC licensees other than licensees subject to the provisions of subsections 170 k. or 170 l. of the Act.

Section 5 amends subsection 170 d. of the Atomic Energy Act of 1954, as amended, by extending until 1987 the authority of the Atomic Energy Commission to enter into indemnity agreements with its contractors.

Section 6 amends subsection 170 e. of the Atomic Energy Act of 1954, as amended, by providing that except as to incidents occurring outside the U.S. to which agreements of indemnification entered into under the provisions of subsection 170 d. are applicable, the limit on aggregate liability arising from a nuclear incident shall be either (1) \$500,000,000 plus the amount of financial protection required of the licensee, if the financial protection required is less than \$60,000,000 or (2) \$560,000,000, or the amount of financial protection required of the licensee, whichever is greater, in cases where the financial protection required is \$60,000,000 or more.

Section 7 amends subsection 170 f. of the Atomic Energy Act of 1954, as amended, to authorize the Commission to reduce the indemnity fee for persons with whom agreements of indemnification have been executed in reasonable relation to increases in financial protection above a level of \$60,000,000.

Section 8 amends subsection 170 i. of the Atomic Energy Act of 1954, as amended, to require a report by the Commission to the Congress on any nuclear incident which will probably result in public liability claims in excess of \$560,000,000. The Act presently provides for such a report for any nuclear incident which will probably result in payments by the United States.

Section 9 amends subsection 170 k. of the Atomic Energy Act to extend until 1987 the authority for the Commission to indemnify licensees found by the Commission to be nonprofit educational institutions for public liability in excess of \$250,000 arising from a nuclear incident.

Section 10 amends subsection 170 o. of the Atomic Energy Act of 1954, as amended, by authorizing and directing the establishment, in any plan for disposition of claims, of priorities between classes of claims and claimants, to the extent necessary to ensure the most equitable allocation of available funds.

Section 11 adds a new subsection 170 p. which provides that the Commission shall submit to the Congress by August 1, 1983, a report and recommendations concerning the need for continuation or modification of section 170 based upon relevant conditions at that time, including the condition of the nuclear industry, availability of private insurance, and the state of knowledge concerning nuclear safety at that time, among other factors.

Section 12 provides that the provisions of this bill shall not come into effect unless and until the Reactor Safety Study under the direction of Dr. Norman Rasmussen, WASH-1400, is completed and the Joint Committee has submitted to Congress its evaluation of that study. This provision does not preclude the Commission from preliminary efforts to prepare for implementation of the bill's provisions, but prevents the substantive changes from coming into force until the Joint Committee's report to the Congress on the Rasmussen Study.

XI. CHANGES IN EXISTING LAW

In accordance with subsection (4) of rule XXIX of the Standing Rules of the Senate, changes in existing law recommended by the bill accompanying this report are shown as follows (deleted matter is shown enclosed in black brackets and new matter is printed in italic; and existing law in which no change is proposed is shown in roman):

PUBLIC LAW 83-703

(Atomic Energy Act of 1954, as amended)

"SEC. 11. DEFINITIONS.—The intent of Congress in the definitions as given in this section should be construed from the words or phrases used in the definitions. As used in this Act:

* * * * *

"q. The term 'nuclear incident' means any occurrence, including an extraordinary nuclear occurrence, within the United States causing, within or outside the United States, bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive toxic,

explosive, or other hazardous properties of source, special nuclear, or byproduct material: *Provided, however*, That as the term is used in subsection 170 l, it shall include any such occurrence outside of the United States: *And provided further*, That as the term is used in subsection 170 d., it shall include any such occurrence outside the United States if such occurrence involves [a facility or device] source, special nuclear, or byproduct material owned by, and used by or under contract with, the United States: *And provided further*, That as the term is used in subsection 170 c., it shall include any such occurrence outside the United States if such occurrence arises out of or results from the radioactive toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material licensed pursuant to chapters 6, 7, 8, and 10 of this Act, other than for import or export or for nuclear ship propulsion, which takes place outside the territorial limits of the United States or any other nation."

* * * * *

"t. The term 'person indemnified' means (1) with respect to a nuclear incident occurring within the United States or outside the United States as the term is used in subsection 170 c., and with respect to any nuclear incident in connection with the design, development, construction, operation, repair, maintenance, or use of the nuclear ship Savannah, the person with whom an indemnity agreement is executed or who is required to maintain financial protection, and any other person who may be liable for public liability; or (2) with respect to any other nuclear incident occurring outside the United States, the person with whom an indemnity agreement is executed and any other person who may be liable for public liability by reason of his activities under any contract with the Commission or any project to which indemnification under the provisions of subsection 170 d. has been extended or under any subcontract, purchase order or other agreement, of any tier, under any such contract or project.

* * * * *

"SEC. 170. INDEMNIFICATION AND LIMITATION OF LIABILITY.—

"a. Each license issued under section 103 or 104 and each construction permit issued under section 185 shall, and each license issued under section 53, 63, or 81 may, for the public purposes cited in Section 2 i. of the Atomic Energy Act of 1954, as amended, have as a condition of the license a requirement that the licensee have and maintain financial protection of such type and in such amounts as the Commission in the exercise of its licensing and regulatory authority and responsibility shall require in accordance with subsection 170 b. to cover public liability claims. Whenever such financial protection is required, it [shall] may be a further condition of the license that the licensee execute and maintain an indemnification agreement in accordance with subsection 170 c. The Commission may require, as a further condition of issuing a license, that an applicant waive any immunity from public liability conferred by Federal or State law.

* * * * *

"b. The amount of financial protection required shall be the amount of liability insurance available from private sources, except that the Commission may establish a lesser amount on the basis of criteria set forth in writing, which it may revise from time to time,

taking into consideration such factors as the following: (1) the cost and terms of private insurance, (2) the type, size, and location of the licensed activity and other factors pertaining to the hazard, and (3) the nature and purpose of the licensed activity: *Provided, That for facilities designed for producing substantial amounts of electricity and having a rated capacity of 100,000 electrical kilowatts or more, the amount of financial protection required shall be the maximum amount available at reasonable cost and on reasonable terms from private sources. Such financial protection may include private insurance, private contractual indemnities, self insurance, other proof of financial responsibility, or a combination of such measures and shall be subject to such terms and conditions as the Commission may, by rule, regulation or order, prescribe. In prescribing such terms and conditions for licensees required to have and maintain financial protection equal to the maximum amount of liability insurance available from private sources, the Commission shall, by rule initially prescribed not later than August 1, 1976, include in determining such maximum amount, private liability insurance available under an industry retrospective rating plan providing for premium charges deferred in whole or major part until public liability from a nuclear incident exceeds, or appears likely to exceed, the level of the primary financial protection required of the licensee involved in the nuclear incident; Provided, That such insurance is available to, and required of, all of the licensees of such facilities without regard to the manner in which they obtain other types or amounts of such financial protection, And provided further, That the maximum amount of any deferred premium which may be charged following any nuclear incident under such a plan shall be not less than \$2 million nor more than \$5 million for each facility required to maintain the maximum amount of financial protection. The Commission is authorized to establish a maximum amount which the aggregate deferred premiums charged for each facility within any one year may not exceed. The Commission may establish amounts less than the standard maximum premium for individual facilities taking into account such factors as the facility's size, location, and other factors pertaining to the hazard. The Commission shall establish such requirements as are necessary to assure availability of funds to meet any assessment of deferred premiums within a reasonable time when due, and may provide reinsurance or otherwise guarantee the payment of such premiums in the event it is not feasible to establish procedures to assure their payment on a timely basis through the resources of private industry and insurance. Any agreement by the Commission with a licensee or indemnitor to guarantee the payment of deferred premiums may contain such terms as the Commission deems appropriate to carry out the purposes of this section and to assure reimbursement to the Commission for its payments made due to the failure of such licensee or indemnitor to meet any of its obligations arising under or in connection with financial protection required under this subsection, including without limitation terms creating liens upon the licensed facility and the revenues derived therefrom or any other property or revenues of such licensee to secure such reimbursement and consent to the automatic revocation of any license.*

* * * * *

"c. The Commission shall, with respect to licenses issued between August 30, 1954 and [August 1, 1977] August 1, 1987, for which it requires financial protection of less than \$560,000,000, agree to indemnify and hold harmless the licensee and other persons indemnified, as

their interest may appear, from public liability arising from nuclear incidents which is in excess of the level of financial protection required of the licensee. The aggregate indemnity for all persons indemnified in connection with each nuclear incident shall not exceed \$500,000,000 including the reasonable costs of investigating and settling claims and defending suits for damage: *Provided, however, That this amount of indemnity shall be reduced by the amount that the financial protection required shall exceed \$60,000,000. Such a contract of indemnification shall cover public liability arising out of or in connection with the licensed activity. With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and [August 1, 1977] August 1, 1987, the requirements of this subsection shall apply to any license issued for such facility subsequent to [August 1, 1977] August 1, 1987.*

* * * * *

"d. In addition to any other authority the Commission may have, the Commission is authorized until [August 1, 1977] August 1, 1987, to enter into agreements of indemnification with its contractors for the construction or operation of production or utilization facilities or other activities under contracts for the benefit of the United States involving activities under the risk of public liability for a substantial nuclear incident. In such agreements of indemnification the Commission may require its contractor to provide and maintain financial protection of such a type and in such amounts as the Commission shall determine to be appropriate to cover public liability arising out of or in connection with the contractual activity, and shall indemnify the persons indemnified against such claims above the amount of the financial protection required, in the amount of \$500,000,000, including the reasonable costs of investigating and settling claims and defending suits for damage in the aggregate for all persons indemnified in connection with such contract and for each nuclear incident: *Provided, That this amount of indemnity shall be reduced by the amount that the financial protection required shall exceed \$60,000,000: Provided further, That in the case of nuclear incidents occurring outside the United States, the amount of the indemnity provided by the Commission shall not exceed \$100,000,000. The provisions of this subsection may be applicable to lump sum as well as cost type contracts and to contracts and projects financed in whole or in part by the Commission. A contractor with whom an agreement of indemnification has been executed and who is engaged in activities connected with the underground detonation of a nuclear explosive device shall be liable, to the extent so indemnified under this section, for injuries or damage sustained as a result of such detonation in the same manner and to the same extent as would a private person acting as principal, and no immunity or defense founded in the Federal, State, or municipal character of the contractor or of the work to be performed under the contract shall be effective to bar such liability.*

* * * * *

"e. The aggregate liability for a single nuclear incident of persons indemnified, including the reasonable costs of investigating and settling claims and defending suits for damage, shall not exceed (1) the sum of \$500,000,000 together with the amount of financial protection required of the licensee or contractors or (2) if the amount of

financial protection required of the licensee exceeds \$60,000,000, [: Provided however, That] such aggregate liability shall [in] not [event] exceed the sum of \$560,000,000 or the amount of financial protection required of the licensee, whichever amount is greater: Provided [further], That with respect to any nuclear incident occurring outside of the United States to which an agreement of indemnification entered into under the provisions of subsection 170d is applicable, such aggregate liability shall not exceed the amount of \$100,000,000 together with the amount of financial protection required of the contractor.

* * * * *

"f. The Commission is authorized to collect a fee from all persons with whom an indemnification agreement is executed under this section. This fee shall be \$30 per year per thousand kilowatts of thermal energy capacity for facilities licensed under section 103: *Provided, That the Commission is authorized to reduce the fee for such facilities in reasonable relation to increases in financial protection above a level of \$60,000,000.* For facilities licensed under section 104, and for construction permits under section 185, the Commission is authorized to reduce the fee set forth above. The Commission shall establish criteria in writing for determination of the fee for facilities licensed under section 104, taking into consideration such factors as (1) the type, size, and location of facility involved, and other factors pertaining to the hazard, and (2) the nature and purpose of the facility. For other licenses, the Commission shall collect such nominal fees as it deems appropriate. No fee under this subsection shall be less than \$100 per year.

* * * * *

"i. After any nuclear incident which will probably require payments by the United States under this section or which will probably result in public liability claims in excess of \$560,000,000, the Commission shall make a survey of the causes and extent of damage which shall forthwith be reported to the Joint Committee, and, except as forbidden by the provisions of chapter 12 of this Act or any other law or Executive order, all final findings shall be made available to the public, to the parties involved and to the courts. The Commission shall report to the Joint Committee by April 1, 1958, and every year thereafter on the operations under this section.

* * * * *

"k. With respect to any license issued pursuant to section 53, 63, 81, 104 a. or 104 c. for the conduct of educational activities to a person found by the Commission to be a nonprofit educational institution, the Commission shall exempt such licensee from the financial protection requirement of subsection 170 a. With respect to licenses issued between August 30, 1954, and [August 1, 1977] August 1, 1987, for which the Commission grants such exemption:

"(1) the Commission shall agree to indemnify and hold harmless the licensee and other persons indemnified, as their interests may appear, from public liability in excess of \$250,000 arising from nuclear incidents. The aggregate indemnity for all persons indemnified in connection with each nuclear incident shall not exceed \$500,000,000, including the reasonable cost of investigating and settling claims and defending suits for damage;

"(2) such contracts of indemnification shall cover public liability arising out of or in connection with the licensed activity; and shall include damage to property of persons indemnified, except property which is located at the site of and used in connection with the activity where the nuclear incident occurs; and

"(3) such contracts of indemnification, when entered into with a licensee having immunity from public liability because it is a State agency, shall provide also that the Commission shall make payments under the contract on account of activities of the licensee in the same manner and to the same extent as the Commission would be required to do if the licensee were not such a State agency.

"Any licensee may waive an exemption to which it is entitled under this subsection. With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and [August 1, 1977] August 1, 1987, the requirements of this subsection shall apply to any license issued for such facility subsequent to [August 1, 1977] August 1, 1987.

* * * * *

"o. Whenever the United States district court in the district where a nuclear incident occurs, or the United States District Court for the District of Columbia in case of a nuclear incident occurring outside the United States, determines upon the petition of any indemnitor or other interested person that public liability from a single nuclear incident may exceed the limit of liability under subsection 170 e.:

"(1) Total payments made by or for all indemnitors as a result of such nuclear incident shall not exceed 15 per centum of such limit of liability without the prior approval of such court;

"(2) The court shall not authorize payments in excess of 15 per centum of such limit of liability unless the court determines that such payments are or will be in accordance with a plan of distribution which has been approved by the court or such payments are not likely to prejudice the subsequent adoption and implementation by the court of a plan of distribution pursuant to subparagraph (3) of this subsection (o); and

"(3) The Commission shall, and any other indemnitor or other interested person may, submit to such district court a plan for the disposition of pending claims and for the distribution of remaining funds available. Such a plan shall include an allocation of appropriate amounts for personal injury claims, property damage claims, and possible latent injury claims which may not be discovered until a later time, and shall include establishment of priorities between classes of claimants or claims, as necessary to ensure the most equitable allocation of available funds.

