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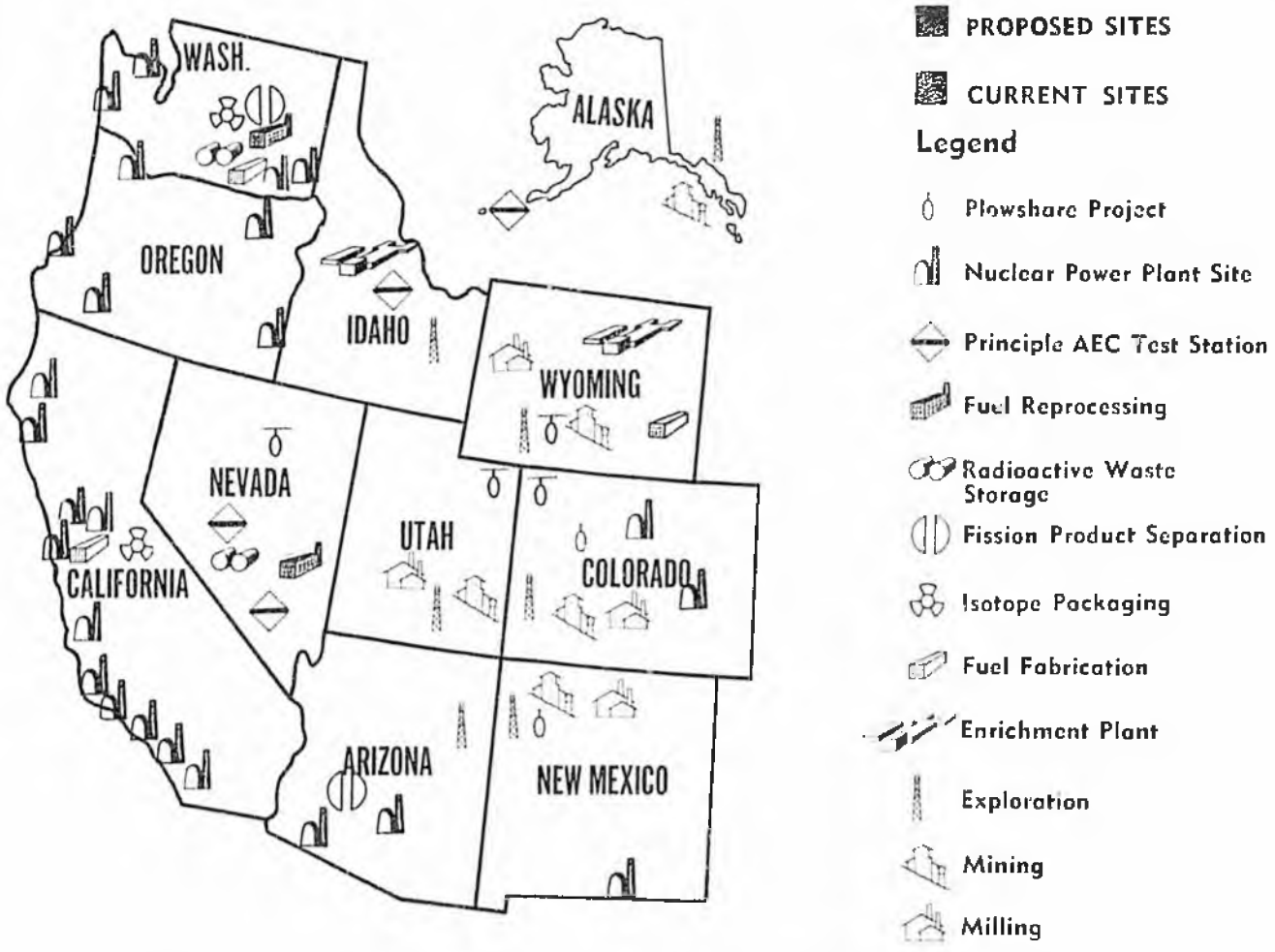

CURRENT AND ANTICIPATED NUCLEAR ACTIVITIES IN W.I.N.C. MEMBER STATES

Figure 24

Table 17

NUCLEAR POWER PLANTS INSTALLED OR PLANNED IN WINC MEMBER STATES

State	*Project*	*Operating Utility*	*Site*	*Rating MW—net elect.*	*Full Power*
In Operation as of 1970					
California	Humboldt–3	Pacific Gas & Electric	Humboldt Bay	68	1963
California	San Onofre–1	So. Calif. Edison–S.D. Gas & Electric	Coastal	430	1967
Washington	Hanford–1	Wash. Pub. Pwr. Sup. Sys.	Columbia River	790	1966
In Operation as of 1980					
Colorado	Ft. St. Vrain	Public Service of Colo.	Platte River	330	1972
California	Diablo Canyon–1	Pacific Gas & Elect.	Coastal	1060	1972
California	Rancho Seco–1	Sac. Munic. Util. Dist.	Inland	804	1973
California	Diablo Canyon–2	Pacific Gas & Elect.	Coastal	1060	1974
Oregon	Trojan	Portland Gen. Elect.	Columbia River	1130	1974
California	San Onofre–2	So. Calif. Edison	Coastal	1140	1976
California	San Onofre–3	So. Calif. Edison	Coastal	1140	1977
Washington	Hanford–2	Wash. Pub. Pwr. Sup. Sys.	Columbia River	1135	1977
California	Pt. Arena–1	Pacific Gas & Elect.	Coastal	1060	1977
California	Pt. Arena–2	Pacific Gas & Elect.	Coastal	1060	1979
California	Santa Cruz–1	Pacific Gas & Elect.	Coastal	1060	
Oregon		Portland Gen. Elect.	Columbia River	1130	1979

State	Project	Operating Utility	Site	Rating MW—net elect.	Full Power
In Operation as of 1990					
Arizona	A–1	Arizona Utility	Inland	1000	
Colorado	C–1	Uncommitted	Inland	1000	
New Mexico	N–1	Uncommitted	Inland	1000	
Oregon	O–3	Oregon Utility	Undesignated	1000	
Oregon	O–4	Oregon Utility	Undesignated	1000	
Oregon	O–5	Oregon Utility	Undesignated	1000	
Oregon	O–6	Oregon Utility	Undesignated	1000	
Oregon	O–7	Oregon Utility	Undesignated	1000	
Washington	W–3	Washington Utility	Undesignated	1000	
Washington	W–4	Washington Utility	Undesignated	1000	
Washington	W–5	Washington Utility	Undesignated	1000	
Washington	W–6	Washington Utility	Undesignated	1000	
Washington	W–7	Washington Utility	Undesignated	1000	
California	SC–4	So. Calif. Utility	Coastal	1200	
California	SC–5	So. Calif. Utility	Coastal	1200	
California	SC–6	So. Calif. Utility	Coastal	1200	
California	SC–7	So. Calif. Utility	Coastal	1200	
California	SC–8	So. Calif. Utility	Coastal	1200	
California	SC–9	So. Calif. Utility	Coastal	1200	
California	SC–10	So. Calif. Utility	Coastal	1200	
California	SC–11	So. Calif. Utility	Coastal	1200	
California	SC–12	So. Calif. Utility	Coastal	1200	
California	SC–13	So. Calif. Utility	Coastal	1200	
California	SC–14	So. Calif. Utility	Coastal	1200	
California	SC–15	So. Calif. Utility	Coastal	1200	
California	SC–16	So. Calif. Utility	Undesignated	1200	
California	SC–17	So. Calif. Utility	Undesignated	1200	
California	SC–18	So. Calif. Utility	Undesignated	1200	
California	SC–19	So. Calif. Utility	Undesignated	1200	
California	SC–20	So. Calif. Utility	Undesignated	1200	
California	SC–21	So. Calif. Utility	Undesignated	1200	
California	SC–22	So. Calif. Utility	Undesignated	1200	
California	SC–23	So. Calif. Utility	Undesignated	1200	
California	SC–24	So. Calif. Utility	Undesignated	1200	
California	NC–8	No. Calif. Utility	Undesignated	1200	
California	NC–9	No. Calif. Utility	Undesignated	1200	
California	NC–10	No. Calif. Utility	Undesignated	1200	
California	NC–11	No. Calif. Utility	Undesignated	1200	
California	NC–12	No. Calif. Utility	Undesignated	1200	
California	NC–13	No. Calif. Utility	Undesignated	1200	
California	NC–14	No. Calif. Utility	Undesignated	1200	
California	NC–15	No. Calif. Utility	Undesignated	1200	
California	NC–16	No. Calif. Utility	Undesignated	1200	
California	NC–17	No. Calif. Utility	Undesignated	1200	
California	NC–18	No. Calif. Utility	Undesignated	1200	
California	NC–19	No. Calif. Utility	Inland	1200	
California	NC–20	No. Calif. Utility	Inland	1200	
California	NC–21	No. Calif. Utility	Undesignated	1200	
California	NC–22	No. Calif. Utility	Undesignated	1200	
California	NC–23	No. Calif. Utility	Undesignated	1200	
California	NC–24	No. Calif. Utility	Undesignated	1200	
California	NC–25	No. Calif. Utility	Undesignated	1200	
California	NC–26	No. Calif. Utility	Undesignated	1200	
California	NC–27	No. Calif. Utility	Undesignated	1200	
California	NC–28	No. Calif. Utility	Undesignated	1200	

	Rating MW—net elect.
Totals *By 1970*	
Southern California	430
Northern California	68
Washington	790
Added *By 1980*	
Southern California	2,280
Northern California	6,104
Colorado	330
Oregon	2,260
Washington	1,135
Added *By 1990*	
Arizona	1,000
Southern California	25,200
Northern California	25,200
Colorado	1,000
New Mexico	1,000
Oregon	5,000
Washington	5,000
1990 Cumulative Total By State (Nuclear Only)	
Arizona	1,000
California	59,282
Colorado	1,330
New Mexico	1,000
Oregon	7,260
Washington	6,925
1990 Total Installed MW Nuclear Power in Member States	76,797

isotope recovery plants. Washington would like to host the first completely integrated nuclear park in the U.S. complete with an enrichment plant, fuel fabrication, fuel reprocessing and several nuclear power plants. Wyoming would like to capture some of the fuel-oriented industry especially those requiring large electrical power loads such as enrichment plants.

New Mexico and Colorado have been the sites for demonstration of Plowshare techniques to recover underground resources of natural gas. Similar trials are expected before 1975 ir Utah and Colorado for oil shale. Soon Wyoming is xpected to have a site for nuclear stimulation of a natural gas field.

The West is growing. To properly marshal modern technology for an orderly growth, nuclear energy is being used and will be used at an increasing rate. The WINC member states are working together to formulate the regulations needed to maximize the benefits and minimize the risk from this infinite energy source.

C. Areas for WINB Assistance

In total there were 39 items listed for action by WINB. These items fell into six categories:

1. Public Information
2. Nuclear Commerce
3. Radiological Health
4. Plant Siting
5. Waste Management
6. Plowshare

These categories each require enough action to warrent staff and committee action.

Public Information on nuclear energy is needed on a broad scale in the various states. Public understanding is normally a prerequisite to public acceptance. If the nuclear commerce is to proceed in an orderly fashion, the public must understand both the risks and the benefits. WINB staff should formulate an information program for committee approval and establish an education budget for Board approval.

Nuclear Commerce is a growing field of trade. Each Western state has something to gain from playing a part in it. The primary industries such as mining and milling are assured because of the natural resources of the West. The fuel cycle is by no means assured and will require considerable effort outside the West to locate and convince plant sponsors.

WINB action cannot be expected to replace state action but could be a clearing house for information leading to potential sponsors. Determination of a timetable for new nuclear plants might provide a handle on this subject.

Assisting member states at a high level for successful creation of spinoff industries can be an area in which WINB could play a strong role.

Diversification of activities in and around AEC sites is a fair and reasonable request as government support is withdrawn, either in whole or in part. Government sanction of property and equipment use can be assisted by organized WINB action.

Radiological Health is not assured in many nuclear activities of the West. The extractive mining activities have always been dangerous but do not need to be as dangerous as they are in and around uranium mines. In many cases equipment can be developed for respiratory protection and available ventilation equipment can be better utilized. Each state should be aware of the operating conditions that prevail in its mines. The U.S. Bureau of Mines is primarily responsible for the health of miners and may be willing to work with the states to provide regulatory action. WINB needs to be aware of the U.S. Public Health Service findings on occupational health of uranium miners and the plans of the Bureau of Mines.

Emergency preparedness is another area where uniformity should exist. WINB has been requested to investigate the state of readiness of both personnel *and* equipment.

Nuclear safety does affect WINB if the AEC design basis accidents are inadequate. WINB should be always aware of the AEC reviews and the accuracy associated therewith. This includes power reactor design, Plowshare devices, underground tests and nuclear rocket tests.

Stabilization of tailings piles seem to vary to a large extent. If the piles are of no consequence radiologically, the states should be relieved. If they are a problem, it should be determined whose problem it is and what will be done about it. The collective

experience of WINB should be helpful.

Plant Siting is more than a local or county problem. It is the concern of a state and in some cases two states. In the case of a desalinization plant need, it could assist the water budget of all states in the Colorado watershed. Plant siting could be extended to justify the need for small plants for remote load centers and for multi-purpose plants. The plant siting could cover fuel fabrication and fuel reprocessing plants as well as central station power plants.

Guidelines could be developed to form a basis for limiting environmental impact. Although the guidelines might not be applicable in all states, at least a uniform basis is provided. Protecting the states authority for plant siting certification should be a WINB goal.

Waste Management is the subject of a current WINB committee. Products from the committee should be minimum container specifications, burial specifications, leak testing specification and a timetable for development of this long-range business for permanent land use planning. WINB should be in a position to learn where the plutonium wastes from Rocky Flats will finally reside.

Plowshare programs represent a small fraction of the nuclear industry in the West but the associated technology is extremely sophisticated. WINB can be of considerable use to the member states by advising the new candidates for Plowshare shots of a) radiological monitoring needs, b) seismic shock possibilities, and c) post-shot activities. WINB can assist the increased ultimate use of Plowshare devices by pressing for budgets to create cleaner devices.

Appendix A

NARUC Model State Utility Environmental Protection Act

An Act to provide for the regulation of the location, operation and maintenance of major utility generation and transmission facilities to promote the provision of reliable, abundant and economical energy supply with due regard for the preservation and enhancement of the environment and conservation of scenic, historic, recreational and other natural resources; and for other purposes.

BE IT ENACTED BY THE LEGISLATURE OF THIS STATE:

Section 1. *Short title.*—This Act shall be known, and may be cited, as the "Utility Environmental Protection Act."

Section 2. *Declaration of public policy.*—The Legislature hereby finds and declares that there is at present and will continue to be a growing need for electric and gas public utility services which will require the construction of major new facilities. It is recognized that such facilities cannot be built without in some way affecting the physical environment where such facilities are located. The Legislature further finds that it is essential in the public interest to minimize any adverse effect upon the environment and upon the quality of life of the people of the State which such new facilities might cause. The Legislature further finds that present laws and practices relating to the location of such utility facilities should be strengthened to protect environmental values and to take into account the total cost to society of such facilities. Present laws and practices have in some areas resulted in undue delays in new construction which have increased costs, eventually borne by the people of the State in the form of higher utility rates, and which have threatened the ability of utilities to meet the needs of the people of the State for economic and reliable utility services. Furthermore, the Legislature finds that existing provisions of law may not provide adequate opportunity for individuals, groups interested in conservation and the protection of the environment, State and regional agencies, local governments, and other public bodies to participate in timely fashion in decisions regarding the location and construction of major facilities. The Legislature, therefore, hereby declares that it shall be the purpose of this Act to provide a forum for the expeditious resolution of all matters concerning the location and construction of electric generating plants and electric and gas transmission lines and associated facilities, presently under the jurisdiction of multiple State, regional and local agencies, and all matters of State, regional and local law, in a single proceeding to which access will be open to individuals, groups, State and regional agencies, local governments and other public bodies to enable them to participate in these decisions.

Section 3. *Definitions.* — The following words, when used in this Act, shall have the following meanings, unless otherwise clearly apparent from the context:

(a) The word "Commission" shall mean the Public Service Commission of this State;

(b) The words "major utility facility" shall mean: (1) electric generation and transmission plant designed for, or capable of, operation at a capacity of fifty megawatts or more; (2) an electric transmission line and associated facilities of a design capacity of one hundred twenty-five kilovolts or more; and (3) an intrastate gas transmission line and associated facilities designed to be operated at a hoop stress in excess of 40% of the specified minimum yield strength extending a distance of one mile or more; or is designed to operate at a hoop stress of 20% of specified minimum yield strength or more, and less than 40% of specified minimum yield strength extending a distance of more than ten miles;

(c) The words "commence to construct" shall mean any clearing of land, excavation, or other action that would adversely affect the natural environment of the site or route of a major utility facility, but does not include changes needed for temporary use of sites or routes for non-utility purposes, or uses in securing geological data, including necessary borings to ascertain foundation conditions;

(d) The word "municipality" shall mean any county or municipality within this State;

(e) The word "person" shall include any individual, group, firm, partnership, corporation, cooperative, association, government subdivision, government agency, local government, or other organization; and

(f) The words "public utility" or "utility" shall mean any person engaged in the production, transmission, storage, sale, delivery or furnishing of electricity or gas, or both, for public use.