Such court shall have all power necessary to approve, disapprove, or modify plans proposed, or to adopt another plan; and to determine the proportionate share of funds available for each claimant. The Commission, any other indemnitor, and any person indemnified shall be entitled to such orders as may be appropriate to implement and enforce the provisions of this section, including orders limiting the liability of the persons indemnified, orders approving or modifying the plan, orders staying the payment of claims and the execution of court judgments, orders apportioning the payments to be made to claimants,

and orders permitting partial payments to be made before final determination of the total claims. The orders of such court shall be effective throughout the United States."

"p. The Commission shall submit to the Congress by August 1, 1983 a detailed report concerning the need for continuation of or modification to the provisions of this section, taking into account the condition of the nuclear industry, availability of private nuclear liability insurance, and the state of knowledge concerning nuclear safety at that time, among other relevant factors, and shall include recommendations as to the repeal or modification of any of the provisions of this section."

APPENDIX I

TABLE 1.—OPERATING REACTORS ASSESSED AT \$2,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total, assessment plus insurance	Remain AEC indemnity
1977.....	96	\$192	\$125	\$317	\$243
1978.....	112	224	125	349	211
1979.....	129	258	125	383	177
1980.....	146	292	125	417	143
1981.....	159	318	125	443	117
1982.....	179	358	125	483	77
1983.....	202	404	125	529	31
1984.....	228	456	125	581	0
1985.....	257	514	125	639	0
1986.....	283	566	125	691	0
1987.....	312	624	125	749	0
1988.....	342	684	125	809	0
1989.....	373	746	125	871	0
1990.....	407	814	125	939	0

¹ Based on estimates in WASH-1139 (December 1972).

TABLE 2.—OPERATING REACTORS ASSESSED AT \$3,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total, assessment plus insurance	Remain AEC indemnity
1977.....	96	\$288	\$125	\$413	\$147
1978.....	112	336	125	461	99
1979.....	129	387	125	512	48
1980.....	146	438	125	563	0
1981.....	151	477	125	602	0
1982.....	179	537	125	662	0
1983.....	202	606	125	731	0
1984.....	228	684	125	809	0
1985.....	257	771	125	896	0
1986.....	283	849	125	974	0
1987.....	312	936	125	1,061	0
1988.....	342	1,026	125	1,151	0
1989.....	373	1,119	125	1,244	0
1990.....	407	1,221	125	1,346	0

¹ Based on estimates in WASH-1139 (December 1972).

TABLE 3.—OPERATING REACTORS ASSESSED AT \$5,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total assessment plus insurance	Remain AEC indemnity
1977	96	\$480	\$125	\$605	0
1978	112	560	125	685	0
1979	129	645	125	770	0
1980	146	730	125	855	0
1981	159	795	125	920	0
1982	179	895	125	1,020	0
1983	202	1,010	125	1,135	0
1984	228	1,140	125	1,265	0
1985	257	1,285	125	1,410	0
1986	283	1,415	125	1,540	0
1987	312	1,560	125	1,685	0
1988	342	1,710	125	1,835	0
1989	373	1,865	125	1,990	0
1990	407	2,035	125	2,160	0

¹ Based on estimates in WASH-1139 (December 1972).

TABLE 4.—OPERATING REACTORS ASSESSED AT \$10,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total assessment plus insurance	Remain AEC indemnity
1977	96	\$960	\$125	\$1,085	0
1978	112	1,120	125	1,245	0
1979	129	1,290	125	1,415	0
1980	146	1,460	125	1,585	0
1981	159	1,590	125	1,715	0
1982	179	1,790	125	1,915	0
1983	202	2,020	125	2,145	0
1984	228	2,280	125	2,405	0
1985	257	2,570	125	2,695	0
1986	283	2,830	125	2,955	0
1987	312	3,120	125	3,245	0
1988	342	3,420	125	3,545	0
1989	373	3,730	125	3,855	0
1990	407	4,070	125	4,195	0

¹ Based on estimates in WASH-1139 (December 1972).

APPENDIX II

STATEMENT OF N. C. RASMUSSEN, DIRECTOR, REACTOR SAFETY
STUDY BEFORE THE JOINT COMMITTEE ON ATOMIC ENERGY HEARINGS ON PRICE-ANDERSON ACT, MAY 16, 1974

Mr. Chairman, I am Dr. Norman C. Rasmussen, Professor of Nuclear Engineering at the Massachusetts Institute of Technology. For the last year and a half I have been a consultant to the Atomic Energy Commission, and, during that time, I have been the director of a study to assess the risks to the public from accidents in nuclear power plants of the type being built in the United States today. I am happy to say that the study is now nearly complete. We are now in the process of reviewing and checking the numerous calculations in this risk analysis. Until that process is finished and we are completely satisfied that, to the best of our knowledge, the results are accurate, I do not think it would be appropriate to discuss the specific results in detail. I anticipate that a draft of this report will be issued for comment from interested parties early this summer. Nevertheless, I am prepared to discuss here today some general conclusions that the study has produced that may be useful to you in your consideration of the renewal of the Price-Anderson legislation.

Let me start by reviewing the nature of the risk to the public from power reactors, and then discuss factors that effect the magnitude of the consequences. The latter part of this testimony will discuss the broader question of the total risks to society and some of my personal observations about the insurance question.

An operating nuclear power station contains a large quantity of radioactivity which is produced by the nuclear processes that take place during its operation. The vast majority of this radioactivity is produced inside the uranium dioxide fuel. Relatively small amounts of radioactivity collect in other parts of the system during its operation. These sources outside the fuel are so small that their accidental release would not have a serious effect on the public health and safety, although they might contaminate the plant and its immediate surroundings and the decontamination process could represent an economic loss to the utility. In order to have an accident large enough to produce serious public consequences, it is necessary to release a significant fraction of the radioactivity contained within the fuel. Considerable experimental work has shown that to do this requires heating the fuel to its melting point of about 5,000° F.

The above facts have long been recognized by the designers, operators and regulators of nuclear reactors and so a great deal of attention has been paid to this problem with the intent of making the probability of accidents leading to core melt very small. Our study's preliminary indications are that the probability of such accidents is, indeed, quite small. Not surprisingly, however, we have identified some ways where

with modest effort the probability could apparently be made somewhat smaller if that is determined to be necessary. These matters will be discussed in detail in the final report and I shall not go into them in detail here today, pending our final review of all calculations.

Let me turn my attention now to the consequences of melting the core. The consequences of core melting depend principally upon three factors: (1) how much radioactivity gets released into the environment, (2) how this radioactivity gets dispersed in the environment by existing weather conditions, and (3) the number of people and the amount of property exposed.

The amount of radioactivity that gets released from the nuclear plant into the environment depends upon how much is released from the core during the melting process and how much of this is trapped inside the containment prior to its escape. All plants have provisions to trap radioactivity within the containment. In addition there are natural processes that lead to deposition of many of the radioactive species on the walls and other surfaces in the containment building. In most core melt accidents these processes would be expected to be quite effective in reducing the amount of radioactivity released. However if an analyst were asked that the worst possible release could be, he could imagine a series of unlikely circumstances where the processes for removing radioactivity would not be very effective and a much larger release would result. Our analysis of core melt accidents shows just this effect, namely, that the most likely course of events following core melt results in rather modest releases and larger releases are even less likely to occur. This means, of course, that the largest release is considerably less likely than the expected or typical release in such an accident.

Now let us consider the weather conditions that cause the dispersal of airborne radioactivity into the environment. There are many weather conditions in which there is very rapid dilution of released pollutants. Under these conditions even a large release would be dispersed so quickly that the public consequences would be rather small. Of course, during a small percent of the time, unfavorable weather conditions associated with strong inversions and low wind speeds exists. In such weather the radioactivity is diluted more slowly and public consequences can be more severe. Not only must this unfavorable weather exist, but it must continue to exist for many hours after the accident for the worst consequences to occur. Of course the likelihood of the most unfavorable weather, therefore, becomes quite small. Thus, as in the case of the release from containment, we find that the average weather effect for a large release is to produce modest consequences and more severe consequences are associated with weather conditions that are less likely to occur.

Next let us look at the people and property exposed. The number of people in a particular direction from a reactor site varies from close to zero for those directions out over the ocean or over large bodies of water to a few cases where the population density is several thousands of people per square mile within 10 or 20 miles of the site. Since the value of real property is about proportional to population density, both health effects and property damage will depend on the number of people over which the radioactivity is dispersed. An analysis of the population density near reactors shows that 90 percent of the area has populations a factor of 10 smaller than the highest and 50 percent has populations a factor of 100 less than the

highest. The very high populations cover only 1 percent of the area. Thus, given a release of radioactivity, we would expect the high population areas to be exposed 1 percent of the time and on the average (i.e., 50 percent of the time) the exposed population to be a factor of 100 smaller. This, of course, means that, other factors being equal, the consequence would be a factor of 100 less.

From the above discussion we see that three random factors, the type of release, the type of weather, and the population density exposed, affect the overall consequences of a core melt accident. On the average we have found that these combine to give modest consequences following core melt. Only under very unlikely circumstances would we expect to see the worst release combined with the worst weather combined with the highest population density exposed. Although the analysis done in WASH-740 showed a number of cases with very small consequences no attempt was made to estimate the likelihood of these cases relative to the worst case that was calculated. As a result attention focused on this worst case and many people came to believe that if a reactor core should melt these very serious consequences would surely result. From the above discussion we see this is not the case. In fact the likelihood of various consequences of a nuclear accident show a distribution that is characteristic of all other types of man-caused accidents which can be studied from historical data. That is, the likelihood of small consequences are much higher than the likelihood of large consequences, and the most likely consequence of a given type of accident is much smaller than the worst accident that clever people can imagine.

The nuclear industry is to some extent the victim of its excellent safety record. We have accumulated in the United States well over 1,500 reactor years of experience in water reactors. This includes about 200 reactor years with commercial power stations; the rest are military reactors. There has never been an accident that has led to injury of the public, let alone an accident involving core melting. Many critics of nuclear power take advantage of this lack of experience with serious accidents such as core melt by saying that if it occurs it will be a catastrophe in terms of public consequences. The catastrophe they describe is one associated with the worst set of events they can imagine, regardless of how unlikely the events. This has led to the belief by many people that power reactors present a public risk with consequences much larger than any of the other activities society pursues. Our study has shown that this is not the case, and, in fact, a number of other activities of society could produce under very unlikely circumstances accidents of similar consequences.

One example of interest regarding large non-nuclear risks in our society comes from the consideration of earthquakes. We have all heard of the very large 1906 San Francisco earthquake in which there were approximately 750 fatalities. The question has often been asked about what consequence an earthquake of a similar size would cause today. A recent study by the National Oceanic and Atmospheric Administration has estimated that an earthquake of such size could occur on the average of every 100 years and could cause fatalities in the range of 10,000 to 20,000.* The study also notes that if the earthquake were to also cause dam failures in the area another 10,000 or so people would be killed.

*"A Study of Earthquake Losses in the Los Angeles, California Area", prepared by NOAA for the Federal Disaster Assistance Administration, 1973.

Let me give another illustration of these points based on my own experience. During the last year I have asked many non-technical people what they feel is the largest possible consequence of an airplane crash in terms of fatalities. Almost all gave an answer in the range of 300 to 400. When asked how they arrived at this number most said they had heard of many airplane crashes and none had killed more people than 300, and, besides, the largest planes could carry only this number. I then pointed out it might be possible for two planes to collide. Most then revised the number upward to 600 or so. I then suggested that a plane might crash into a crowded place on the ground. Most then increased their estimate by 100 or so more. Finally I suggested that the crash might be into a crowded sports stadium and kill 10,000 or more. Although they recognized that this was hypothetically possible almost all felt it was unrealistic to believe that it would really ever happen. None of these people realized that the very serious postulated reactor accidents that they have heard about involve an even more unlikely combination of circumstances. This has come about because there has been a tendency, in the absence of any real experience with serious nuclear accidents, to ask what is the worst that could happen and clever people can think of some very unlikely combinations of circumstances. The safety philosophy applied to nuclear power plants which uses a number of hypothetical accidents to set safety design requirements has also been in part responsible for this.

I hope our study will help people understand that the most likely consequence of a core melt accident, which itself is unlikely, would be quite modest, in fact, no worse than many other kinds of accidents such as fires and airplane crashes that society has experienced. Just as it is possible to imagine an airplane crash producing 10 or 100 times more serious consequence than the average under a very unlikely set of circumstances, it is also possible to identify an unlikely set of circumstances in which reactor accidents could produce much more serious consequences.

The question that now arises is whether Price-Anderson legislation is needed. We now have about 40 nuclear plants in operation and more than 110 more under construction or on order. These 150 plants represent about a \$70 billion investment. According to several recent studies, they can be expected to produce electricity for about one-half a cent a kilowatt-hour less than fossil fuel plants at current fuel prices. If these plants have a load factor of 70 percent they will represent an annual saving to society of more than \$4 billion over the cost of electricity produced by fossil plants. It should thus be clear that, even if a reactor accident were to occur that caused significant property damage, the saving in cost of electricity due to use of nuclear power combined with the low likelihood of such an accident indicates that the property damage costs would not represent a large burden on our economy. It seems to me that by the middle 1980's the nuclear power industry should be quite capable of dealing with any loss it might possibly encounter.

I believe the present legislation you are considering, which provides for a gradual phasing-out of the Price-Anderson insurance and a take-over by the insurance pools and the nuclear industry, is a good approach to this problem. At this time, I see no reason for changing the current

\$560 million limit. Of course, completion of the Reactor Safety Study may shed more light on this matter.

While it is possible there may be nuclear accidents with more severe consequences, so are there accidents possible in many other industries that go beyond the levels of insurance obtainable. It is also possible to imagine very unlikely circumstances in many industries that would lead to public consequences beyond the financial capabilities of these companies. This is true of some of those companies that process and transport large quantities of explosive, poisonous, or flammable materials. It may also apply to some of those companies that supply large quantities of food and medicine.

Society accepts these risks because the commodity being handled is considered essential, because the event is so unlikely that it is not considered to be credible, or, perhaps in a few cases, because it is not understood how large the consequences might be.

Past history has shown that when natural or man-caused events such as this occur, society, usually through its government, acts to help the victims of the unfortunate event. I have no doubt that should an event of this type happen in the nuclear or any other industry the Congress and the Government would take whatever action was necessary to help those involved.

In summary, I believe that the proposal before you represents a reasonable way to phase out the Government responsibility for nuclear insurance and shift the responsibility to the insurance companies and the nuclear industry. I believe that the current \$560 million limit is reasonable value at this time and will cover all combinations of circumstances which can reasonably be considered credible. The National Safety Council now reports that accidents in the U.S. are currently causing 100,000 fatalities per year and an economic loss of \$30 billion per years. Any reasonable estimate of probability and consequences of nuclear accidents indicates that they would not have a significant impact on this already large accident burden that society bears.