Section 4. *Certificate of environmental compatibility and public need.*—(a) No person shall hereafter commence to construct a major utility facility in the State without first having obtained a certificate of environmental compatibility and public need (hereafter in this Act called a "certificate") issued with respect to such facility by the Commission. The replacement of an existing facility with a like facility, as determined by the Commission, shall not constitute construction of a major utility facility. Any facility, with respect to which a certificate is required shall be constructed in conformity with such certificate and any terms, conditions and modifications contained therein. A certificate may only be issued

pursuant to this Act, provided, however, certificates of public convenience and necessity issued pursuant to other provisions of the public utility laws of this state shall, with respect to facilities to which this act relates, constitute certificates hereunder if the requirement of this act have been complied with in proceedings for the issuance thereof.

(b) A certificate may be transferred, subject to the approval of the Commission, to a person who agrees to comply with the terms, conditions and modifications contained therein.

(c) A certificate issued hereunder may be amended as herein provided.

(d) This Act shall not apply to any major utility facility:

(1) For which, prior to the effective date of this Act, an application for the approval of same has been made to any Federal, State, regional or local governmental agency, which possesses the jurisdiction to consider the matters prescribed for finding and determination in Subsection (a) of Section 9 of this Act;

(2) This act shall not apply to any major utility facility upon which site survey has, prior to the effective date hereof, been commenced, or for which, prior to the effective date hereof, financial commitments have been made by the person proposing to construct same;

(3) For which, prior to the effective date of this Act, a governmental agency has approved the construction of same and such agency has incurred indebtedness to finance all or part of the cost of such construction; or

(4) Over which an agency of the Federal Government has exclusive jurisdiction.

(e) Any person intending to construct a major utility facility excluded from this Act pursuant to Paragraphs (1) or (2) of Subsection (d) of this Section may elect to waive such exclusion by delivering notice of such waiver to the Commission. This Act shall thereafter apply to each major utility facility identified in such notice from the date of its receipt by the Commission.

Section 5. *Application of certificate.*—(a) An applicant for a certificate shall file with the Commission an application, in such form as the Commission may prescribe, containing the following information: (1) a description of the location and of the major utility facility to be built thereon; (2) a summary of any studies which have been made of the environmental impact of the facility; (3) a statement explaining the need for the facility; (4) a description of any reasonable alternate location or locations for the proposed generating facility, a description of the comparative merits and detriments of each location submitted, and a statement of the reasons why the primary proposed location is best suited for the facility; and (5) such other information as the applicant may consider relevant or as the Commission may by regulation or order require. A copy or copies of the studies referred to in clause (2) above shall be filed with the Commission, if ordered, and shall be available for public inspection.

(b) Each application shall be accompanied by sufficient copies for service by the Commission on the chief executive officer of each municipality and the head of each government agency, charged with the duty of protecting the environment or of planning land use, in the area in which any portion of such facility is to be located, both as primarily and as alternatively proposed. The copy of such application shall be accompanied by a notice specifying the date on or about which the application is to be filed.

(c) Each application shall also be accompanied by a summary thereof which the Commission shall cause to be published, at applicant's expense, as public notice to persons residing in the local governments entitled to receive notice under Subsection (b) of this Section. Such summary shall be published promptly after filing of the application in a newspaper published or having circulation in such local government area or areas.

(d) Inadvertent failure of service on, or notice to, any of the municipalities, government agencies or persons indentified in Subsections (b) and (c) of this Section may be cured pursuant to orders of the Commission designed to afford them adequate notice to enable their effective participation in the proceeding. In addition, the Commission may, after filing, require the applicant to serve notice of the application, or copies thereof or both upon other persons, and file proof thereof, as the Commission may deem appropriate.

(e) An application for an amendment of a certificate shall be in such form and contain such information as the Commission shall prescribe. Notice of such an application shall be given as set forth in Subsections (b) and (c) of this Section.

Section 6. *Hearing on application for certificate; amendment.*—(a) Upon the receipt of an application complying with Section 5, the Commission shall promptly fix a date for the commencement of a public hearing thereon, not less than thirty nor more than sixty days after such receipt, and shall conclude the proceeding as expeditiously as practicable. The testimony presented at such hearing may be presented in writing or orally, provided that the Commission may make rules designed to exclude repetitive, redundant or irrelevant testimony.

(b) On an application for an amendment of a certificate, the Commission shall hold a hearing in the same manner as a hearing is held on an application for a certificate of the proposed change in the facility would result in any material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of such facility other than as provided in the alternates set forth in the application.

Section 7. *Parties to certification proceedings.*—(a) The parties to a certification proceeding shall include:

(1) The applicant;

(2) Each municipality and government agency entitled to receive service of a copy of the application under Subsection (b) of Section 5 of this Act, if it has filed with the Commission a notice of intervention as a party, within fifteen days after the date it was served with a copy of the application; and

(3) Any person residing in a municipality entitled to receive service of a copy of the application under Subsection (b) of Section 5 of this Act; any domestic non-profit organization, formed in whole or in part to promote conservation or natural beauty, to protect the environment, personal health or other biological values, to preserve historical sites, to promote consumer interests, to represent commercial and industrial groups, or to promote the orderly development of the areas in which the facility is to be located; or any other person, if such a person or organization has petitioned the Commission for leave to intervene as a party, within fifteen days after the date given in the published notice as the date for filing the application, and if such petition has been granted by the Commission for good cause shown.

(b) Any person may make a limited appearance in the proceeding by filing a verified statement of position within thirty days after the date given in the published notice as the date for filing the application. No person making a limited appearance shall be a party or shall have the right to present oral testimony or argument or cross-examine witnesses.

(c) The Commission may, in extraordinary circumstances for good cause shown, grant a petition for leave to intervene as a party to participate in subsequent phases of the proceeding, filed by a municipality, government agency, person or organization who is indentified in Paragraphs (2) or (3) of Subsection (a) of this Section, but who failed to file a timely notice of intervention or petition for leave to intervene, as the case may be.

Section 8. *Conduct of the hearing.*—A record shall be made of the hearing and of all testimony taken and the cross-examination thereon. Rules of evidence, as specified by the Commission, shall apply to the proceeding. The Commission may provide for the consolidation of the representation of parties having similar interests.

Section 9. *The decision.*—(a) The Commission shall render a decision upon the record either granting or denying the application as filed, or granting it upon such terms, conditions or modifications of the construction, operation or maintenance of the major utility facility as the Commission may deem appropriate. The Commission may not grant a certificate for the construction, operation and maintenance of a major utility facility, either as proposed or as modified by the Commission, unless it shall find and determine:

(1) The basis of the need for the facility;

(2) The nature of the probable environmental impact;

(3) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature of economics of the various alternatives, and other pertinent considerations;

(4) In the case of an electric transmission line, what part, if any, of the line shall be located underground; that such facility is consistent with regional plans for expansion of the electrical power grid systems serving the State and interconnected utility systems; and that such facilities will serve the interests of electric system economy and reliability;

(5) That the location of the facility as proposed conforms to applicable State, regional and local laws and regulations issued thereunder, except that the Commission may refuse to apply any regional or local law or regulation if it finds that, as applied to the proposed facility, such law or regulation is unreasonably restrictive in view of the existing technology, or factors of cost or economics, or of the needs of consumers whether located inside or outside of the directly affected government subdivisions; and

(6) That the facility will serve the public interest, convenience and necessity.

(b) If the Commission determines that the location of all or a part of the proposed facility should be modified, it may condition its certificate upon such modification, provided that the municipalities, and persons residing therein, affected by the modification, shall have been given reasonable notice thereof.

(c) A copy of the decision and any opinion issued therewith shall be served upon each party.

Section 10. *Opinion to be issued with decision.*—In rendering a decision on an application for a certificate, the Commission shall issue an opinion stating its reasons for the action taken. If the Commission has found that any regional or local law or regulation, which would be otherwise applicable, is unreasonably restrictive pursuant to Paragraph (5) of Subsection (a) of Section 9 of this Act, it shall state in its opinion the reasons therefor.

Section 11. *Rehearing: judicial review.*—(a) Any party aggrieved by any decision issued on an application for a certificate may apply for a rehearing within fifteen days after issuance of the decision. Any party aggrieved by the final decision of the Commission on rehearing may obtain judicial review thereof by filing of a petition in a State court of competent jurisdiction within fifteen days after the issuance of such final decision. Upon receipt of such petition, the Commission shall forthwith deliver to the court a copy of the written transcript of the record of the proceeding before it and a copy of its decision and opinion entered therein which shall constitute the record on judicial review. A copy of such transcript, decision and opinion shall remain on file with the Commission and shall be available for public inspection.