REVISING AND AMENDING THE PRICE-
ANDERSON INDEMNITY PROVISIONS OF
THE ATOMIC ENERGY ACT OF 1954,
AS AMENDED

REPORT

BY THE

JOINT COMMITTEE ON ATOMIC ENERGY

TOGETHER WITH

SEPARATE VIEW

[To accompany H.R. 15323]



JUNE 18, 1974.—Committed to the Committee of the Whole House
on the State of the Union and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1974

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REVISING AND AMENDING THE PRICE-ANDERSON
INDEMNITY PROVISIONS OF THE ATOMIC ENERGY
ACT OF 1954, AS AMENDED

JUNE 18, 1974.—Committed to the Committee of the Whole House on the State
of the Union and ordered to be printed

Mr. PRICE of Illinois, from the Joint Committee on Atomic Energy,
submitted the following

REPORT

together with

SEPARATE VIEW ¹

[To accompany H.R. 15323]

The Joint Committee on Atomic Energy, having considered H.R. 15323, to amend Sections 11 and 170 of the Atomic Energy Act of 1954, as amended, hereby reports favorably thereon, with amendments, and recommends that the bill do pass.

The amendments to the bill (H.R. 15323) adopted by the Joint Committee in open mark-up session, June 13, 1974, are as follows:

Page 2, line 5: delete "Unted" and insert "United".

Page 5, line 14: delete the word "standard".

Page 5, line 16: after the word "charged", insert the phrase, "following any nuclear incident".

Page 5, line 18: Following the sentence ending with the word, "protection.", add a new sentence, to read as follows: "The Commission is authorized to establish a maximum amount which the aggregate deferred premiums charged for each facility within one year may not exceed."

Page 6, line 21: delete the figure "1997" and substitute therefor the figure "1987".

Page 6, line 22: Following line 22, insert the phrase, "August 1, 1977" in the last sentence wherever it appears".

Page 6, line 23: delete the figure "1997" and substitute therefor the figure "1987".

Page 7, line 2: delete the figure "1997" and substitute therefor the figure "1987".

¹ See p. 25.

Page 9, line 9: delete the figure "1997" and substitute therefor the figure "1987".

Page 9, line 20: delete the figure "1987" and substitute therefor "1983".

I. BACKGROUND

The Price-Anderson Act was enacted in 1957, and extended and amended in 1965 and 1966. The Act was designed to protect the public and the emerging nuclear industry by assuring the availability of funds for the payment of claims in the unlikely event of a catastrophic nuclear incident. Among other things, the Act provides funds for public liability in the event of a nuclear incident up to a total amount of \$560 million. This figure represents the sum of the amount of Government indemnity fixed at \$500 million by the Congress, and the then-existing (1957) maximum available private liability insurance, \$60 million. The amount of private insurance has gradually risen, so that it stands now at \$110 million; the Government's indemnity has commensurately decreased to \$450 million. Other features included in the Act by the amendments of 1966 are no-fault liability and provisions for accelerated payment of claims immediately upon occurrence of a nuclear incident.

Since the enactment of the Price-Anderson Act, there has not been a single accident which has resulted in indemnity payments for public injury under its provisions. This outstanding safety record has been accompanied by a gradual growth in the nuclear power industry which is now accelerating at a rapid pace. Thus the Price-Anderson Act has served well its dual purpose of protection of the public and elimination of a potential deterrent to the establishment of a nuclear industry.

The Act is scheduled to expire on August 1, 1977. Because of the long-lead times involved in planning new commitments to nuclear power, the Joint Committee has been urged to consider the matter of extension and possible modification of the Act during the present session of Congress in order to prevent an unwarranted disruption in the planning process for nuclear powerplants, such as might result from uncertainty over the future of the Price-Anderson Act. In order to permit early consideration in the current Congress, the Joint Committee in July 1973, requested the Commission to submit studies and alternative proposals in the indemnity area. In response to this call, the Atomic Energy Commission filed a broad based staff study in January 1974 and the Columbia University Legislative Drafting Fund submitted an independent review sponsored by the Atomic Industrial Forum. Months of informal interchange among members of the Joint Committee, the Atomic Energy Commission, and their staffs, and representatives of private industry and the general public culminated in public hearings beginning on January 31, 1974. On April 22, 1974, the Atomic Energy Commission forwarded to the Congress proposed legislation which was introduced as H.R. 14408 by Chairman Melvin Price of the Joint Committee on Atomic Energy on April 25, 1974, and as S. 3452 by Senator John O. Pastore, Vice-Chairman of the Joint Committee, on May 7, 1974. Additionally, a related bill, S. 3254 was introduced by Senator Mike Gravel on March 27, 1974.

Following public hearings, held on May 9, 10, 14, 15, and 16, 1974, the full committee met in executive session on June 11, 1974, and after careful consideration voted to submit a committee bill in lieu of the above-mentioned measures. The bill was introduced on June 11,

1974, by Chairman Price (for himself and Mr. Hosmer) as H.R. 15323. The Joint Committee met again on June 13, 1974, in open session and voted to report favorably on the bill with amendments by a roll call vote of 11 to 2.

II. HEARINGS

Public hearings on the possible modification or extension of the Price-Anderson Act were held on January 31, March 27 and 28, 1974, and hearings on H.R. 14408, S. 3254 and S. 3452 were held on May 9, 10, 14, 15, and 16, 1974. An informal planning committee, drawn from the Joint Committee staff, the Atomic Energy Commission, the legal profession, the commercial power and insurance industries, and public citizen groups, assisted the Committee and staff in regard to the scope of the hearings and potential witnesses.

The following witnesses from the Atomic Energy Commission appeared before the Joint Committee to present testimony or to assist in the development of the record: Dr. Dixy Lee Ray, Chairman; William O. Doub, Commissioner; Marcus Rowden, General Counsel; L. Manning Muntzing, Director of Regulation; and Jerome Saltzman, Deputy Chief, Office of Antitrust and Indemnity, Directorate of Licensing.

Other non-governmental witnesses who appeared one or more times are:

Elmer Dee Anderson, Private Citizen, Valparaiso, Indiana.

Dr. W. H. Arnold, Jr., General Manager, PWR Systems Division, Westinghouse Electric Company.

George K. Bernstein, Federal Insurance Administrator, HUD.

Arthur C. Gehr, Atomic Industrial Forum.

Frank P. Grad, Director, Legislative Drafting Research Fund, Columbia University.

Harold P. Green, Professor of Law, National Law Center, George Washington University.

Gerald R. Hartman, Professor of Insurance and Risk, Temple University.

Joseph F. Hennessey, Bechhoefer, Snapp and Trippe, Washington, D.C.

Larry Hobart, Assistant General Manager, American Public Power Association.

Mrs. Judith H. Johnsrud, Central Pennsylvania Committee on Nuclear Power.

Dr. Chauncey Kepford, York, Pennsylvania, representing the Environmental Coalition on Nuclear Power.

Hubert H. Nexon, Senior Vice-President, Commonwealth Edison Company, representing Edison Electric Institute.

Norman C. Rasmussen, Department of Nuclear Engineering, Massachusetts Institute of Technology.

Charles A. Robinson, Jr., Corporate Counsel, National Rural Electric Cooperative Association.

Mrs. Laurie R. Rockett, Greenbaum, Wolff and Ernst, New York City, New York.

Ms. Ann Roosevelt, New York, on behalf of Friends of the Earth.

Richard A. Schmalz, Hartford Insurance Group, representing Nuclear Electric Liability Insurance Association.

Chauncey Starr, Electric Power Research Institute.

Mark Swann, New Park, Pennsylvania.

Martin Victor, V.P. and Secretary, Babcock & Wilcox Company.
 Richard Walker, Partner, Arthur Andersen & Company.
 Bruce L. Welch, Director Environmental Studies, Friends Medical
 Science Research Center, Inc.

III. PROVISIONS OF CURRENT ACT

The Price-Anderson Act is incorporated in the Atomic Energy Act in Sections 2, 11, 53, and 170. Its major provisions are described below.

The Atomic Energy Commission must require as a condition for certain licenses, including those for nuclear power plants, that the licensee maintain financial protection for payment of third party liability claims in the event of a nuclear accident, in the amount required by the Commission. The AEC may also at its discretion require the protection for its contractors and other types of licensees. For any power reactor with an electric capacity of 100 Mwe or more the Commission must require financial protection equal to the maximum available from private sources. Currently this is \$110 million.

The Commission is also required to execute an indemnity agreement with its contractors and with each licensee required to maintain financial protection, agreeing to indemnify the licensee and any other parties liable for claims arising from a nuclear incident above the amount required, up to \$500 million. The indemnity agreement extends for the life of the license (usually 40 years for power reactors).

The aggregate liability for damages arising from a nuclear incident is limited to \$560 million within the U.S. and \$100 million plus the financial protection required of the licensee for incidents occurring outside the U.S. All vendors, architect-engineers, subcontractors, and other parties are protected from liability by the omnibus feature of the licensee insurance and the Government indemnity.

Non-profit educational institutions licensed to operate reactors are exempted from the financial protection requirement and are indemnified by the Commission for payment of claims exceeding \$250,000, in an amount up to \$500 million.

Damages to offsite property of the licensee are covered by the insurance and indemnity.

The Commission may require the inclusion in any insurance contract or other proof of financial protection and in its indemnity agreements of provisions waiving any defenses based upon conduct of the claimant or fault of the indemnified person, charitable or governmental immunity, or statutes of limitations which are shorter than a specified duration. The waivers apply in any instance where the Commission determines there has been an extraordinary nuclear occurrence, as defined by the Commission.

Provisions are also included for prompt payments to injured parties and for consolidation of all claims into a single Federal district court.

IV. STUDIES

Various groups have studied the problem of nuclear insurance and indemnity in the past year, and several reports and proposals were reviewed by the Atomic Energy Commission and the informal planning Committee headed by former AEC Commissioner James T. Ramey, serving as a consultant to the Joint Committee. The studies and proposals and related material are included in a Joint Committee

Print of March 1974 entitled, "Selected Materials on Atomic Energy Indemnity and Insurance Legislation".

The major studies were those by the Atomic Energy Commission and by the Legislative Drafting Research Fund of Columbia University. The latter, an independent study, resulted in a report December 12, 1973, entitled "Major Issues of Financial Protection in Nuclear Activities". Among the proposals which are included in the Joint Committee print and which were discussed in the AEC and Columbia studies was a proposal by the nuclear liability insurance pools for a retrospective premium insurance plan. This plan, modified somewhat, became the basis of legislation submitted to the Congress by the Atomic Energy Commission, subsequently introduced by Chairman Price in the House as H.R. 14408, and by Vice Chairman Pastore in the Senate as S. 3452, and which has been further modified by the Joint Committee into the bill now being reported.

Other proposals included a Commission staff study proposal for a contingent fee system, and proposals by former AEC General Counsel Joseph Hennessey, Professor Harold Green, and former Pennsylvania Insurance Commissioner Herbert S. Denenberg. These proposals are not discussed in this report, but can be found in the committee print described above, and were discussed during the hearings.

Senator Gravel's bill constituted an additional proposal which was considered at the hearings and is discussed in this report.

V. NEED FOR LEGISLATION

The Price-Anderson Act applies only to licenses issued prior to August, 1977. Nuclear power plants now in the planning and design phases would not receive construction permits until about 1977-1978. Thus there is uncertainty as to whether these plants would receive protection in the form of Government indemnity. Reactor manufacturers and architect-engineers are already requiring escape clauses in their contracts to permit cancellation in the event some form of protection from unlimited potential liability is not provided. Action is required soon to prevent disruption in utility plans for nuclear power.

The study by the Columbia University Legislative Drafting Research Fund examined the situation that would prevail if the Price-Anderson Act were to be allowed to expire. The study concluded that the resulting legal situation in the event of a nuclear incident would be chaotic. Injured parties would be subject to whatever tort law prevailed in the State in which the incident occurred or in which they suffered harm. There would be wide variation in the grounds for recovery, the standards of proof, and the defenses available to the defendants. Recovery would be uncertain and could be delayed for many years. The potential for unlimited liability might drive smaller manufacturers, architect-engineers, and component suppliers out of the nuclear business and could serve as a deterrent to entry by other firms. The report's conclusions were summarized as follows:

"The primary defect of this alternative is its failure to afford adequate protection to the public in terms of providing either a secure source of funds or a firm basis of legal liability. While it does have the theoretical advantage of placing no legal limit on amount of protection available, as a practical matter, the public would be less assured of compensation than under the Price-Anderson Act. Adoption of this alternative would also, for the

reasons discussed in Chapters 3 and 4, tend to discourage the participation of industry in the nuclear field. If in other respects Congress adopts a policy of continued encouragement, inaction with respect to financial protection will not advance, and will probably impede, this policy.

Assuming no significant change in the insurance patterns of the industry, this alternative also fails to meet the criterion of efficient and equitable cost allocation through risk spreading. With the possible exception of the approximately 100 million dollars insured by the insurance pools, the entire risk of an accident would fall, under the law of most states, either on the victim who was barred from recovery by a technical defense, failure of proof, or inability of the defendant to pay a judgment, or on the particular utility involved and possibly its contractors or suppliers, and on their consumers. And the entire cost would arise after the accident had occurred. This alternative thus makes use of little, if any, intertemporal and, initially, virtually no interpersonal spreading. Interpersonal spreading might be achieved later as the companies held liable shifted the cost onto their consumers. Although the allocation of liability to the industry does appear to meet the third criterion of internalization, to the extent that victims of an accident are unable to recover from the industry, even this criterion is not met. Finally, because of the potential problems plaintiffs may encounter in seeking damages under state law, recovery is likely to involve excessive time and expense. In sum, this alternative meets only one of the four basic criteria, that of internalization of costs, and meets that only in part".

The Joint Committee has received numerous letters from companies and organizations in the nuclear industry, urging extension of the Price-Anderson Act in its present or a modified form. These letters as well as testimony at the hearings have stressed the importance of the Act in removing a deterrent to development of the nuclear industry, and the need for prompt action to clarify the situation that will prevail after 1977.

VI. DISCUSSION OF BILL

The bill proposed by the Atomic Energy Commission provided for a ten-year extension of the Price-Anderson Act and for three major changes—(1) phase out of Government indemnity, (2) increase in limit of liability, and (3) extension of indemnity coverage outside the territorial limits of the United States for certain limited activities. The Committee generally concurs in the Commission's proposal except as described below.

A. PHASEOUT OF GOVERNMENT INDEMNITY

AEC Proposed Bill

The AEC Bill provides specific authorization for the commission to establish by rule, regulation or order the terms and conditions of the financial protection required of nuclear licensees. AEC proposes, under this authority, to require participation, by licensees who are required to maintain the maximum amount of financial protection, in an insurance retrospective rating plan whereby in the event of a nuclear incident resulting in damages

exceeding the base layer of insurance, each licensee would be assessed a deferred premium which would be a prorated share of the excess damages. A maximum amount would be established which the retrospective premiums for each facility could not exceed. If, for instance, at some time in the future, a maximum level of \$3 million per reactor were set and a total of 100 reactors had been licensed up to that time, then \$300 million would be available at that time to provide for payment of damages in this secondary layer over and above the base insurance. As more reactors were licensed, the secondary layer would increase proportionately. The Commission proposed to set the maximum premium by rule.