(b) The court in the proceeding shall have the power to grant such relief as it deems just and proper, and to make and enter an order enforcing, modifying and enforcing as so modified, remanding for further specific evidence or findings, or setting aside in whole or in part, such decision of the Commission. The appeal shall be heard on the record without requirement of reproduction. No objection that has not been urged by the aggrieved party in his application for rehearing before the Commission shall be considered by the court, unless the failure or neglect to urge such objection shall be excused because of extraordinary circumstances. The findings of fact on which such decision is based shall be conclusive if supported by substantial evidence on the record considered as a whole. The jurisdiction of such court shall be exclusive and its judgment and order shall be final, subject only to review by the highest appellate court of the State in the same manner as provided for appeals to such court in other proceedings. All such proceedings shall be heard and determined by the courts as expeditiously as practicable and with lawful precedence over other matters.

(c) The grounds for and the scope of review of the court shall be limited to whether the decision and opinion of the Commission is:

(1) In conformity with the constitution and the laws of the State and of the United States;

(2) Supported by substantial evidence in the record;

(3) Made in accordance with the procedures set forth in this Act or established by order, rule or regulation of the Commission; and

(4) Arbitrary, capricious or an abuse of discretion.

Section 12. *Jurisdiction of courts.*—Except as expressly set forth in Section 11 of this Act, no court of this State shall have jurisdiction to hear or determine any issue, case or controversy concerning any matter which was or could have been determined in a proceeding before the Commission under this Act or to stop or delay the construction, operation or maintenance of a major utility facility except to enforce compliance with this Act or the provisions of a certificate issued hereunder.

Section 13. *Powers of local governments and State agencies.*—Not withstanding any other provision of law, no State or regional agency, or municipality or other local government may require any approval, consent, permit, certificate or other condition for the construction, operation or maintenance of a major utility facility authorized by a certificate issued pursuant to the provisions of this Act; *except* that nothing herein shall prevent the application of State laws for the protection of employees engaged in the construction, operation or maintenance of such facility.

Section 14. *Joint hearings and orders.*—The Commission, in the discharge of its duties under this Act or any other Act, is authorized to make joint investigations, hold joint hearings within or without the State, and issue joint or concurrent orders in conjunction or concurrence with any official or agency of any State or of the United States, whether in the holding of such investigations or hearings, or in the making of such orders, the Commission shall function under agreements or compacts between States or under the concurrent power of states to regulate interstate commerce, or as an agency of the United States, or otherwise. The Commission, in the discharge of its duties under this Act, is further authorized to negotiate and enter into agreements or compacts with agencies of other States, pursuant to any consent of Congress, for cooperative efforts in certificating the construction, operation and maintenance of major utility facilities in accord with the purposes of this Act and for the enforcement of the respective State laws regarding same.

Section 15. *Effective date.*—This Act shall become effective .....

Appendix B

State of Arizona — Thirtieth Legislature
Senate Bill 98

CHAPTER 57

AN ACT

Relating to public utilities; providing for establishment of a Power Plant and Transmission Line Siting Committee, and amending Title 40, Chapter 2, Arizona Revised Statutes, by adding Article 6.2.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ARIZONA:

Section 1. *Declaration of policy*

The legislature hereby finds and declares that there is at present and will continue to be a growing need for electric service which will require the construction of major new facilities. It is recognized that such facilities cannot be built without in some way affecting the physical environment where the facilities are located. The legislature further finds that it is essential in the public interest to minimize any adverse effect upon the environment and upon the quality of life of the people of the state which effect such new facilities might cause. The legislature further finds that present practices, proceedings and laws relating to the location of such utility facilities may be inadequate to protect environmental values and take into account the total effect on society of such facilities. The lack of adequate statutory procedures may result in delays in new construction and increases in costs which are eventually passed on to the people of the state in the form of higher electric rates and which may result in the possible inability of the electric suppliers to meet the needs and desires of the people of the state for economical and reliable electric service. Furthermore, the legislature finds that existing law does not provide adequate opportunity for individuals, groups interested in conservation and the protection of the environment, local governments, and other public bodies to participate in timely fashion in the decision to locate a specific major facility at a specific site. The legislature therefore declares that it is the purpose of this article to provide a single forum for the expeditious resolution of all matters concerning the location of electric generating plants and transmission lines in a single proceeding to which access will be open to interested and affected individuals, groups, county and municipal governments and other public bodies to enable them to participate in these decisions.

Sec. 2. Title 40, chapter 2, Arizona Revised Statutes, is amended by adding article 6.2, sections 40-360 and 40-360.01 to 40-360.12, inclusive, to read:

ARTICLE 6.2. Power Plant and Transmission Line Siting Committee

40-360. *Definitions*

In this article, unless the context otherwise requires:

1. "Area of Jurisdiction" means the state, a county or an incorporated city or town which exercises concurrent or exclusive jurisdiction over a geographical area.

2. "Certificate of Environmental Compatibility" means the certificate required by this article which evidences the approval by the state of the sites for a plant or transmission line or both.

3. "Commission" means the Arizona Corporation Commission.

4. "Committee" means the powerplant and transmission line siting committee.

5. "Facilities" means a plant, transmission line or both.

6. "Member" means the state official named herein, the employee designee thereof from the department, agency or governing body of such state official member and the public members designated herein.

7. "Person" means any state or agency or political subdivision thereof, or any individual, partnership, joint venture, corporation, city or county, whether located within or without this state, or any combination of such entities.

8. "Plant" means each separate thermal electric, nuclear or hydroelectric generating unit with a nameplate rating of one hundred megawatts or more for which expenditures or financial commitments for land acquisition, materials, construction or engineering in excess of fifty thousand dollars have not been made prior to the effective date of this article.

9. "Transmission Line" means a series of new structures erected above ground and supporting one or more conductors designed for the transmission of electric energy at nominal voltages of one hundred fifteen thousand volts or more and all new switchyards to be used therewith and related thereto for which expenditures or financial commitments for land acquisition, materials, construction or engineering in excess of fifty thousand dollars have not been made prior to the effective date of this article.

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State of Arizona — Thirtieth Legislature
Senate Bill 98

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BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ARIZONA:

Section 1. *Declaration of policy*

The legislature hereby finds and declares that there is at present and will continue to be a growing need for electric service which will require the construction of major new facilities. It is recognized that such facilities cannot be built without in some way affecting the physical environment where the facilities are located. The legislature further finds that it is essential in the public interest to minimize any adverse effect upon the environment and upon the quality of life of the people of the state which effect such new facilities might cause. The legislature further finds that present practices, proceedings and laws relating to the location of such utility facilities may be inadequate to protect environmental values and take into account the total effect on society of such facilities. The lack of adequate statutory procedures may result in delays in new construction and increases in costs which are eventually passed on to the people of the state in the form of higher electric rates and which may result in the possible inability of the electric suppliers to meet the needs and desires of the people of the state for economical and reliable electric service. Furthermore, the legislature finds that existing law does not provide adequate opportunity for individuals, groups interested in conservation and the protection of the environment, local governments, and other public bodies to participate in timely fashion in the decision to locate a specific major facility at a specific site. The legislature therefore declares that it is the purpose of this article to provide a single forum for the expeditious resolution of all matters concerning the location of electric generating plants and transmission lines in a single proceeding to which access will be open to interested and affected individuals, groups, county and municipal governments and other public bodies to enable them to participate in these decisions.

Sec. 2. Title 40, chapter 2, Arizona Revised Statutes, is amended by adding article 6.2, sections 40-360 and 40-360.01 to 40-360.12, inclusive, to read:

ARTICLE 6.2. Power Plant and Transmission Line Siting Committee

40-360. *Definitions*

In this article, unless the context otherwise requires:

1. "Area of Jurisdiction" means the state, a county or an incorporated city or town which exercises concurrent or exclusive jurisdiction over a geographical area.

2. "Certificate of Environmental Compatibility" means the certificate required by this article which evidences the approval by the state of the sites for a plant or transmission line or both.

3. "Commission" means the Arizona Corporation Commission.

4. "Committee" means the powerplant and transmission line siting committee.

5. "Facilities" means a plant, transmission line or both.

6. "Member" means the state official named herein, the employee designee thereof from the department, agency or governing body of such state official member and the public members designated herein.

7. "Person" means any state or agency or political subdivision thereof, or any individual, partnership, joint venture, corporation, city or county, whether located within or without this state, or any combination of such entities.

8. "Plant" means each separate thermal electric, nuclear or hydroelectric generating unit with a nameplate rating of one hundred megawatts or more for which expenditures or financial commitments for land acquisition, materials, construction or engineering in excess of fifty thousand dollars have not been made prior to the effective date of this article.

9. "Transmission Line" means a series of new structures erected above ground and supporting one or more conductors designed for the transmission of electric energy at nominal voltages of one hundred fifteen thousand volts or more and all new switchyards to be used therewith and related thereto for which expenditures or financial commitments for land acquisition, materials, construction or engineering in excess of fifty thousand dollars have not been made prior to the effective date of this article.

10. "Utility" means any person engaged in the generation or transmission of electric energy.