The Commission would continue to provide indemnity for payment of damages exceeding the combined primary and secondary layers, up to a total of \$560 million. As the secondary layer increased, it would gradually phase out the government indemnity. The date at which this would occur would depend on the amount set as the maximum premium and on the rate at which reactors were licensed. The tables in the appendix to this report illustrate how this phase out would occur for various premium levels.

The Commission proposes to require present licensees to enter into the retrospective premium plan under its authority to establish the maximum financial protection required. The Commission believes that this authority is sufficient to require the participation of such licensees in the plan.

S-3254

S. 3254 would immediately terminate the authority of the Commission to enter into agreements to indemnify licensees of nuclear power plants and other facilities. The Commission's authority to enter into indemnity agreements with its contractors would terminate on August 1, 1977. The financial protection requirements for licensees would remain. No specific treatment is given to licensees who have entered into indemnification agreements before that date.

Joint Committee Comments:

The Joint Committee has from the time of the inception of the Price-Anderson Act endorsed the concept of the assumption by the nuclear industry of the risks associated with nuclear incidents. The industry in its early stages of development, however, was not capable of assuming this unique risk, which has generally been considered to have extremely low probability but potentially large consequences. While the probabilities of severe nuclear accidents appear now to have been overestimated, the industry is just now reaching the point where the government's role can be phased out without the possibility of unduly disrupting the industry's development or of leaving the public with inadequate provision for relief from the highly improbable severe nuclear incident which the Act is designed to protect against. The Commission's proposal as embodied in the Joint Committee bill is considered the most expeditious means for the transfer of responsibility. An abrupt termination of Government protection

such as S-3254 provides for is not considered appropriate at this time, in light of the still relatively small number of nuclear reactors now licensed.

The Joint Committee desires that the Government indemnity be phased out as soon as is reasonably feasible. Consequently, the bill provides that the Commission must set the level of the standard maximum deferred premium at no less than \$2 million per facility. The Joint Committee has also established an upper level for the premium of \$5 million per facility. This limitation was considered necessary to assure that smaller utilities are not hampered in efforts to raise capital by a too-high potential liability. The bill thus establishes a range within which the Commission shall set the maximum premium taking into consideration the objectives on which these statutory limits were based and other pertinent factors. The range was further intended to enable the termination of the Government indemnity between about 1981 and 1985. The Commission is directed to consider this time frame as a guideline in establishing the premium.

The Commission is authorized to establish a maximum deferred premium lower than the standard premium for any facility based upon such considerations as size and location. This authorization is included to permit such variations if the Commission finds they are warranted.

The Joint Committee has added to the legislation a target date of August 1, 1976 for completion of Commission action to implement the deferred premium plan. This should provide ample time for a rulemaking proceeding.

Authority and direction has also been provided for the Commission to establish measures to ensure that the deferred premiums will be paid when they are called for following a nuclear incident. The Commission is directed to assure these payments to the maximum extent possible through the resources of the nuclear and insurance industries. Representatives of insurance companies indicate that the insurance pools could provide coverage for up to \$30 million in defaults initially, and that this sum could be increased later. The Joint Committee believes the industry and the AEC should make every effort to provide additional coverage by insurance and industry.

In order to prevent a potential gap between the public protection pledged and actual payments made, the Joint Committee added authorization for the Commission to serve as the ultimate assurance to the public for these payments, to the extent necessary. This may be done through reinsurance, guarantees, or other means. If the Commission should determine that a guarantee of payment is essential, authority has been provided to permit recovery by the Government from the defaulting licensee of any payments made on its behalf.

During the hearings on this legislation, a potential constitutional problem was raised as to public power organizations. Public power representatives testified that the retrospective premium arrangement might be construed to be in violation of some State constitutions, which prohibit a State or a subdivision

or agency of a State, such as a municipal utility, from lending its credit or making expenditures for other than public purposes. They suggested that preemption of this field by the Federal Government or explicit establishment of the premium system as a condition to obtaining a nuclear power plant license might resolve the problem.

The Committee feels that the language of Section 170, as amended by this bill, is clear in its establishment of participation in the retrospective premium system as a firm requirement of a licensee required to maintain the maximum financial protection.

The Joint Committee has strengthened the language of Section 170 to stress the Federal preemption of nuclear powerplant licensing and the public purposes of the premium system. Furthermore, the deferred premium should not be interpreted as establishing a responsibility by one licensee for a liability or debt of another. The potential deferred premiums are considered by the Joint Committee to have fundamentally the same status as any other such insurance premium. The committee has amended the bill to authorize the Commission to establish a maximum limit on the amount of deferred premiums which can be charged to a facility in any one year. The purpose of this amendment is to clarify the status of the premiums and to ensure that they can not be construed as the lending of credit and thus raise constitutional problems for some publicly owned utilities.

The Joint Committee concurs in the Commission's belief that the Commission's authority to establish the financial protection required is sufficient to require participation by present licensees in the deferred premium plan. The Joint Committee expects the Commission to do so. Exclusion of present licensees would result in confusion and would delay the date at which Government indemnity can be eliminated.

The Joint Committee modified the Commission's proposal by including requirements that the retrospective premium plan be available to licensees who elect to provide the basic financial protection through some means other than insurance, and a provision that the maximum financial protection required shall be that available under reasonable terms and conditions. The Commission is thus authorized not to require available insurance to the degree that it determines the rates or terms of such insurance to be unreasonable.

B. INCREASE IN LIMIT ON LIABILITY

AEC Proposed Bill

The Commission does not propose an immediate change in the \$560 million limit on total liability arising from a nuclear incident. It proposes to retain that limit until the total of primary insurance and assessable retrospective premiums reaches the level necessary to completely replace the Government indemnity. From the point, as the primary and secondary levels rise, the limit on liability would be allowed to rise correspondingly. No ultimate limitation on the level to which this coverage could rise is proposed. At a

premium level of \$3 million per reactor, the overall limit would be projected to reach a billion dollars in about 1987, and rise to \$1,346,000,000 in 1990. The Commission would have the continuing authority to establish a rule reducing the standard maximum premium as appropriate when it determines that the total financial protection has risen to an amount above which further increases are not necessary.

S-3254

S-3254 would eliminate the limit on liability entirely. The waiver of defense provisions would be retained. The result would be unlimited strict liability.

Joint Committee Comments:

The Joint Committee does not feel that any increase in or elimination of the limit is necessary or appropriate at this time. As the Joint Committee pointed out when the Act was first proposed:

"The limit of the Commission's responsibility under these (indemnity) agreements is to be \$500 million. This limit could be subject to upward revision by the Congress in the event of any one particular incident in which, after further congressional study, the Congress felt more appropriations would be in order.

* * * * *

"Subsec. e limits the liability of the persons indemnified for each nuclear incident to \$500 million, together with the amount of financial protection required. Of course, Congress can change this act at any time after any particular incident. The Joint Committee wanted to be sure that any such changes in the act would be considered by it in the light of the particular incident."

At the time the extension of the Act in 1965, the Joint Committee reiterated this point when it said:

"In the event of a national disaster of this magnitude, it is obvious that Congress would have to review the problem and take appropriate action. The history of other natural or man-made disasters, such as the Texas City incident, bears this out. The limitation of liability serves primarily as a device for facilitating further congressional review of such a situation, rather than an ultimate bar to further relief of the public."

Testimony on the preliminary results of the Reactor Safety Study under the direction of Professor Norman Rasmussen of the Massachusetts Institute of Technology has indicated that the probabilities of a nuclear incident are much lower and the likely consequences much less severe than has been thought previously (See Section VII of this report). The likelihood of an accident with damages exceeding \$560 million appears to be quite remote. However, the committee did decide to permit the limit to increase once the retrospective premiums assessable have completely replaced the government indemnity.

C. EXTENSION OF INDEMNITY COVERAGE OUTSIDE UNITED STATES TERRITORIAL LIMITS

AEC Proposed Legislation

The proposed legislation would amend the definitions of "nuclear incident" and "person indemnified" in section 11 of

the Atomic Energy Act to permit the Commission to extend the provisions of the Price-Anderson Act to certain activities outside the territorial limits of the United States conducted by commission contractors or involving licensed nuclear facilities or licensed activities. The Commission does not propose to include under Price-Anderson indemnity coverage the import or export of nuclear material or facilities or activities conducted within the territorial limits of another nation, nor any occurrence resulting from the use of a nuclear power reactor to propel a U.S. merchant ship, although nuclear material transported on such a ship as cargo could be covered by the Price-Anderson indemnity provisions in the same manner as cargo carried in ships powered by fossil fuel.

The existing definitions of "person indemnified" and "nuclear incident" do not permit indemnity protection for activities licensed by the Atomic Energy Commission if the nuclear incident occurs outside the territorial limits of the United States, with the exception of the now retired nuclear ship Savannah. There are two situations in which the Commission proposes that the protection afforded by the Price-Anderson Act with respect to licensed activities be extended to nuclear incidents occurring outside the territorial limits of the United States. The first situation involves ocean shipments of new or spent fuel which may move outside the territorial limits of the United States during ocean transit from one licensed nuclear facility to another. The second situation involves nuclear facilities which are physically located outside of the territorial limits of the United States but whose construction and operation are licensed by the Atomic Energy Commission, such as a floating nuclear power plant located beyond the limits of the territorial sea of the United States. The proposed legislation would authorize the Atomic Energy Commission to extend Price-Anderson indemnity protection to such shipments and such facilities.

Any indemnification agreements relating to these activities would be administered in the same manner as the Commission would administer the Price-Anderson Act with respect to other licensed activities.

The present definition of "nuclear incident" as applied to Commission contractors provides indemnity protection only if an occurrence outside the United States involves "a facility or device" owned by, and used by or under contract, with the United States. The amended definition would resolve any possible ambiguities concerning the Commission's authority to indemnify its contractors for any occurrence during the course of transporting source, special nuclear, or byproduct material outside the United States.

Joint Committee Comments:

The Joint Committee concurs in the Commission's proposals. With the apparent advent of offshore nuclear powerplants, it is essential that the protection intended by the Price-Anderson Act not be thwarted by the incidental fact of location beyond the U.S. territorial limits. Likewise, the shipment of nuclear materials from one licensed facility to another within the United States should be included in the Act's coverage regardless of whether

the facility or route involved is located or involves transportation outside the territorial limits.

Testimony at the hearings on this bill included suggestions that nuclear merchant ships be included in the act's coverage. The Joint Committee has not included those activities in this bill. The urgency of such inclusion is not considered sufficient to warrant legislation without a more detailed examination. The Joint Committee's decision not to take this action at this time is in no way intended to preclude further consideration at a later time.

D. ADDITIONAL CONSIDERATIONS

Duration of Extension

The Commission proposed a further 10-year extension of the Price-Anderson Act, as modified by this legislation. The Joint Committee concurs, and adds a provision for a formal review and report to Congress after six years, in 1983.

Activities Covered by Price-Anderson Act

Financial protection and indemnity for plutonium processing facilities is discretionary with the Commission under the present law. One witness at the hearings, a representative of a company which operates such a facility, proposed that these provisions of the Price-Anderson Act be made mandatory for such facilities. The Commission does not at this time require financial protection of such licensees or extend indemnity coverage to them. However, private liability insurance is available. The Commission has indicated that it will undertake a thorough review of this matter. The Joint Committee has not proposed a legislative change in this area, pending the outcome of this review. The Commission is urged to give appropriate consideration to this matter.

Transportation of nuclear materials is not specifically provided for under the Price-Anderson Act, although carriers are generally covered either as AEC contractors or under the omnibus aspects of licensee financial protection and indemnity. The Association of American Railroads has proposed that transportation be specifically covered because of gaps in the existing system for such situations as transportation of materials for a shipper or receiver not required to maintain financial protection. Although insurance is available to carriers, it is limited to the amount of \$60,000,000. The Joint Committee has not proposed legislation to deal with this matter, but encourages the Commission to review the situation to determine if procedural or legislative changes are in order.

Priorities Between Claimants and Types of Claims

The Joint Committee has included in the legislation a direction and authorization for the court which develops the plan for distribution of funds in the event of a nuclear incident which appears to have resulted in damages exceeding the limit on liability to establish priorities between classes of claims and claimants. The Joint Committee wishes to assure that in such a case, where the immediate recovery by claimants may be less than the full amount

of their losses, the distribution of funds will be made in such a manner as to compensate first for the most severe and the most readily computable losses. Thus claims for actual losses to property, for actual and reasonable medical expenses, for loss of wages, and other such losses may merit higher priority than such claims as those for alleged pain and suffering, emotional harm, and loss of consortium. Likewise, losses otherwise compensated for, while not precluded from recovery (under the collateral source rule) in most jurisdictions, should be accorded lower priority than uncompensated losses. The Joint Committee also believes that as a matter of equity, in cases where less than full compensation will be made through the amounts immediately available from insurance and government indemnity, losses to offsite property of the licensee of the responsible facility should be accorded lower priority than losses to third parties. The court is authorized to establish such additional priorities as are deemed desirable and equitable to further the principles described above.

The above provisions are in no way intended to create any causes of action not in accordance with existing law or to derogate any existing causes of action. Nor should these provisions be construed as a retreat from the belief expressed on many occasions by this Joint Committee that Congress is committed to thoroughly review the situation and to provide additional relief in the remote event of a nuclear incident involving damages in excess of the limit on liability. The priorities are not intended to preclude ultimate relief for claims of secondary priority, but rather to assure that early relief is applied where most needed.

VII. SAFETY OF NUCLEAR FACILITIES

Nuclear power plants contain large amounts of intensely radioactive materials which are produced by nuclear processes which take place during their operation. Practically all of these materials are produced and contained inside the reactor fuel. Multiple barriers are provided in nuclear plants to assure that undue amounts of radioactivity are not released to the environment in the event of malfunctions or accidents within the plant. The primary barriers are the reactor fuel itself; the cladding material which encases the fuel; the reactor pressure vessel and primary coolant boundary; and finally the outside containment system. In addition to these multiple barriers, each nuclear facility is equipped with a multiplicity of special safety systems and devices which are intended to either prevent accidents or mitigate their potential consequences. Extensive quality assurance programs covering all facets of each facility are followed to assure the initial establishment and continuing maintenance of plant integrity. A comprehensive description of nuclear power plants, their safety features, and the Government regulatory system is included in the AEC report "The Safety of Nuclear Power Reactors (Light Water Cooled) and Related Facilities"—Wash-1250.

As a result of this careful approach to the design and operation of nuclear power plants, coupled with a vigorous Government regulatory system, the overall safety record of the commercial nuclear power industry has been excellent. While there have been a number of minor malfunctions in operating plants, to date no accidents have occurred

which have resulted in deaths or injuries to the general public. Notwithstanding this record, the risk of major accidents cannot be said to be zero. There remains a small but finite probability that an accident may occur that could result in the release of major amounts of radioactivity to the environment.

In most human endeavors, it is possible to estimate the probability and consequences of major accidents based on past experience (statistics). In the case of nuclear power plants, due to the lack of major accident experience, numbers representing probabilities of severe accidents and associated consequences must be deduced or inferred by some indirect means. For the past decade or so, a number of individuals and groups have been exploring methods for estimating such probabilities. Until the early 1970's it has not been thought possible through statistical means to adequately estimate probabilities of reactor accidents, although it was believed that component failure statistics were feasible. Notwithstanding these considerations, the results of these studies have generally supported the judgments made by experts that the probabilities of severe reactor accidents are exceedingly low.

The improvements in the development of statistical methods in the space program and defense program in the past ten years have led to the belief that adequate statistical probabilities can be developed for nuclear plants. Perhaps the most comprehensive effort in this area so far is an AEC sponsored study which has been conducted over the past year and a half under the direction of Dr. Norman Rasmussen, Professor of Nuclear Engineering at the Massachusetts Institute of Technology. The Joint Committee has been closely following the conduct of this study, and has received testimony from Dr. Rasmussen on two occasions. In his most recent appearance before the committee, Dr. Rasmussen concluded his statement with the following remarks pertinent to considering the Price-Anderson legislation:

"In summary I believe that the proposal before you represents a reasonable way to phase out the Government responsibility for nuclear insurance and shift the responsibility to the insurance companies and the nuclear industry. I believe that the current \$560 million limit is a reasonable value at this time and will cover all combinations of circumstances which can reasonably be considered credible. The National Safety Council now reports that accidents in the U.S. are currently causing 100,000 fatalities per year and an economic loss of 30 billion dollars per year. Any reasonable estimate of probability and consequences of nuclear accidents indicates that they would not have a significant impact on this already large accident burden that society bears."

Although the Rasmussen study is not yet complete, general conclusions have been reached which confirm that the probability of major reactor accidents involving reactor core malfunctions is, indeed, quite small. It has been concluded that the most likely consequence of a core melt accident, which itself is highly unlikely, would be quite modest, in comparison with the catastrophic results generally discussed as the "worst case" accident. In fact, the likely consequences of a core melt would be no worse than many other kinds of accidents such as fires and airplane crashes that society has experienced. While nuclear accidents with more severe consequences could be postulated, the study indicates that the probability of such events is extremely low and would require a highly unlikely combination of circumstances.

While the safety record of nuclear powerplants to date has been excellent, the increasing number of plants expected in the future dictates the need for industry and Government to be vigilant and strengthen their performance to assure that nuclear power plants will continue to provide a safe and reliable source of electrical energy. Over the years, the Joint Committee has devoted major attention, through the conduct of many hearings* and other means, to assure that nuclear power activities are carried out in a safe and environmentally acceptable manner. In this regard, the committee has strongly supported the major reactor safety research efforts underway in industry and Government to further increase understanding and knowledge in this field. The Congress has authorized a funding level of approximately \$100 million in fiscal year 1975 for such efforts. It is expected that the information from these programs will help provide an improved basis for estimating the probability and consequences of hypothetical major reactor accidents, and assist in preventing or mitigating the consequences of such highly unlikely accidents.

VIII. COMPARISON WITH OTHER FEDERAL PROGRAMS OF DISASTER ASSISTANCE AND INSURANCE

The Joint Committee examined the posture of other Federal programs for relief from disaster. The Federal government has become increasingly involved as the major underwriter of relief for losses due to natural disasters, principally flooding, hurricane and tornado damage. For example, in a ten-year period ending in 1972, allocations from the President's disaster fund totaled just over \$1.25 billion. In the first 2½ years of the Disaster Relief Act of 1970, 104 major disasters were declared, triggering expenditures from the President's fund of about \$1 billion, plus loans from two separately administered programs in excess of \$2 billion.

Recent legislation affecting both the Federal Disaster Assistance Administration¹ and the National Flood Insurance Program² has altered the Government's response to natural disaster, by emphasizing the role of insurance as the primary means of compensation for loss. In this sense, there is consistency with the amendments to the Price-Anderson legislation which are the subject of this report, whereby increased reliance is being placed upon private insurance pools and the licensees of nuclear facilities themselves for financial protection with a concomitant decrease in governmental involvement.

The Government's approach is consistent also in its emphasis on loss prevention. The National Flood Insurance Program, for example, provides for mandatory land use criteria for new construction within flood-prone areas. In the nuclear energy field, the rigid licensing process enforced by the Atomic Energy Commission and the surveillance activities of its regulatory division represent an unprecedented program of loss prevention.

*Most recently, the Joint Committee held very comprehensive hearings on the subject of nuclear reactor safety. Testimony was received from representatives of the Government, the nuclear community, environmental organizations, other scientific and technical experts in the field and the public at large. These hearings were held on the following dates: Jan. 23, 1973; Sept. 25, 26, 27 and Oct. 1, 1973; and Jan. 22, 23, 24, and 28, 1974.

¹ P.L. 93-288, "Disaster Relief Act of 1974."

² P.L. 93-324, "Flood Disaster Protection Act of 1973."

It is clear from this examination that the Federal Government remains in the business of compensation in many fields, whether as reinsurer, coinsurer, indemnitor or provider of disaster relief. Insurance concepts become less valid as the frequency of events decreases and as the potential consequences increase.

With respect to the amendments to the Atomic Energy Act under consideration, it is envisioned that the Federal Government will retain its role as indemnitor for the uninsured portion of the statutory amount of \$560 million, and, after the combined totals of basic and excess insurance reach that figure and are allowed to float upward, as the ultimate guarantor for defaulted retrospective premiums, while retaining subrogated rights against the defaulting licensees.

It is important to note that of all of these Federal programs, only the Price-Anderson legislation provides for compensation to the public for personal injury as well as property damage. All of the other insurance and assistance programs are geared solely to property damage.

Finally, it should be pointed out that the panoply of Federal resources, other than monetary compensation, is available in the event of a large-scale nuclear accident, just as it would be in cases of natural disasters.

IX. COST OF LEGISLATION

Pursuant to Clause 7 of Rule XIII of the Rules of the House of Representatives, the Joint Committee has determined that, with the exception of minimal administrative costs associated with determining the terms and conditions acceptable in the proposed retrospective premium plan, the Atomic Energy Commission will incur no additional costs as a result of carrying out this legislation; except that in the event of a nuclear incident involving a contractor or a licensee with whom an indemnity agreement has been executed, and resulting in damages exceeding the amount of financial protection required, the Commission may incur costs of up to \$500,000,000 for each such incident. The probability of such an incident occurring is considered extremely low. The potential cost to the Government of such an incident involving a licensee other than a nonprofit educational institution will be reduced over a period of years until it reaches essentially zero during the period 1981-1985. The potential liability for an incident involving a contractor or nonprofit educational institution will remain at a maximum of \$500,000,000 per incident. In addition, there will be potential costs to the Government in the event of defaults on retrospective premiums for which the Government serves as reinsurer, or as guarantor in cases where full recovery back against the defaulter is not possible.

X. SECTION-BY-SECTION ANALYSIS

Section 1 of the bill would amend subsection 11q. of the Atomic Energy Act of 1954, as amended, to alter the definition of "nuclear incident" as that term is used in subsection 170 d., by substituting the words "source, special nuclear, or byproduct material" for "a facility or device". Its purpose is to gain specificity and consistency. Section 1 of the bill would also amend subsection 11 q. to specially define "nuclear incident" as that term is used in subsection 170 c. The purpose of this amendment is to extend the full aggregate indemnity to off-

shore nuclear power plants and to shipments between licensees in the United States which are routed beyond territorial waters.

Section 1 of the bill would also amend subsection 11 t. of the Atomic Energy Act of 1954, as amended, by broadening the definition of "person indemnified", as that term is used in subsection 170 c., to include nuclear incidents outside the United States. This change preserves consistency within the Act. Section 1 would further amend subsection 11 t. by an alternative description of a "person indemnified" as a person "who is required to maintain financial protection". This provides for the situation in which the \$560 million limit on liability is provided wholly by private insurance protection, in which case the execution of an indemnity agreement may no longer be required.

Section 2 of the bill would amend subsection 170 a. of the Atomic Energy Act of 1954, as amended, by substituting the word "may" for "shall" in the second sentence. The purpose of this change is to provide consistency with subsection 170 c., as amended. Additional language has been added in the first sentence of subsection 170 a. to emphasize the public purposes of the Price-Anderson provisions, as stated in subsection 2 i. of the Act.

Section 3 of the bill would amend subsection 170 b. of the Atomic Energy Act of 1954, as amended, to provide authority for the Atomic Energy Commission to regulate the terms and conditions of nuclear liability insurance. This section requires the Commission by August 1, 1976, to include in determining the maximum amount of private liability insurance available any deferred premium plan which meets certain requirements. Any such plan must have a standard maximum retrospective premium within the range of \$2 million to \$5 million for each licensed facility required to maintain the maximum financial protection available from private sources. In addition, participation in the secondary layer must not be conditioned on provision of the basic financial protection through insurance means. This assures that an individual licensee may fulfill some or all of its base liability by means other than insurance and yet be eligible for the retrospective coverage.

Section 3 further requires the Commission to develop a plan to assure payment of such deferred premiums when due in the event of a nuclear incident, and authorizes the Commission to provide reinsurance or guaranty to assure the availability of funds despite any defaults in retrospective assessments. This provides, in effect, that the full amount to pay any liability will be available promptly with the government undertaking the burden of later recovery from the defaulter. In connection with the recovery of such funds, Section 3 authorizes the Commission to specify the terms of any guaranty agreement as appropriate to permit reimbursement, including liens on property and revenues of a defaulting licensee, and automatic revocation of any license.

Section 4 of the bill would amend subsection 170 c. of the Atomic Energy Act of 1954, as amended, by changing the date "August 1, 1977" wherever it appears to "August 1, 1987". The purpose of this amendment is to extend for 20 years the Price-Anderson legislation as it pertains to AEC licensees other than licensees subject to the provisions of subsections 170 k. or 170 l. of the Act.

Section 5 amends subsection 170 d. of the Atomic Energy Act of 1954, as amended, by extending until 1987 the authority of the Atomic Energy Commission to enter into indemnity agreements with its contractors.

Section 6 amends subsection 170 e. of the Atomic Energy Act of 1954, as amended, by providing that except as to incidents occurring outside the U.S. to which agreements of indemnification entered into under the provisions of subsection 170 d. are applicable, the limit on aggregate liability arising from a nuclear incident shall be either (1) \$500,000,000 plus the amount of financial protection required of the licensee, if the financial protection required is less than \$60,000,000 or (2) \$560,000,000, or the amount of financial protection required of the licensee, whichever is greater, in cases where the financial protection required is \$60,000,000 or more.

Section 7 amends subsection 170 f. of the Atomic Energy Act of 1954, as amended, to authorize the Commission to reduce the indemnity fee for persons with whom agreements of indemnification have been executed in reasonable relation to increases in financial protection above a level of \$60,000,000.

Section 8 amends subsection 170 i. of the Atomic Energy Act of 1954, as amended, to require a report by the Commission to the Congress on any nuclear incident which will probably result in public liability claims in excess of \$560,000,000. The Act presently provides for such a report for any nuclear incident which will probably result in payments by the United States.

Section 9 amends subsection 170 k. of the Atomic Energy Act to extend until 1987 the authority for the Commission to indemnify licensees found by the Commission to be nonprofit educational institutions for public liability in excess of \$250,000 arising from a nuclear incident.

Section 10 amends subsection 170 o. of the Atomic Energy Act of 1954, as amended, by authorizing and directing the establishment, in any plan for disposition of claims, of priorities between classes of claims and claimants, to the extent necessary to ensure the most equitable allocation of available funds.

Section 11 adds a new subsection 170 p. which provides that the Commission shall submit to the Congress by August 1, 1983, a report and recommendations concerning the need for continuation or modification of section 170 based upon relevant conditions at that time, including the condition of the nuclear industry, availability of private insurance, and the state of knowledge concerning nuclear safety at that time, among other factors.

XI. CHANGES IN EXISTING LAW

In compliance with clause (3) of rule XIII of the Rules of the House of Representatives, changes in existing law recommended by the bill accompanying this report are shown as follows (deleted material is enclosed in black brackets and new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

PUBLIC LAW 83-703

(Atomic Energy Act of 1954, as amended)

"SEC. 11. DEFINITIONS.—The intent of Congress in the definitions as given in this section should be construed from the words or phrases used in the definitions. As used in this Act:

* * * * *

"q. The term 'nuclear incident' means any occurrence, including an extraordinary nuclear occurrence, within the United States causing, within or outside the United States, bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material: *Provided however*, That as the term is used in subsection 170. l, it shall include any such occurrence outside of the United States: *And provided further*, That as the term is used in subsection 170 d., it shall include any such occurrence outside the United States if such occurrence involves [a facility or device] *source, special nuclear, or byproduct material* owned by, and used by or under contract with, the United States: *And provided further*, That as the term is used in subsection 170 c., it shall include any such occurrence outside the United States if such occurrence arises out of or results from the radioactive, toxic, explosive or other hazardous properties of source, special nuclear or byproduct material licensed pursuant to Chapters 6, 7, 8 and 10 of this Act, other than for import or export or for nuclear ship propulsion, which takes place outside the territorial limits of the United States or any other nation.

* * * * *

"t. The term 'person indemnified' means (1) with respect to a nuclear incident occurring within the United States or outside the United States as the term is used in subsection 170 c., and with respect to any nuclear incident in connection with the design, development, construction, operation, repair, maintenance, or use of the nuclear ship Savannah, the person with whom an indemnity agreement is executed or who is required to maintain financial protection, and any other person who may be liable for public liability; or (2) with respect to any other nuclear incident occurring outside the United States, the person with whom an indemnity agreement is executed and any other person who may be liable for public liability by reason of his activities under any contract with the Commission or any project to which indemnification under the provisions of subsection 170 d. has been extended or under any subcontract, purchase order or other agreement, of any tier, under any such contract or project.

* * * * *

"SEC. 170. INDEMNIFICATION AND LIMITATION OF LIABILITY.—

"a. Each license issued under section 103 or 104 and each construction permit issued under section 185 shall, and each license issued under section 53, 63, or 81 may, for the public purposes cited in Section 2 i of the Atomic Energy Act of 1954, as amended, have as a condition of the license a requirement that the licensee have and maintain financial protection of such type and in such amounts as the Commission in the exercise of its licensing and regulatory authority and responsibility shall require in accordance with subsection 170 b. to cover public liability claims. Whenever such financial protection is required, it [shall] may be a further condition of the license that the licensee execute and maintain an indemnification agreement in accordance with subsection 170 c. The Commission may require, as a further condition of issuing a license, that an applicant waive any immunity from public liability conferred by Federal or State law.