40-360.01. *Organization and membership of the committee*

A. The commission shall establish a powerplant and transmission line siting committee of Arizona.

B. The committee shall consist of the following members:

1. State Attorney General.
2. State Land Commissioner.
3. Chairman of the State Water Quality Control Council.
4. Director of the Division of Air Pollution Control of the State Board of Health.
5. Director of the Game and Fish Department.
6. Executive Director of State Water Commission.
7. Executive Director of the Department of Economic Planning and Development.
8. Chairman of the Arizona Corporation Commission.
9. Chairman of the Archaeological Department of the University of Arizona.
10. Director of the State Parks Board.
11. Executive Director of the Arizona Atomic Energy Commission.
12. Seven members appointed by the commission to serve for a term of two years of which two members shall represent the public, two members shall represent incorporated cities and towns, two members shall represent counties and one member who shall be a registered landscape architect.

C. The Attorney General or his designee shall be chairman of the committee.

D. The Commission shall establish such procedures as provided for expenditures review of the proposed siting plans and necessary consultation with the person proposing the facilities, for noticing and conducting the hearing provided by Section 40-360.04, and for a timely decision regarding the issuance of a certificate of environmental compatibility of the proposed site.

E. Committee members are not eligible to receive compensation for their services, but shall be reimbursed from the filing fee required by Section 40-360.09 for their actual and necessary expenses incurred in connection with their participation in committee meetings.

F. The committee may utilize the staff resources of its constituent agencies as well as necessary consultants. All studies required by the committee shall be conducted as specificed by the committee and under its general direction.

40-360.02. *Ten year plans; filing; failure to comply*

A. Every person contemplating construction of any facilities within the state during any ten year period shall file a ten year plan with the commission on or before the thirty-first day of January of each year.

B. Each plan filed pursuant to Subsection A shall set forth the following information with respect to the proposed facilities to the extent such information is available:

1. The proposed general area of each plant.
2. The approximate generating capacity of each plant and the number of plants proposed for each site.
3. The type of fuel proposed for each plant.
4. The proposed source of fuel and water for each plant.
5. The size and approximate route of the transmission lines associated with each proposed plant and of the transmission lines proposed to be constructed to serve any other purposes.
6. The purpose to be served by each proposed transmission line.
7. The estimated date by which each plant or transmission line will be in operation.

C. Failure of any person to comply with the requirements of Subsection A or B may, in the commission's discretion in the absence of a showing of good cause, constitute a ground for refusing to consider an application of such person.

D. Such plans shall be recognized and utilized as tentative information only and are subject to change at any time at the discretion of the person filing the same.

40-360.03. *Applications prior to construction of facilities*

Every utility planning to construct a plant, transmission line or both in this state shall first file with the commission an application for a certificate of environmental compatibility. The application shall be in a form prescribed by the commission and shall be accompanied by information with respect to the proposed type of facilities and description of the site, including the areas of jurisdiction affected and the estimated cost of the proposed facilities and site. Also the application shall be accompanied by a receipt evidencing payment of the appropriate fee required by section 40-360.09. The application and accompanying information shall be promptly referred by the commission to the chairman of the committee for the committee's review and decision.

40-360.04. *Hearings; procedures*

A. The chairman of the committee shall, within ten days after receiving an application, provide public notice as to the time and place of a hearing on the application and provide notice by certified mail to the affected areas of jurisdiction at least twenty days prior to a scheduled hearing. If the committee subsequently proposes to condition the certificate on the use of a site other than the site or alternative sites generally described in the notice and considered at the hearing, a further hearing shall be held thereon after public notice. The hearing or hearings shall be held not less than thirty days nor more than sixty

days after the date notice is first given and shall be held in the general area within which the proposed plant or transmission line is to be located or at the state capitol at Phoenix as determined by the chairman, at his discretion.

B. The committee may conduct the hearing or may appoint an attorney as a hearing officer. To be eligible for appointment the attorney must reside in a county other than the county in which the proposed site is located and have been admitted to practice in this state for not less than five years.

C. The committee or hearing officer shall receive under oath and before a court reporter the material, nonrepetitive evidence and comments of the parties to the proceedings and any rebuttal evidence of the applicant, and the committee or hearing officer may require the consolidation of the representation of nongovernmental parties having similar interests.

D. The committee shall review and consider the transcript of the public hearing or hearings and shall by a decision of a majority of the members issue or deny a certificate of environmental compatibility within one hundred eighty days after the application has been filed with or referred to the committee.

E. Should the estimated cost of the facilities or site be increased as a result of the action of the committee, such increase, as determined by an independent engineering firm selected jointly by the committee and applicant, shall be reflected in the certificate issued by the committee. The engineering firm shall include a registered professional engineer experienced in utility construction.

40-360.05. *Parties to certification proceedings*

A. The parties to a certification proceeding shall include:

1. The applicant.

2. Each county and municipal government and state agency interested in the proposed site that has filed with the chairman of the committee, not less than ten days before the date set for the hearing, a notice of intent to be a party.

3. Any domestic nonprofit corporation or association formed in whole or in part to promote conservation or natural beauty, to protect the environment, personal health or other biological values, to preserve historical sites, to promote consumer interests, to represent commercial and industrial groups, or to promote the orderly development of the areas in which the facilities are to be located, that his filed with the chairman of the committee, not less than ten days before the date set for the hearing, a notice of intent to be a party.

4. Such other persons as the committee or hearing officer may at any time deem appropriate.

B. Any person may make a limited appearance in the proceeding by filing a statement in writing with the chairman of the committee not less than five days before the date set for the hearing. A statement filed by a person making a limited appearance shall become part of the record. A person making a limited appearance shall not be a party or have the right to present oral testimony or cross-examine witnesses.

C. Any person may make an appearance in the proceeding on behalf of county, municipal government or state agency notwithstanding the fact that the county, municipality or state agency may be represented on the committee as provided for in Section 40-360.01.

40-360.06. *Factors to be considered in issuing a certificate of environmental compatibility*

A. The committee may approve or deny an application and may impose reasonable conditions upon the issuance of a certificate of environmental compatibility and in so doing shall consider the following factors as a basis for its action with respect to the suitability of either plant or transmission line siting plans:

1. Existing plans of the state, local government and private entities for other developments at or in the vicinity of the proposed site.

2. Fish, wildlife and plant life and associated forms of life upon which they are dependent.

3. Noise emission levels and interference with communication signals.

4. The proposed availability of the site to the public for recreational purposes, consistent with safety considerations and regulations.

5. Existing scenic areas, historic sites and structures or archaeological sites at or in the vicinity of the proposed site.

6. The total environment of the area.

7. The technical practicability of achieving a proposed objective and the previous experience with equipment and methods available for achieving a proposed objective.

8. The estimated cost of the facilities and site as proposed by the applicant and the estimated cost of the facilities and site as recommended by the committee, recognizing that any significant increase in costs represents a potential increase in the cost of electric energy to the customers of the applicant.

9. Any additional factors which require consideration under applicable federal and state laws pertaining to any such site.

B. The committee shall give special consideration to the protection of areas unique because of biological wealth or because they are habitats for rare and endangered species.

C. Notwithstanding any other provision of this article, the committee shall require in all certificates for facilities that the applicant comply with all applicable nuclear radiation standards and air and water pollution control standards and regulations, but shall not require compliance with performance standards other than those established by the agency having primary jurisdiction over a particular pollu-

tion source.

D. Any certificate granted by the committee shall be conditioned on compliance by the applicant with all applicable ordinances, master plans and regulations of the state, a county or an incorporated city or town, except that the committee may grant a certificate notwithstanding any such ordinance, master plan or regulation, exclusive of franchises, if the committee finds as a fact that compliance with such ordinance, master plan or regulation is unreasonably restrictive and compliance therewith is not feasible in view of technology available. When it becomes apparent to the chairman of the committee or to the hearing officer that an issue exists with respect to whether such an ordinance, master plan or regulation is unreasonably restrictive and compliance therewith is not feasible in view of technology available, he shall promptly serve notice of such fact by certified mail upon the chief executive officer of the area of jurisdiction affected and, notwithstanding any provision of this article to the contrary, shall make such area of jurisdiction a party to the proceedings upon its request and shall give it an opportunity to respond on such issue.

40-360.07. *Compliance by utility; commission order*

A. No utility may construct a plant or transmission line within this state until it has received a certificate of environmental compatibility from the committee with respect to the proposed site, affirmed and approved by an order of the commission which shall be issued not less than thirty days nor more than sixty days after the certificate is issued by the committee, except that within fifteen days after the committee has rendered its written decision any party to a certification proceeding may request a review of the committee's decision by the commission.