* * * * *

"b. The amount of financial protection required shall be the amount of liability insurance available from private sources, except that the Commission may establish a lesser amount on the basis of criteria set forth in writing, which it may revise from time to time, taking into consideration such factors as the following: (1) the cost and terms of private insurance, (2) the type, size, and location of the licensed activity and other factors pertaining to the hazard, and (3) the nature and purpose of the licensed activity *Provided*, That for facilities designed for producing substantial amounts of electricity and having a rated capacity of 100,000 electrical kilowatts or more, the amount of financial protection required shall be the maximum amount available at reasonable cost and on reasonable terms from private sources. Such financial protection may include private insurance, private contractual indemnities, self insurance, other proof of financial responsibility, or a combination of such measures and shall be subject to such terms and conditions as the Commission may, by rule, regulation or order, prescribe. In prescribing such terms and conditions for licensees required to have and maintain financial protection equal to the maximum amount of liability insurance available from private sources, the Commission shall, by rule initially prescribed not later than August 1, 1976, include in determining such maximum amount, private liability insurance available under an industry retrospective rating plan providing for premium charges deferred in whole or major part until public liability from a nuclear incident exceeds, or appears likely to exceed, the level of the primary financial protection required of the licensee involved in the nuclear incident; *Provided*, That such insurance is available to, and required of, all of the licensees of such facilities without regard to the manner in which they obtain other types or amounts of such financial protection, And provided further, That the maximum amount of any deferred premium which may be charged following any nuclear incident under such a plan shall be not less than \$2 million nor more than \$5 million for each facility required to maintain the maximum amount of financial protection. The Commission is authorized to establish a maximum amount which the aggregate deferred premiums charged for each facility within any one year may not exceed. The Commission may establish amounts less than the standard maximum premium for individual facilities taking into account such factors as the facility's size, location, and other factors pertaining to the hazard. The Commission shall establish such requirements as are necessary to assure availability of funds to

meet any assessment of deferred premiums within a reasonable time when due, and may provide reinsurance or otherwise guarantee the payment of such premiums in the event it is not feasible to establish procedures to assure their payment on a timely basis through the resources of private industry and insurance. Any agreement by the Commission with a licensee or indemnitor to guarantee the payment of deferred premiums may contain such terms as the Commission deems appropriate to carry out the purposes of this section and to assure reimbursement to the Commission for its payments made due to the failure of such licensee or indemnitor to meet any of its obligations arising under or in connection with financial protection required under this subsection, including without limitation terms creating liens upon the licensed facility and the revenues derived therefrom or any other property or revenues of such licensee to secure such reimbursement and consent to the automatic revocation of any license.

* * * * *

"c. The Commission shall, with respect to licenses issued between August 30, 1954, and [August 1, 1977] August 1, 1987, for which it requires financial protection of less than \$560,000,000, agree to indemnify and hold harmless the licensee and other persons indemnified, as their interest may appear, from public liability arising from nuclear incidents which is in excess of the level of financial protection required of the licensee. The aggregate indemnity for all persons indemnified in connection with each nuclear incident shall not exceed \$500,000,000 including the reasonable costs of investigating and settling claims and defending suits for damage: *Provided, however*, That this amount of indemnity shall be reduced by the amount that the financial protection required shall exceed \$60,000,000. Such a contract of indemnification shall cover public liability arising out of or in connection with the licensed activity. With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and [August 1, 1977] August 1, 1987, the requirements of this subsection shall apply to any license issued for such facility subsequent to [August 1, 1977] August 1, 1987.

* * * * *

"d. In addition to any other authority the Commission may have, the Commission is authorized until [August 1, 1977] August 1, 1987, to enter into agreements of indemnification with its contractors for the construction or operation of production or utilization facilities or other activities under contracts for the benefit of the United States involving activities under the risk of public liability for a substantial nuclear incident. In such agreements of indemnification the Commission may require its contractor to provide and maintain financial protection of such a type and in such amounts as the Commission shall determine to be appropriate to cover public liability arising out of or in connection with the contractual activity, and shall indemnify the persons indemnified against such claims above the amount of the financial protection required, in the amount of \$500,000,000, including the reasonable costs of investigating and settling claims and defending suits for damage in the aggregate for all persons indemnified in connection with such contract and for each nuclear incident: *Provided*, That this amount of indemnity shall be reduced by the amount that

the financial protection required shall exceed \$60,000,000: *Provided further*, That in the case of nuclear incidents occurring outside the United States, the amount of the indemnity provided by the Commission shall not exceed \$100,000,000. The provisions of this subsection may be applicable to lump sum as well as cost type contracts and to contracts and projects financed in whole or in part by the Commission. A contractor with whom an agreement of indemnification has been executed and who is engaged in activities connected with the underground detonation of a nuclear explosive device shall be liable, to the extent so indemnified under this section, for injuries or damage sustained as a result of such detonation in the same manner and to the same extent as would a private person acting as principal, and no immunity or defense founded in the Federal, State, or municipal character of the contractor or of the work to be performed under the contract shall be effective to bar such liability.

* * * * *

"e. The aggregate liability for a single nuclear incident of persons indemnified, including the reasonable costs of investigating and settling claims and defending suits for damage, shall not exceed (1) the sum of \$500,000,000 together with the amount of financial protection required of the licensee or contractor or (2) if the amount of financial protection required of the licensee exceeds \$60,000,000, [*Provided however, That*] such aggregate liability shall [in] not [event] exceed the sum of \$560,000,000 or the amount of financial protection required of the licensee, whichever amount is greater: *Provided [further]*, That with respect to any nuclear incident occurring outside of the United States to which an agreement of indemnification entered into under the provisions of subsection 170d. is applicable, such aggregate liability shall not exceed the amount of \$100,000,000 together with the amount of financial protection required of the contractor.

* * * * *

"f. The Commission is authorized to collect a fee from all persons with whom an indemnification agreement is executed under this section. This fee shall be \$30 per year per thousand kilowatts of thermal energy capacity for facilities licensed under section 103: *Provided, That the Commission is authorized to reduce the fee for such facilities in reasonable relation to increases in financial protection above a level of \$60,000,000.* For facilities licensed under section 104, and for construction permits under section 185, the Commission is authorized to reduce the fee set forth above. The Commission shall establish criteria in writing for determination of the fee for facilities licensed under section 104, taking into consideration such factors as (1) the type, size, and location of facility involved, and other factors pertaining to the hazard, and (2) the nature and purpose of the facility. For other licenses, the Commission shall collect such nominal fees as it deems appropriate. No fee under this subsection shall be less than \$100 per year.

* * * * *

"i. After any nuclear incident which will probably require payments by the United States under this section or which will probably result in public liability claims in excess of \$560,000,000, the Commission shall

make a survey of the causes and extent of damage which shall forthwith be reported to the Joint Committee, and, except as forbidden by the provisions of chapter 12 of this Act or any other law or Executive order, all final findings shall be made available to the public, to the parties involved and to the courts. The Commission shall report to the Joint Committee by April 1, 1958, and every year thereafter on the operations under this section.

* * * * *

"k. With respect to any license issued pursuant to section 53, 63, 81, 104 a. or 104 c. for the conduct of educational activities to a person found by the Commission to be a nonprofit educational institution, the Commission shall exempt such licensee from the financial protection requirement of subsection 170 a. With respect to licenses issued between August 30, 1954, and [August 1, 1977] *August 1, 1987*, for which the Commission grants such exemption:

(1) the Commission shall agree to indemnify and hold harmless the licensee and other persons indemnified, as their interests may appear, from public liability in excess of \$250,000 arising from nuclear incidents. The aggregate indemnity for all persons indemnified in connection with each nuclear incident shall not exceed \$500,000,000, including the reasonable cost of investigating and settling claims and defending suits for damage;

"(2) such contracts of indemnification shall cover public liability arising out of or in connection with the licensed activity; and shall include damage to property of persons indemnified, except property which is located at the site of and used in connection with the activity where the nuclear incident occurs; and

(3) such contracts of indemnification, when entered into with a licensee having immunity from public liability because it is a State agency, shall provide also that the Commission shall make payments under the contract on account of activities of the licensee in the same manner and to the same extent as the Commission would be required to do if the licensee were not such a State agency.

Any licensee may waive an exemption to which it is entitled under this subsection. With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and [August 1, 1977] *August 1, 1987*, the requirements of this subsection shall apply to any license issued for such facility subsequent to [August 1, 1977] *August 1, 1987*.

* * * * *

"o. Whenever the United States district court in the district where a nuclear incident occurs, or the United States District Court for the District of Columbia in case of a nuclear incident occurring outside the United States, determines upon the petition of any indemnitor or other interested person that public liability from a single nuclear incident may exceed the limit of liability under subsection 170 e.:

(1) Total payments made by or for all indemnitors as a result of such nuclear incident shall not exceed 15 per centum of such limit of liability without the prior approval of such court;

(2) The court shall not authorize payments in excess of 15 per centum of such limit of liability unless the court determines that

such payments are or will be in accordance with a plan of distribution which has been approved by the court or such payments are not likely to prejudice the subsequent adoption and implementation by the court of a plan of distribution pursuant to subparagraph (3) of this subsection (o); and

(3) The Commission shall, and any other indemnitor or other interested person may, submit to such district court a plan for the disposition of pending claims and for the distribution of remaining funds available. Such a plan shall include an allocation of appropriate amounts for personal injury claims, property damage claims, and possible latent injury claims which may not be discovered until a later time, and shall include establishment of priorities between classes of claimants or claims, as necessary to ensure the most equitable allocation of available funds.

Such court shall have all power necessary to approve, disapprove, or modify plans proposed, or to adopt another plan; and to determine the proportionate share of funds available for each claimant. The Commission, any other indemnitor, and any person indemnified shall be entitled to such orders as may be appropriate to implement and enforce the provisions of this section, including orders limiting the liability of the persons indemnified, orders approving or modifying the plan, orders staying the payment of claims and the execution of court judgments, orders apportioning the payments to be made to claimants, and orders permitting partial payments to be made before final determination of the total claims. The orders of such court shall be effective throughout the United States."

"p. The Commission shall submit to the Congress by August 1, 1983 a detailed report concerning the need for continuation of or modification to the provisions of this section, taking into account the condition of the nuclear industry, availability of private nuclear liability insurance, and the state of knowledge concerning nuclear safety at that time, among other relevant factors, and shall include recommendations as to the repeal or modification of any of the provisions of this section."

SEPARATE VIEW OF REPRESENTATIVE TENO RONCALIO

I did not vote to report H.R. 15323 because I think that more time is needed to consider such an important piece of energy legislation. Specifically, time is needed—and is available—to assimilate the findings of a soon-to-be-released Atomic Energy Commission report on the probabilities and consequences of large accidents at nuclear power plants.

During the course of Joint Committee hearings on the question of insurance to protect the public in the event of a nuclear catastrophe, several witnesses mentioned this report, the Reactor Safety Study, conducted under the supervision of Dr. Norman Rasmussen of the Massachusetts Institute of Technology. The report, we have been told, will "provide a more precise quantification of the probabilities and implications of nuclear accidents . . ."¹

Dr. Rasmussen testified before the Joint Committee on May 16, 1974. He reported that the Reactor Safety Study is nearing completion and that he is now in the process of reviewing and checking his calculations. He said: "Until that process is finished and we are completely satisfied that, to the best of our knowledge, the results are accurate, I do not think it would be appropriate to discuss the specific results in detail."²

Dr. Rasmussen did discuss some general conclusions of his study as they pertain to renewal or modification of the Price-Anderson Act, but the testimony contained little specific data. He said: "At this time, I see no reason for changing the current 560 million dollar limit. . . . Of course, completion of the Reactor Safety Study may shed more light on this matter."³

I oppose the reporting of these bills out of committee until the completion of this study which, its director says, "may shed more light on this matter." I believe that it is an abdication of its responsibility for this committee to report these bills without the benefit of having all the information currently available on which to base a decision on a policy question of such magnitude. The Reactor Safety Study will be completed and published within one or two months, and the committee intends to hold hearings on the Study's findings shortly thereafter. I think that it best serves the public interest to examine the results of this study, to hear the public comment on these results, and then, on the basis of all the information, to construct nuclear insurance legislation. It would be unfortunate for the Committee not to avail itself of this new information, developed over the last eighteen months at a cost to the tax-payers of over two million dollars. Currently, we do not have enough specific data on which to make informed decisions regarding a comprehensive insurance scheme

¹ AEC News Release, June 27, 1973.

² Testimony of Norman Rasmussen before the Joint Committee on Atomic Energy, May 16, 1974, page 9.

³ Op. cit.

that will adequately protect the public. Therefore, I urge that we not report this legislation until the completion of the Rasmussen Report and until we study its conclusions and recommendations in detail.

Rationale for Quickly Reporting This Bill:

This committee has been urged by some to consider the matter of possible modification or extension of the Price-Anderson Act during the present session of Congress, "Because of the long lead times involved in planning new commitments to nuclear power . . . in order to prevent an unwarranted disruption in the planning process for nuclear power plants, such as might result from uncertainty over the future of the Price-Anderson Act."⁴

Let us examine this rationale. The argument states that the Price-Anderson Act must be enacted immediately so that there will be no disruption in the planning process for new nuclear reactors. It is argued that because of the long lead times necessary for the planning and construction of nuclear plants, we cannot wait until even early next year to pass this legislation without causing substantial harm to the industry.

I submit that this is a specious argument. The lead times required for obtaining construction permits (after which a plant is covered) are often less than two years. Even if this argument were true, with over three years still to run until expiration of the current Act, there is ample time to consider the Act. But the fact that the nuclear industry has been planning for nuclear reactors well into the mid-1980's clearly shows that this "uncertainty" is not affecting their actions.⁵

Furthermore, if it is argued that knowledge of the specific insurance method is necessary before utilities can plan for the future, this argument is incompatible with the current legislation. This bill gives the Atomic Energy Commission until August 1, 1976, to determine what the exact retrospective premium plan will be. The bill sets broad limits of \$2-5 million per reactor. The Commission is ordered to establish, through a rule-making proceeding, the retrospective premium that would lie somewhere in between. It is likely that this decision will not be forthcoming until shortly before its deadline, August 1, 1976.

This aspect of the legislation further buttresses my contention that haste in enacting this legislation is not as important as we have been led to believe. The nuclear industry is willing to wait until one year before the expiration of the Price-Anderson Act to learn what premiums will be required. And, as I have stated, the utilities are planning to go nuclear in time frames where construction permits would be granted long after August 1, 1977, the expiration date. Therefore, I conclude that no good reason exists to warrant reporting this legislation before the release and review of the Reactor Safety Study. I am joined in this sentiment by many of my colleagues in both Houses, and I am including letters from them expressing this support in an appendix to my views.

⁴ Committee Report, page 2.

⁵ Many plants which will come on line years after the expiration of the current Price-Anderson Act have already been ordered. 1980: 26 plants, 1981: 29 plants, 1982: 20 plants, 1983: 14 plants, 1984: 6 plants, 1985: 1 plant, and 1986: 2 plants.

Protection of the Public

My major concern with this legislation is that the public will not be adequately compensated in the event of a major nuclear power plant accident. I believe there are two major defects in this legislation. The first problem is the retention of an artificial limit on the amount of money which will be available to compensate the public in the event of an accident. This problem as it existed over the last twenty years was highlighted in a discussion of the current Price-Anderson Act by the Columbia University Study; *Issues of Financial Protection in Nuclear Activities*.

The Act thus did not fully achieve the legislative goal of assuring compensation to the public . . . the decision to limit liability—represents a determination that a major share of the costs of an accident should be borne by its victims . . .⁶

Further, in the new legislation, we continue to limit liability at a relatively low level. For the near term, in fact, the liability will still be placed at \$560 million. It will gradually float upward to \$1-2 billion. From AEC estimates of the possible damages resulting from a nuclear power plant disaster, these amounts are woefully inadequate. In several places the committee hints that, in the case of an accident which surpasses in damages the limit of financial protection afforded nuclear reactors, the Congress would pass a supplementary appropriation to compensate the victims. This appears to negate the purpose for which the Price-Anderson Act was originally enacted: that is, to provide quick, adequate compensation for the public, to spare them the anxiety and grief which would attend a delay in obtaining relief, and to minimize and expedite the administrative and legal complications that are always involved in trying to mitigate the effects of a disaster. I believe that in order to fulfill these goals, full compensation should be guaranteed to the public by this law. Reliance on quick Congressional response to a catastrophe is inappropriate and is not supported by history. Because of this, I believe that we should more fully explore other possible insurance programs which would provide full liability coverage or we should explore the possibilities more fully of allowing the Price-Anderson to lapse. After all, Chairman Dixy Lee Ray was asked in an interview in the *National Journal* of March, 1973 if she thought the Price-Anderson Act should be allowed to lapse. She answered:

I think it's absolutely the thing to do. The Price-Anderson Act came into effect at a time when there was no nuclear industry at all, at a time when we didn't really know whether it was commercially feasible to develop nuclear power plants, but now it's been proved that it is. It's been proved they can operate; the insurance companies are willing to insure them.

She said there were no difficulties with nuclear industry assuming full liability; "No, in fact the plan is that they will do the same thing they do in a great many industries, have pool insurance. The only thing that has prevented it is the Price-Anderson Act. Why should the industry do it if the Government has been?"⁷

⁶ Columbia University Study, *Issues of Financial Protection in Nuclear Activities*, pp. 2-4.

⁷ Statement of Dixy Lee Ray, *National Journal*, March 1973.

The second defect in this legislation concerns what I feel must be the cornerstone of this coverage: the *quick* and orderly compensation of victims of a nuclear accident. In order to compensate the public quickly, there must be available liquid assets from which to draw. Unfortunately this bill proposes the establishment of a "retrospective" or "deferred" premium in which premiums would only be assessed by the Commission in the event of a nuclear power plant disaster. The licensees would not be required to hold these premiums as cash. Thus, in order to pay its premium on demand by the Commission each utility would either have to use whatever assets are currently available, or more likely would have to immediately raise a substantial amount of funds. Not only would this process take a great deal of time, but it could wreak havoc within our financial system. Consider the scenario of several hundred utilities borrowing substantial sums of money or floating new bond issues at the same time. For these reasons I feel that the retrospective premium system as outlined in this legislation is inadequate. It is eminently more reasonable to require the Atomic Energy Commission to assess these premiums on the utility at the time of licensing or on a yearly basis, and hold the funds in escrow.

There is a further flaw in the committee's system of retrospective premiums. The possibility exists for a gap in coverage. This gap would occur if any utility defaulted on its obligation to pay its premium and if the full amount, or more than the full amount of financial protection was needed. This legislation addresses this problem in a vague manner:

The Commission shall establish such requirements as are necessary to assure availability of funds to meet any assessment of deferred premiums within a reasonable time when called for, and may provide reinsurance or guarantee the payment of such premiums in the event it is not feasible to assure their payment through the resources of private industry and insurance.⁸

Thus this section allows the Government to guarantee any defaulted premiums. The ultimate insurer, then, is still the Federal Government, contrary to the expressed wish of this Joint Committee.

If this is allowed to continue in this legislation, at least the Commission should be explicitly given the power to order whatever sanctions are necessary, including fines and revocation of licenses of those plants who default on their premium payments after a major catastrophe.

My final comment concerns the desire of this committee to break with precedent and tradition and extend the coverage provided by this Act for twenty years, until August 1, 1977. I firmly believe that such a step would be wrong and dangerous. The past few years have amply demonstrated that the rate of change in the field of nuclear energy is accelerating. Who can be sure what lies ahead? What new developments may render this Act, or the coverage it provides, obsolete or inadequate? The requirement of this proposed legislation that the agency review the insurance system in ten years is not satisfactory. The members of the Joint Committee have the ultimate responsibility to the people of this Nation for protection in the event

⁸ Section 3.

of a nuclear catastrophe. Extending this Act until 1997 does not acknowledge that the potential changes over the next twenty years—the introduction of a breeder economy, commercial fuel enrichment plants, possible use of fusion—may be so great as to warrant, long before 1997, radical changes in this legislation. Without the assurance—provided by an earlier expiration date, that the Congress, the elected representatives directly responsible to the people, and not the agency, will review this legislation, we are abdicating our public trust.

On June 12, this committee called Chairman Ray back before it to give her an opportunity to refute her remarks of March 1973 which I have quoted herein. This strategy was used after the Joint Committee examined my separate views in an attempt to negate them. I find this procedure extraordinary to recall Dr. Ray to testify after hearings have ended; one day after mark-up was originally scheduled, and the day prior to an open mark-up of this legislation.

Dr. Ray noted that she has had time to reassess her views on the need for the Price-Anderson Act since her remarks of last year. The previous Chairman of the Atomic Energy Commission, James R. Schlesinger, made the following remarks as he was leaving the AEC in a statement before this committee on January 23, 1973:

Let me say this, in passing, since I am on my way out of this job, that I would recommend, I would personally feel that when the Price-Anderson Act comes up for reexamination that we substantially amend or phase out that act because this industry has built up to the point that it can underwrite the cost itself of these very improbable accidents.

This committee could do greater service to the best interests of the American public if this bill were delayed. After weighing all of the defects in this legislation and after listening to the scientific and consumer testimony which spoke against this legislation, I feel that I must oppose the enactment of this renewal of the Price-Anderson Act at this time.

TENO RONCALIO.

[Exhibits supplied by Representative Roncalio follow:]

EXHIBIT I

UNITED STATES SENATE,
Washington, D.C., June 10, 1974.

DEAR CHAIRMAN AND MEMBERS OF THE JOINT COMMITTEE ON ATOMIC ENERGY: Recently, the Joint Committee on Atomic Energy completed hearings on the extension of the Price-Anderson Nuclear Indemnity Act and moved to mark up a bill that would extend the Act to 1987, with certain modifications. While it is entirely within the purview of the committee to report this bill, we urge that you postpone consideration until after the release of the draft of the Rasmussen Report, which is scheduled for July, and until adequate time has been provided to study the results of this report. In light of the fact that the current Price-Anderson Act still has more than three years to run—until August, 1977—we do not think that such a postponement would be against the national interest, or detrimental to the nuclear power industry.

In announcing the existence of the Rasmussen study on June 27, 1973, the Atomic Energy Commission said that this study will provide a "realistic assessment" and "a more precise quantification of the probabilities and implications of nuclear accidents." As you know, this study, compiled at a cost of over \$2 million, will look at the probabilities and consequences of potential accidents at nuclear power plants. Thus, it will examine the rationale behind any new Price-Anderson legislation. Indeed, witnesses for the AEC have referred to preliminary conclusions of the Report in testifying for a slightly modified extension of the Price-Anderson Act. This testimony, we feel, is not enough disclosure for the Congress to make an informed decision. There is a paucity of reliable information regarding the risks of nuclear accidents and the potential consequences of such accidents. Studies previously endorsed by the AEC are now repudiated by the Commission as technically naive, or based on incorrect assumptions. Although we do not necessarily agree with this conclusion, the imminent release of the Rasmussen Report is the most up-to-date attempt to provide a means by which the Congress can examine the potential damage from a catastrophic nuclear power plant accident and the probability of such an accident. It seems eminently reasonable that the results of this Report should be used in fashioning new legislation regulating nuclear insurance and indemnity.

It is for these reasons that we urge the committee to postpone reporting out a renewal of the Price-Anderson Act. We feel that time should be allowed to consider the relationship between the results of the Rasmussen Report and new Price-Anderson legislation. A comment period of 60-90 days and new hearings on the results of the Report as they affect this legislation seem to be indicated. Such a delay can only further the protection of the public. It will provide a

(80)

more informed analysis of the very questions the Price-Anderson Act attempts to address, and it may clear some of the mist clouding this very complex issue.

Much of the impetus for such an early renewal has come from those who fear that delay will cause uncertainty in the industry and may hinder some plans to go nuclear. However, we think that adequately protecting the public in the event of a nuclear accident is a paramount concern and that all available information should be studied before passing such important legislation.

For these reasons, then, we urge you *not* to report out at this time a bill which would extend the Price-Anderson Nuclear Indemnity Act. Sincerely,

HUBERT H. HUMPHREY
GEORGE MCGOVERN
WILLIAM D. HATHAWAY
DICK CLARK
MIKE GRAVEL
LEE METCALF
EDWARD W. BROOKE
FLOYD K. HASKELL
WILLIAM PROXMIRE
HOWARD M. METZENBAUM

WALTER F. MONDALE
RICHARD S. SCHWEIKER
CHARLES McC. MATHIAS, Jr.
MARK O. HATFIELD
PHILIP A. HART
FRANK E. MOSS
JOSEPH R. BIDEN
WILLIAM V. ROTH, Jr.
JACOB K. JAVITS
ABRAHAM A. RIBICOFF

EXHIBIT II

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., June 11, 1974.

MEMBERS,
The Joint Committee on Atomic Energy,
Washington, D.C.

DEAR MEMBERS: Recently, the Joint Committee on Atomic Energy completed hearings on the extension of the Price-Anderson Nuclear indemnity Act and moved to mark up a bill that would extend the Act to 1987, with certain modifications. We urge that you postpone consideration until after the release of the Rasmussen Report, which is scheduled for early July, and until adequate time has been provided to study the results of this report. In light of the fact that the current Price-Anderson Act still has more than three years to run, we think that such a postponement would not be harmful to the national interest or detrimental to the nuclear power industry.

In announcing the existence of the Rasmussen study on June 27, 1973, the Atomic Energy Commission said that this study would provide a "realistic assessment" and "a more precise quantification of the probabilities and implications of nuclear accidents." As you know, this study, compiled at considerable cost, will look at the probabilities and consequences of potential accidents at nuclear power plants. Thus, it will examine the rationale behind any new Price-Anderson legislation. Indeed, witnesses for the AEC have referred to preliminary conclusions of the Report in testifying for a slightly modified exten-

sion of the Price-Anderson Act. This testimony, we feel, is not enough disclosure for the Congress to make an informed decision. There is a paucity of reliable information regarding the risks of nuclear accidents and the potential consequences of such accidents. The Rasmussen Report is the most up-to-date means by which the Congress can examine the potential damage from a catastrophic nuclear power plant accident and the probability of such an accident. It seems eminently reasonable that the results of this Report should be used in fashioning new legislation regulating nuclear insurance and indemnity.

It is for these reasons that we urge the Committee to postpone reporting out a renewal of the Price-Anderson Act. We feel that time should be allowed to consider the relationship between the results of the Rasmussen Report and new Price-Anderson legislation. A comment period of 60-90 days and new hearings on the results of the Report as they affect this legislation seem to be indicated. Such a delay can only further the protection of the public. It will provide a more informed analysis of the very questions the Price-Anderson Act attempts to address, and it may clear some of the mist clouding this very complex issue.

Much of the impetus for such an early renewal has come from those who fear that a delay will cause uncertainty in the industry and may hinder some plans to go nuclear. However, we think that adequately protecting the public in the event of a nuclear accident is a paramount concern and that all available information should be studied before passing such important legislation.

For these reasons, then, we urge you *not* to report out at this time a bill which would extend the Price-Anderson Nuclear Indemnity Act.

Sincerely,

DONALD M. FRASER
 BELLA S. ABZUG
 JOHN D. DINGELL
 JOHN C. CULVER
 GEORGE E. BROWN, Jr.
 BILL FRENZEL
 EDWARD G. BIESTER, Jr.
 PETER W. RODINO, Jr.
 MICHAEL HARRINGTON
 YVONNE BRATHWAITE BURKE
 RONALD V. DELLUMS
 JEROME R. WALDIE
 DANIEL J. FLOOD
 BOB BERGLAND
 JOHN F. SEIBERLING
 THOMAS M. REES
 ELIZABETH HOLTZMAN
 ANDREW YOUNG

BENJAMIN S. ROSENTHAL
 JOSHUA EILBERG
 JAMES W. SYMINGTON
 PAUL S. SARBANES
 PARREN J. MITCHELL
 JOE MOAKLEY
 CHARLES A. VANIK
 DAVID R. OBEY
 DANTE B. FASCELL
 GERRY E. STUDDS
 BERTRAM L. PODELL
 ROBERT F. DRINAN
 SILVIO O. CONTE
 PATRICIA SCHROEDER
 MORRIS K. UDALL

APPENDIX

TABLE 1.—OPERATING REACTORS ASSESSED AT \$2,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total, assessment plus insurance	Remain AEC indemnity
1977.....	96	\$192	\$125	\$317	\$243
1978.....	112	224	125	349	211
1979.....	129	258	125	383	177
1980.....	146	292	125	417	143
1981.....	159	318	125	443	117
1982.....	179	358	125	483	77
1983.....	202	404	125	529	31
1984.....	228	456	125	581	0
1985.....	257	514	125	639	0
1986.....	283	566	125	691	0
1987.....	312	624	125	749	0
1988.....	342	684	125	809	0
1989.....	373	746	125	871	0
1990.....	407	814	125	939	0

¹ Based on estimates in WASH-1139 (December 1972).