B. The grounds for review shall be stated in a written notice filed with the commission with a copy thereof served on the chairman of the committee. The committee shall transmit to the commission the complete record, including a certified transcript, and the review shall be conducted on the basis of the record. The commission may, at the request of any party, require written briefs or oral argument and shall within sixty days from the date the notice is filed either confirm or modify any certificate granted by the committee, or in the event the committee refused to grant a certificate, the commission may issue a certificate to the applicant. In arriving at its decision, the commission shall comply with the provisions of section 40-360.06 and shall balance in the broad public interest, the need for an adequate, economical and reliable supply of electric power with the desire to minimize the effect thereof on the environment and ecology of this state. The decision of the commission is final with respect to all issues, subject only to judicial review as provided by law in the event of an appeal by a person having a legal right or interest that will be injuriously affected by the decision.

40-360.08. *Transfer of certificate; compliance by committee, commission and review panel; authorization to construct*

A. Subject to such limitations and conditions as may otherwise be prescribed by law, a certificate may be transferred to any electric company or electric utility agreeing to comply with the terms, limitations and conditions contained therein.

B. If the committee or the commission fails to act on an application within the applicable time period prescribed in this article, the applicant may, in its discretion and in the interest of providing adequate, reliable and economical electric service to its customers, immediately proceed with the construction of the planned facilities at the proposed site or, if application has been made for alternative sites, at the proposed site which in the opinion of the applicant best satisfies the factors expressed in Section 40-360.06.

40-360.09. *Filing fees; utility siting fund*

The fee to be paid for each application is as follows and shall be paid to the committee for immediate transmittal to the state treasurer for deposit in a special fund to be known as the utility siting fund.

1. For a new proposed plantsite and associated transmission line site, ten thousand dollars.

2. For expansion of an existing plantsite and a new proposed transmission line site, seven thousand five hundred dollars.

3. For expansion of an existing plantsite only, five thousand dollars.

4. For a new proposed transmission line site one hundred miles or more in length, five thousand dollars.

5. For a new proposed transmission line site over fifty but less than one hundred miles in length, two thousand five hundred dollars.

6. For a new proposed transmission line site fifty miles or less in length, one thousand dollars.

7. For a new proposed transmission line site paralleling an existing transmission line site, regardless of length, one thousand dollars.

40-360.10. *Expenditure of funds*

The state treasurer, upon receipt of a detailed accounting of the committee's expenses, approved by the commission, shall pay the following:

1. The cost of reporting and transcribing any application hearing, the compensation of the hearing officer at the rate of two hundred dollars for each day and his reimbursable expenses.

2. Actual and necessary expenses incurred by the committee members in connection with their participation in committee meetings.

3. The cost of studies and the fees of consultants utilized by the committee. Costs and fees exceeding the amount of the applicant's fee may with the applicant's consent be incurred by the committee and charged to the applicant.

4. A refund to the person who paid the filing fee of any unused portion thereof.

40-360.11. *Jurisdiction of courts*

Subject to the rights to judicial review recognized in sections 40-254 and 40-360.07, no court in this state has jurisdiction to hear or determine any case or controversy concerning any matter which was or could have been determined in a proceeding before the committee or the commission under this article or to stop or delay the construction or operation of any facility, except to enforce compliance through the procedures established by Article 3 of this chapter.

40-360.12. *Jurisdiction of the commission*

Except as specifically provided for in this article nothing in this article shall confer upon the commission the power or jurisdiction to regulate or supervise any person, that is not otherwise a public service corporation regulated and supervised by the commission. Nothing contained in this article shall confer upon the commission the power or jurisdiction to regulate or establish the rates, regulations or conditions of service of any such person.

Approved by the Governor—April 16, 1971.

Filed in the Office of the Secretary of State—April 16, 1971.

Appendix C

California Radiological Environmental Surveillance Program

The objective of this program is the protection of the health of individuals and the public from the harmful effects of exposure to radiation in the environment.

The tasks through which this objective is achieved are: a) Determination of the level of radiation in the environment resulting from nuclear device testing, contamination from nuclear reactors, laboratories, and other man-made causes, by the collection and analysis of 6,500 samples of environmental media during the year; b) Evaluation of the effects of environmental contamination, and taking appropriate action to prevent unacceptable exposures by assessing the results of 14,800 analyses of these samples, comparing these against acceptable levels of radiation and, if necessary, requiring or recommending additional controls to reduce the possibility of excessive exposure; c) Maintaining and updating standards and regulations relating to potential environmental contamination; d) Maintaining a level of competency among professional staff sufficient to develop and interpret such standards; and e) Dissemination of information on radiation levels in the environment and on the effects of such contamination, so that the public is kept informed of the degree of risk present and of the actions the Department is taking or prepared to take to protect the health of the public from the harmful effects of environmental contamination.

Within the program, activities are expected to continue at almost the same level of operations, with some workload increase. There will be some shifting of emphasis and reallocation of resources necessary to meet changing problems and requirements. Flexibility to handle the internal program modifications must be maintained to accommodate unpredictable occurrences such as increased nuclear device testing, environmental contamination problems, or incidents.

Staff support for the California Radiological Environmental Program:

A. Bureau of Radiological Health
   1) Senior Health Physicist

B. Radiological Laboratory*
   1) Research Radio Chemist
   2) Associate Radio Chemist
   3) Asst. Public Health Chemist
   4) Asst. Public Health Chemist
   5) Lab Assistant
   6) Clerk Typist

C. Voluntary sample collectors (see attached list of cooperating groups)

* Except for administrative overhead.

ENVIRONMENTAL PROGRAM—1970-1971

Sample	*Locations*	*Frequency*	*Samples Per Year*	*Analysis*	*Analyses Per Year*	*Remarks*
Air	11	5/wk	2,860		2,860	*Air:* Eleven stations sample 7 day/wk, but remove samples only on work days (5 times/wk). All stations analyzed for beta; Los Angeles for alpha. Three stations obtain 7 samples/week. Two stations analyzed for beta. Berkeley samples analyzed for beta @ 5 hrs and 72 hrs after removal, and for alpha. Monthly composite for all stations analyzed for gamma and strontium.
					260	
	3	7/wk	1,092		1,456	
					364	
	14	1/mo	168	gamma	168	
				Sr	168	
			4,120		5,276	
Rain	1	36/yr	36		144	*Rain:* It is estimated Berkeley has 36 days of rain each year. A monthly composite is made up of individual rains on which alpha and strontium are run.
	1	1/mo	12	gamma	12	
				Sr	12	
			48		168	
Fallout	3	1/mo	36	gamma	36	*Fallout:* Locations of fallout stations are: Eureka, Berkeley and Anaheim.
				Sr	36	
			36		72	
Domestic Water	20	1/mo	240		240	*Domestic Water:* Monthly samples are run for beta and the yearly composite for gamma, strontium and radium.
	20	1/yr	20	gamma	20	
				Sr	20	
				Ra	20	
			260		300	
Sewage	21	2/mo	504		552	*Sewage:* Both effluent and digested sludge from 21 treatment plants are sampled each month. The Pleasanton samples are always analyzed in triplicate.
					552	
			504		1,104	
Milk	10	1/mo	120	gamma	120	*Milk:* Milk samples are obtained from 10 milksheds each month. In cases of incidents, milk sampling is increased as deemed appropriate.
				Sr	120	
				Ca	120	
				K	120	
			120		480	
Diet	20	1/qtr	80	gamma	80	*Diet:* Diets are obtained from 20 hospitals once each quarter. The samples consist of 7 days of diet (21 consecutive meals).
				Sr	80	
				Ca	80	
				Na	80	
				K	80	
				Sr(stbl)	20	
				Ra	80	
			80		500	
Specials	8	1/yr	160		160	*Specials:* Special sampling consists of about 20 samples each year from the following: 1) Vallecitos, 2) Humboldt, 3) San Francisco Bay, 4) Atomics International, 5) San Onofre, 6) Diablo, 7) Gulf Energy and Environmental Systems, and 8) San Diego Bay.
					160	
				gamma	160	
			160		480	
Industrial Air	36	10/yr	360		360	*Industrial:* An estimate of 360 samples of workers' environmental air will be sampled each year.
					40	
				gamma	40	
			360		440	

Industrial Swipes	36	10/yr	360	360	*Industrial Swipes:* Estimate 360 swipes per year.
				40	
			360	400	
	Totals		6,048	9,220	*Notes:* In determining the number of analyses, 1) gamma scan was considered as one analysis, 2) strontium 89 and 90 was considered one analysis, 3) stable strontium was considered one analysis, 4) potassium, although it is calculated in the gamma scan is also determined by flame spectrometry so it is considered one analysis.