TABLE 2.—OPERATING REACTORS ASSESSED AT \$3,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total, assessment plus insurance	Remain AEC indemnity
1977.....	96	\$288	\$125	\$413	\$147
1978.....	112	336	125	461	99
1979.....	129	387	125	512	48
1980.....	146	438	125	563	0
1981.....	151	477	125	602	0
1982.....	179	537	125	662	0
1983.....	202	606	125	731	0
1984.....	228	684	125	809	0
1985.....	257	771	125	896	0
1986.....	283	849	125	974	0
1987.....	312	936	125	1,061	0
1988.....	342	1,026	125	1,151	0
1989.....	373	1,119	125	1,244	0
1990.....	407	1,221	125	1,346	0

¹ Based on estimates in WASH-1139 (December 1972).

TABLE 3.—OPERATING REACTORS ASSESSED AT \$5,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total, assessment plus insurance	Remain AEC Indemnity
1977	96	\$480	\$125	\$605	0
1978	112	560	125	685	0
1979	129	645	125	770	0
1980	146	730	125	855	0
1981	159	795	125	920	0
1982	179	895	125	1,020	0
1983	202	1,010	125	1,135	0
1984	228	1,140	125	1,265	0
1985	257	1,285	125	1,410	0
1986	283	1,415	125	1,540	0
1987	312	1,560	125	1,685	0
1988	342	1,710	125	1,835	0
1989	373	1,865	125	1,990	0
1990	407	2,035	125	2,160	0

¹ Based on estimates in WASH-1139 (December 1972).

TABLE 4.—OPERATING REACTORS ASSESSED AT \$10,000,000 EACH

[Dollar amounts in millions]

Year	Number of operating reactors ¹	Assessment	Insurance	Total, assessment plus insurance	Remain AEC Indemnity
1977	96	\$960	\$125	\$1,085	0
1978	112	1,120	125	1,245	0
1979	129	1,290	125	1,415	0
1980	146	1,460	125	1,585	0
1981	159	1,590	125	1,715	0
1982	179	1,790	125	1,915	0
1983	202	2,020	125	2,145	0
1984	228	2,280	125	2,405	0
1985	257	2,570	125	2,695	0
1986	283	2,830	125	2,955	0
1987	312	3,120	125	3,245	0
1988	342	3,420	125	3,545	0
1989	373	3,730	125	3,855	0
1990	407	4,070	125	4,195	0

¹ Based on estimates in WASH-1139 (December 1972).



Ninety-third Congress of the United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Monday, the twenty-first day of January,
one thousand nine hundred and seventy-four*

An Act

To amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 11 of the Atomic Energy Act of 1954, as amended, is amended by amending subsections q. and t. to read as follows:

“q. The term ‘nuclear incident’ means any occurrence, including an extraordinary nuclear occurrence, within the United States causing, within or outside the United States bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material: *Provided, however,* That as the term is used in subsection 170 l., it shall include any such occurrence outside of the United States: *And provided further,* That as the term is used in subsection 170 d., it shall include any such occurrence outside the United States if such occurrence involves source, special nuclear, or byproduct material owned by, and used by or under contract with, the United States: *And provided further,* That as the term is used in subsection 170 c., it shall include any such occurrence outside the United States or any other nation if such occurrence arises out of or results from the radioactive, toxic, explosive or other hazardous properties of source, special nuclear, or byproduct material licensed pursuant to Chapters 6, 7, 8, and 10 of this Act, which is used in connection with the operation of a licensed stationary production or utilization facility and/or moves outside the territorial limits of the U.S. in transit from one person licensed by the Commission to another person licensed by the Commission.

“t. The term ‘person indemnified’ means (1) with respect to a nuclear incident occurring within the United States or outside the United States as the term is used in subsection 170 c., and with respect to any nuclear incident in connection with the design, development, construction, operation, repair, maintenance, or use of the nuclear ship *Savannah*, the person with whom an indemnity agreement is executed or who is required to maintain financial protection, and any other person who may be liable for public liability; or (2) with respect to any other nuclear incident occurring outside the United States, the person with whom an indemnity agreement is executed and any other person who may be liable for public liability by reason of his activities under any contract with the Commission or any project to which indemnification under the provisions of subsection 170 d. has been extended or under any subcontract, purchase, order, or other agreement, of any tier, under any such contract or project.”

SEC. 2. Subsection 170 a. of the Atomic Energy Act of 1954 as amended, is amended to read as follows:

“a. Each license issued under section 103 or 104 and each construction permit issued under section 185 shall, and each license issued under section 53, 63, or 81 may, for the public purposes cited in section 2 i. of the Atomic Energy Act of 1954, as amended, have as a condition of the license a requirement that the licensee have and maintain financial protection of such type and in such amounts as the Commission in the exercise of its licensing and regulatory authority and responsibility shall require in accordance with subsection 170 b. to cover public liability claims. Whenever such financial protection is required, it may be a further condition of the license that the licensee execute



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and maintain an indemnification agreement in accordance with subsection 170 c. The Commission may require, as a further condition of issuing a license, that an applicant waive any immunity from public liability conferred by Federal or State law."

Sec. 3. Subsection 170 b. of the Atomic Energy Act of 1954, as amended, is amended to read as follows:

"b. The amount of financial protection required shall be the amount of liability insurance available from private sources, except that the Commission may establish a lesser amount on the basis of criteria set forth in writing, which it may revise from time to time, taking into consideration such factors as the following: (1) the cost and terms of private insurance, (2) the type, size, and location of the licensed activity and other factors pertaining to the hazard, and (3) the nature and purpose of the licensed activity: *Provided*, That for facilities designed for producing substantial amounts of electricity and having a rated capacity of 100,000 electrical kilowatts or more, the amount of financial protection required shall be the maximum amount available at reasonable cost and on reasonable terms from private sources. Such financial protection may include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures and shall be subject to such terms and conditions as the Commission may, by rule, regulation, or order, prescribe. In prescribing such terms and conditions for licensees required to have and maintain financial protection equal to the maximum amount of liability insurance available from private sources, the Commission shall, by rule initially prescribed not later than August 1, 1976, include, in determining such maximum amount, private liability insurance available under an industry retrospective rating plan providing for premium charges deferred in whole or major part until public liability from a nuclear incident exceeds or appears likely to exceed the level of the primary financial protection required of the licensee involved in the nuclear incident: *Provided*, That such insurance is available to, and required of, all of the licensees of such facilities without regard to the manner in which they obtain other types or amounts of such financial protection: *And provided further*, That the maximum amount of any deferred premium which may be charged following any nuclear incident under such a plan shall be not less than \$2,000,000 nor more than \$5,000,000 for each facility required to maintain the maximum amount of financial protection. The Commission is authorized to establish a maximum amount which the aggregate deferred premiums charged for each facility within one year may not exceed. The Commission may establish amounts less than the standard maximum premium for individual facilities taking into account such factors as the facility's size, location, and other factors pertaining to the hazard. The Commission shall establish such requirements as are necessary to assure availability of funds to meet any assessment of deferred premiums within a reasonable time when due, and may provide reinsurance or otherwise guarantee the payment of such premiums in the event it appears that the amount of such premiums will not be available on a timely basis through the resources of private industry and insurance. Any agreement by the Commission with a licensee or indemnitor to guarantee the payment of deferred premiums may contain such terms as the Commission deems appropriate to carry out the purposes of this section and to assure reimbursement to the Commission for its payments made due to the failure of such licensee or indemnitor to meet any of its obligations arising under or in connection with financial protection required under this subsection including without limitation terms creating liens upon the licensed facility and the revenues derived therefrom or any other property or revenues of



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such licensee to secure such reimbursement and consent to the automatic revocation of any license.

SEC. 4. Subsection 170 c. of the Atomic Energy Act of 1954, as amended, is amended by deleting the phrase "and August 1, 1977, for which it requires financial protection," in the first sentence and substituting therefor the phrase "and August 1, 1982, for which it requires financial protection of less than \$560,000,000," and by deleting the date "August 1, 1977" in the last sentence wherever it appears and substituting therefor the date "August 1, 1982".

SEC. 5. Subsection 170 d. of the Atomic Energy Act of 1954, as amended, is amended by deleting the phrase "until August 1, 1977," in the first sentence and substituting therefor the phrase "until August 1, 1982,".

SEC. 6. Subsection 170 e. of the Atomic Energy Act of 1954, as amended, is amended to read as follows:

"e. The aggregate liability for a single nuclear incident of persons indemnified, including the reasonable costs of investigating and setting claims and defending suits for damage, shall not exceed (1) the sum of \$500,000,000 together with the amount of financial protection required of the licensee or contractor or (2) if the amount of financial protection required of the licensee exceeds \$60,000,000, such aggregate liability shall not exceed the sum of \$560,000,000 or the amount of financial protection required of the licensee, whichever amount is greater: *Provided*, That with respect to any nuclear incident occurring outside of the United States to which an agreement of indemnification entered into under the provisions of subsection 170 d. is applicable, such aggregate liability shall not exceed the amount of \$100,000,000 together with the amount of financial protection required of the contractor."

SEC. 7. Subsection 170 f. of the Atomic Energy Act of 1954, as amended, is amended to read as follows:

"f. The Commission is authorized to collect a fee from all persons with whom an indemnification agreement is executed under this section. This fee shall be \$30 per year per thousand kilowatts of thermal energy capacity for facilities licensed under section 103: *Provided*, That the Commission is authorized to reduce the fee for such facilities in reasonable relation to increases in financial protection required above a level of \$60,000,000. For facilities licensed under section 104, and for construction permits under section 185, the Commission is authorized to reduce the fee set forth above. The Commission shall establish criteria in writing for determination of the fee for facilities licensed under section 104, taking into consideration such factors as (1) the type, size, and location of facility involved, and other factors pertaining to the hazard, and (2) the nature and purpose of the facility. For other licenses, the Commission shall collect such nominal fees as it deems appropriate. No fee under this subsection shall be less than \$100 per year."

SEC. 8. Subsection 170 i. of the Atomic Energy Act of 1954, as amended, is amended to read as follows:

"i. After any nuclear incident which will probably require payments by the United States under this section or which will probably result in public liability claims in excess of \$560,000,000, the Commission shall make a survey of the causes and extent of damage which shall forthwith be reported to the Joint Committee, and, except as forbidden by the provisions of chapter 12 of this Act or any other law of Executive order, all final findings shall be made available to the public, to the parties involved and to the courts. The Commission shall report to the Joint Committee by April 1, 1958, and every year thereafter on the operations under this section."



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SEC. 9. Subsection 170 k. of the Atomic Energy Act of 1954, as amended, is amended by deleting the date "August 1, 1977" wherever it appears and substituting therefor the date "August 1, 1982".

SEC. 10. Subsection 170 o. of the Atomic Energy Act of 1954, as amended, is amended by adding at the end of the second sentence in subparagraph (3) the words "and shall include establishment of priorities between claimants and classes of claims, as necessary to insure the most equitable allocation of available funds."

SEC. 11. Section 170 of the Atomic Energy Act of 1954, as amended, is amended by adding subsection p., to read as follows:

"p. The Commission shall submit to the Congress by August 1, 1979, a detailed report concerning the need for continuation or modification of the provisions of this section, taking into account the condition of the nuclear industry availability of private insurance, and the state of knowledge concerning nuclear safety at that time, among other relevant factors, and shall include recommendations as to the repeal or modification of any of the provisions of this section.

SEC. 12. The provisions of this Act shall become effective thirty (30) days after the date on which the Joint Committee on Atomic Energy submits to the Congress an evaluation of the Reactor Study, entitled "An Assessment of Accident Risks in the U.S. Commercial Nuclear Power Plants", AEC Report Number WASH-1400, except that it shall not become effective if within the thirty (30) day period after the Joint Committee submits its evaluation, the Congress adopts a concurrent resolution disapproving the extension of the Price-Anderson Act.

Speaker of the House of Representatives.

*Vice President of the United States and
President of the Senate.*

October 12, 1974

Office of the White House Press Secretary

THE WHITE HOUSE

TO THE HOUSE OF REPRESENTATIVES:

I am returning without my approval H.R. 15323, "To amend the Atomic Energy Act, as amended, to revise the method of providing public remuneration in the event of a nuclear incident, and for other purposes."

The first eleven sections of the bill basically carry out recommendations of the Atomic Energy Commission, and I would be glad to approve them if they stood alone.

Section 12, however, would provide that "the provisions of this Act shall become effective thirty (30) days after the date on which the Joint Committee on Atomic Energy submits to the Congress an evaluation of the Reactor Study, entitled 'An Assessment of Accident Risks in the U. S. Commercial Nuclear Power Plants,' AEC Report Number WASH-1400, except that it shall not become effective if within the thirty (30) day period after the Joint Committee submits its evaluation, the Congress adopts a concurrent resolution disapproving the extension of the Price-Anderson Act." The import of this section is that after I have approved the bill, the Joint Committee and the Congress would further consider whether it should ever become effective.

I cannot approve legislation under these circumstances -- if, indeed, the bill can properly be called legislation rather than merely the expression of an intent to legislate. The presentation of a bill to me pursuant to Article I, section 7 of the Constitution amounts to a representation by Congress that, as far as it is concerned, the legislation is ready to become effective, subject perhaps to some extrinsic condition precedent, but not to further congressional deliberation. Here, however, Congress in effect requests my approval before it has given its own.

In this instance, the clear constitutional infirmity of the bill not only affects my powers and duties but directly endangers substantial and important private rights. If the bill is unconstitutional, it will remain unconstitutional despite my signing it. As a result, a sure source of funds for prompt payment of public liability claims, a primary objective of the Price-Anderson Act, would be in doubt. The uncertainty over nuclear liability protection would also adversely affect that private investment which will be necessary as nuclear power assumes its vital role in meeting the nation's energy requirements. The public interest would not be served by approving legislation which creates these uncertainties.

I urge the Congress to reenact the bill promptly so as to remove the problems which Section 12 now raises.

GERALD R. FORD


THE WHITE HOUSE,
October 12, 1974

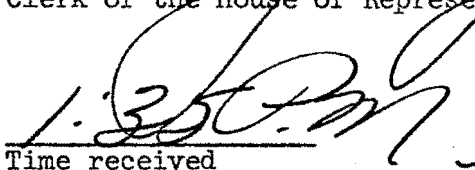
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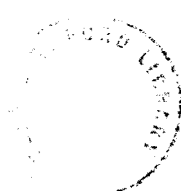


October 12, 1974

Received from the White House a sealed envelope said to contain H.R. 15323, An Act to amend the Atomic Energy Act of 1954, as amended, to revise the method of providing for public remuneration in the event of a nuclear incident, and for other purposes, and a veto message thereon.


W. Pat Jennings
Clerk of the House of Representatives


1:35 P.M.
Time received



October 1, 1974

Dear Mr. Director:

The following bills were received at the
White House on October 1st:

H.R. 15301

H.R. 15323 ✓

H.R. 16032 ✓

Please let the President have reports and
recommendations as to the approval of these
bills as soon as possible.

Sincerely,

Robert D. Linder
Chief Executive Clerk

The Honorable Roy L. Ash
Director
Office of Management and Budget
Washington, D. C.