Place	*Type Sample*							*Cooperating Group*
	AIR	FALLOUT	DOMESTIC WATER	SEWAGE	MILK	DIET	SPECIALS	
Alturas			X					Modoc County Health Department
Antioch			X	X				City Water Department
Atomics International							X	State Department of Public Health
Bakersfield	X			X				Kern County Health Department
Bakersfield						X		Kern County General Hospital
Barstow	X							San Bernardino County Fire District
Berkeley	X	X	X				X[1]	State Department of Public Health
Bishop						X		Northern Inyo Hospital
Brawley						X		Pioneers Memorial Hospital
Colfax	X							U. S. Forest Service
Crescent City			X					Del Norte County Health Department
Crescent City					X			Parkside Dairy
Crescent City						X		Seaside Hospital
Diablo Canyon							X	State Department of Public Health
Death Valley			X					U. S. Park Service
El Centro	X		X	X				Imperial County Health Department
Eureka	X	X		X				Humboldt County Health Department
Eureka			X					City Water Department
Eureka						X		Humboldt Medical Center
Fresno	X							State Department of Public Health
Fresno				X				City Sewage Treatment Plant
Fresno					X			Department of Agriculture
Fresno					X[2]			Department of Agriculture
Fresno						X		Fresno Valley Medical Center
Glenn					X[2]			Department of Agriculture
Gulf Energy							X	State Department of Public Health
Humboldt					X			Department of Agriculture
Humboldt					X[2]			Department of Agriculture
Humboldt							X	State Department of Public Health
Lake Arrowhead			X					San Bernardino County Health Department
Livermore			X					State Department of Public Health
Livermore				X				City Sewage Treatment Plant
Los Angeles	X		X					State Department of Public Health
Los Angeles				X				Hyperion Treatment Plant
Los Angeles				X				Los Angeles Co. Sanitation District
Los Angeles					X			Department of Agriculture
Los Angeles						X		Santa Monica Hospital

1 This is a rain sample.
2 Powdered milk.

Place	Type Sample							Cooperating Group
	AIR	FALLOUT	DOMESTIC WATER	SEWAGE	MILK	DIET	SPECIALS	
Marin M.U.D.			X					Marin Municipal Utility District
Metropolitan Water Dept.			X					Metropolitan Water District
Needles						X		Needles Municipal Hospital
Oakland EBMUD				X				East Bay Municipal Utility District
Orange County		X						Orange County Health Department
Orange County				X				Orange County Sanitation District
Pleasanton			X	X				City Department of Public Works
Potter Valley					X			Department of Agriculture
Quincy						X		Plumas District Hospital
Redding	X		X					State Department of Public Health
Redding						X		Shasta General Hospital
Sacramento	X							U. S. Army
Sacramento			X					City Water Department
Sacramento				X				Sewage Treatment Plant
Sacramento					X			Department of Agriculture
Sacramento						X		Sacramento Medical Center
Salinas	X							Monterey County Health Department
Salinas						X		Salinas Valley Memorial Hospital
San Bernardino	X							S.B. County Air Pollution Control District
San Bernardino				X				Sewage Treatment Plant
San Bernardino						X		S.B. County General Hospital
San Diego	X							San Diego County Health Department
San Diego			X	X				City Water Department
San Diego					X			Department of Agriculture
San Diego						X		Donald M. Sharp Memorial Hospital
San Diego Bay							X	State Department of Public Health
San Francisco			X					City Water Department
San Francisco				X				Northpoint Plant
San Francisco				X				Richmond Sunset Plant
San Francisco				X				Southeast Plant
San Francisco Bay							X	State Department of Public Health
San Jose				X				Sewage Treatment Plant
San Luis Obispo			X					S.L.O. County Health Department
San Luis Obispo						X		S.L.O. County Health Department
San Onofre							X	State Department of Public Health
Santa Barbara			X					Santa Barbara Co. Health Department
Santa Barbara						X		Cottage Hospital
Santa Clara					X			Department of Agriculture
Santa Rosa	X							Sewage Treatment Plant
Santa Rosa			X					Flood Control & Water Conservation District
Santa Rosa						X		Community Hospital of Sonoma County
Shasta					X			Department of Agriculture
Sonoma					X			Department of Agriculture
Susanville						X		Lassen Memorial Hospital
Ukiah						X		Mendocino State Hospital
Vallecitos							X	State Department of Public Health
Vallejo				X				Sanitary & Flood Control District

SANITATION AND RADIATION LABORATORIES CAPABILITIES

A. Radiochemistry
   1. Sequential separation of various radionuclides from a single sample.
   2. Purification and determination of approximately 40 elements and about 100 radionuclides from a wide variety of matrices.

B. Alpha Emitters
   1. Gross alpha
      Routine environmental samples, such as air, water, sewage, soil, vegetation, wipes, etc. Total radium is determined after purification.
   2. Alpha pulse height spectrometry.
      Plutonium-238 and 239 -240 are determined in air, fallout, diet, etc. Other heavy element can be determined.
   3. Radium-226 is determined by the emanation method from water and diet samples.

C. Beta Emitters
   1. Gross beta
      Routine environmental samples as in the alpha counting.
   2. Determination of gross beta-gamma emitters (excluding K-40, Rb-87, Cs-137) in seawater by precipitation method.
   3. Determination of strontium-89, 90 in various samples.
   4. Determination of tritium and other beta emitters in water, milk, vegetation, etc.
   5. Rapid determination of iodine-121 in milk.

D. Gamma Emitters
   1. Various environmental samples are gamma scanned as received such as, milk in a Marinelli beaker or processed into a solid. In addition to the routine scanning of Ba-140, La-140, K-40, Mn-54, Zr-95, Nb-95, Cs-137, Ru-106, Rh-106, I-131, and Ce-144, Zn-65, Co-60, Sb-125, etc., can be determined.
   2. Rapid determination of I-121 in milk.
   3. Determination of Cs-137 in water and seawater.

E. Stable Elements.
   1. Spectrophotometric
      K, Na, Sr.
   2. Fluorometric
      U
   3. Titration
      Ca

Laboratory Personnel:

Research Radiochemist	1
Associate Radiochemist	1
Assistant Public Health Chemist	2
Technical Laboratory Assistant	1
Intermediate Clerk	1

SANITATION AND RADIATION LABORATORY INSTRUMENTATION: RADIOCHEMISTRY SECTION

	Number Available
A. Nuclear Detection Equipment	
1. Alpha Counting Equipment:	
Internal proportional counters, Nuclear measurement	5*
Surface barrier alpha spectrometer, Nuclear Diode	1
Low background alpha counter, Sharp	1†
Radon gas counting system	2
Liquid scintillation counter, automatic, Nuclear Chicago	1‡
2. Beta Counting Equipment:	
Internal proportional counter, NMC	5*
Low background counter, automatic, Nuclear Chicago	1
Low background counter, automatic, Sharp	1†
End window counter, automatic	1
Liquid scintillation counter, Nuclear Chicago	1‡
3. Gamma Counting Equipment:	
Gamma Spectrometry detectors Harshaw's Na I, 2″x2″, 3″x3″, 4″x4″, 8″x8″.	4
Gamma well detector Harshaw 2″x2″.	1
4. Analyzer:	
Single channel, Nuclear Chicago	1
512 Channel, Nuclear data	1
1024 Channel, Nuclear data	1
Multichannel analyzers are coupled to typewriter, punch paper tape input and output, X-Y plotter and oscilloscope readout.	
5. Monitoring Equipment:	
Beta-gamma monitor	
Continuous air monitoring system	
6. Computer Facility:	
RCA Spectra 70 and assorted equipment.	
Gamma scan (8 by 8 matrix),	
Strontium-89, 90, and	
Gross radioactivity computer programs are in use.	
Staff from the Data Processing Center are available for additional or modification of the program.	
7. Accessory Equipment:	
High voltage power supplies	10
Low voltage power supplies	4
Scaler-timer	9
Oscilloscope with various plug-ins	2
Linear amplifiers	10
Bias amplifier	1
Coincidence unit	1
Pulse generator	2
Electrometer	1
Tube tester	1
Transistor tester	1
Recorders	2
High-speed printer	1

* Same equipment
† Same equipment
‡ Same equipment

	Number Available
B. Sampling Equipment	
Millipore filter air sampling unit	20
High volume air sampler	2
Rain collector	24
C. Laboratory Equipment	
1. Instrument:	
Balance, analytical	3
Balance, automatic, top-loading	1
Balance, torsion	2
Electrolytic analyzer, 2-position	1
Fluorometer	1
pH meter	2
Spectrometer, Beckman "B", flame	1
2. Equipment:	
Calculator	2
Centrifuge	7
Drying oven	6
Muffle furnace	5
Mill, hammer	1
Blenders (diet and assorted)	3
Tritium enrichment apparatus	3
Shaker, wrist action	1
Ultrasonic bath	1
Assorted standard laboratory equipment	
Other equipment and expertise is available with the Division of Laboratories.	

Tables A and B list all the practical reporting levels for all analyses routinely performed by the Radiological Laboratory of the State Department of Public Health. Table C summarizes the analytical procedures used in the Laboratory.

The practical reporting levels are defined as 2 standard deviation total analytical errors. Values below this level are not too reliable because they have errors as large or larger than the value reported. However, they are a best estimate figure and can be used to make averages and other statistical calculations.

Table A

Practical Reporting Levels for Gross Activity Determination

Type of Sample	*Air*	*Water Domestic Sewage Effluent*	*Sludge Water, Sewage*	*Soil Vegetation Ash*
Radioactivity	pCi/m²	pCi/l	pCi/g	pCi/g
Alpha	.02	8	15	8
Beta	.08	15	30	20

Table B

Practical Reporting Levels for Radionuclide Determinations

Type of Sample	*Air Composite*	*Water Composite*	*Fallout*	*Milk*	*Powdered Milk*	*Soil*	*Diet*
Unit							
Radionuclides	pCi/1000m³	pCi/l	pCi/m²	pCi/l	pCi/kg	pCi/kg	pCi/kg
90 Sr	0.5	0.1	3	1.5	3	15	1.0
89 Sr	1.0	....	15	2.5	....	40	2.0
226 Ra	....	0.03	....	....	....	....	0.2
140 Ba-La	20	....	60	7	....	....	10
40 K	30	3	150	75	500	2000	75
54 Mn	5	0.5	20	....	....	200	7
95 Zr-Nb	7	1.0	30	....	....	300	7
137 Cs	7	0.5	30	7	50	200	7
103, 106 Ru-Rh	7	0.7	30	....	....	300	10
131 I	....	....	....	7	....	....	10
141, 144 Ce	7	0.7	30	7	....	300	10
H-3		200		500			500

Table C

Summary of Sample Type, Sample Size, Sample Processing, Analyses Made and Counting Period Routinely Performed in the Laboratory

Type of Sample	*Sample Size*	*Sample Processing*	*Analyses*	*Counting Period in Min.*
Air	80 m^3	Ashed in planchet		10
				10
Water	250 ml	Evaporated in planchet		10
				20
Soil	200 mg	Dried and fixed in planchet		10
Vegetation Ash				20
Air Composite	2400 m^3	Daily air combined into planchet	scan	100
		Purified and mounted on plastic disc	89,90 Sr	60–100
Water Composite	19	Evaporate into planchet	scan	100
		Purified and mounted in plastic disc	89,90 Sr	60–100
		Total radium or radon method	226 Ra	40–100
Fallout	1 to 3 mo. in 0.4 m^2 collector	Evaporated and ashed in planchet	scan	100
		Purified and mounted	89,90 Sr	60–100
Milk	4	Whole sample in Marinelli beaker	scan	100
		1 purified and mounted	89,90 Sr	60–100
Powdered Milk	100 g	Ashed to 10 g, transferred to planchet	scan	100
		Purified and mounted	90 Sr	60–100
Soil	Quartered to 60 g	20 g transfer to planchet	scan	100
		60 g purified and mounted	89,90 Sr	60–100
Diet	16 kg	4 kg mixture in Marinelli beaker	scan	100
		10 g ash purified and mounted	89,90 Sr	60–100
		10 g ash by total radium or radon method	226 Ra	40–100
Milk Diet		Freeze dry 100 ml or 100 g collect aqueous phase	H-3	60–100

Appendix D

January 7, 1971

STATE WATER RESOURCES CONTROL BOARD

Policy Regarding the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California

Definition of Terms

1. *Thermal Waste*—Cooling water and industrial process water used for the purpose of transporting waste heat.

2. *Elevated Temperature Waste*—Liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the ambient temperature of receiving water. Irrigation return water is not considered elevated temperature waste for the purpose of this policy.

3. *Ambient Receiving Water Temperature* — The temperature of the receiving water at locations, depths, and times which represent conditions unaffected by any elevated temperature waste discharge.

4. *Interstate Waters*—All rivers, lakes, artificial impoundments, and other waters that flow across or form a part of the boundary with other states or Mexico.

5. *Coastal Waters*—Waters of the Pacific Ocean outside of enclosed bays and estuaries which are within the territorial limits of California.

6. *Enclosed Bays*—Indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays will include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes, but is not limited to, the following: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Carmel Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

7. *Estuaries and Coastal Lagoons*—Waters at the mouths of streams which serve as mixing zones for fresh and ocean water during a major portion of the year. Mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and saltwater occurs in the open coastal waters. This definition includes but is not limited to the following; Smith River, Klamath River, Mad River, Eel River, Noyo River, Russian River, Sacramento River (including Suisun Bay) downstream to Carquinez Bridge, Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code.

8. *Cold Interstate Waters*—Streams and lakes having a range of temperatures generally suitable for trout and salmon including but not limited to the following: Lake Tahoe, Truckee River, West Fork Carson River, East Fork Carson River, West Walker River and Lake Topaz, East Walker River, Minor California-Nevada waters, Klamath River, Smith River, Goose Lake, and Colorado River from the California-Nevada stateline to the Needles-Topock Highway Bridge.

9. *Warm Interstate Waters*—Interstate streams and lakes having a range of temperatures generally suitable for warm water fishes such as bass and catfish. This definition includes but is not limited to the following: Colorado River from the Needles-Topock Highway Bridge to the northerly international boundary of Mexico, Tijuana River, New River, and Alamo River.

10. *Existing Discharge*—Any discharge (a) which is presently taking place or (b) for which waste discharge requirements have been established and construction commenced prior to the adoption of this policy, or (c) any material change in an existing discharge for which construction has commenced prior to the adoption of this policy. Commencement of construction shall include execution of a contract for on-site construction or for major equipment which is related to the condenser cooling system.

Major thermal discharges under construction which are included within this definition are:

A. Diablo Canyon Units 1 and 2, Pacific Gas and Electric Company

B. Ormond Beach Generating Station Units 1 and 2, Southern California Edison Company

C. Pittsburg No. 7 Generating Plant, Pacific Gas and Electric Company

D. South Bay Generating Plant Unit 4 and Encina Unit 4, San Diego Gas and Electric Company.

11. *New Discharge*—Any discharge (a) which is not presently taking place unless waste discharge requirements have been established and construction as defined in Paragraph 10 has commenced prior to adoption of this policy and (b) which is presently taking place and for which a material change is proposed but no construction as defined in Paragraph 10 has commenced prior to adoption of this policy.

Specific Water Quality Objectives

1. *Cold Interstate Waters*

A. Elevated temperature waste discharges into cold interstate waters are prohibited.

2. *Warm Interstate Waters*

A. Thermal waste discharges having a maximum temperature greater than 5°F above ambient receiving water temperature are prohibited.

B. Elevated temperature wastes shall not cause the temperature of warm interstate waters to increase by more than 5°F.

C. *Lost River*—Elevated temperature wastes discharged to the Lost River shall not cause the temperature of the receiving water to increase by more than 2°F when the receiving water temperature is less than 62°F, and 0°F when the receiving water temperature exceeds 62°F.

3. *Coastal Waters*

A. Existing discharges:

(1) Elevated temperature wastes shall comply with specific temperature limitations and other restrictions necessary to assure protection of the beneficial uses including areas of special biological significance.

B. New discharges:

(1) Elevated temperature wastes shall be discharged a sufficient distance from areas of special biological significance to assure the maintenance of ambient temperature in these areas.

(2) The maximum temperature of thermal waste discharges shall not exceed the ambient temperature of receiving waters by more than 20°F.

(3) Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

4. *Enclosed Bays*

A. Existing discharges:

(1) Elevated temperature waste discharges shall comply with specific temperature limitations and other restrictions necessary to assure protection of beneficial uses.

B. New discharges:

(1) Elevated temperature waste discharges shall comply with specific temperature limitations and other restrictions necessary to assure protection of beneficial uses. The maximum temperature of waste discharges shall not exceed the ambient temperature of the receiving waters by more than 20°F.

(2) Thermal waste discharges having a maximum temperature greater than 4°F above the ambient temperature of the receiving water are prohibited.

5. *Estuaries*

A. Existing discharges:

(1) Elevated temperature waste discharges shall comply with the following:

a. The maximum temperature shall not exceed the ambient receiving water temperature by more than 20°F.

b. Elevated temperature waste discharges either individually or combined with other discharges shall not create a zone, defined by water temperatures of more than 1°F above ambient receiving water temperature, which exceeds 25 percent of the cross-sectional area of main river channel at any point.

c. No discharge shall cause a surface water temperature rise greater than 4°F above the ambient temperature of the receiving waters at any time.

d. Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

(2) Thermal waste discharges shall comply with the provisions of 5A(1) above and, in addition, the maximum temperature of thermal waste discharges shall not exceed 86°F.

B. New discharges:

(1) Elevated temperature waste discharges shall comply with item 5A(1) above.

(2) Thermal waste discharges having a maximum temperature greater than 4°F above the ambient temperature of the receiving water are prohibited.

(3) Additional limitations shall be imposed when necessary to assure protection of beneficial uses.

General Water Quality Provisions

1. Additional limitations, including discharge prohibitions, shall be imposed if necessary for the protection of specific beneficial uses including areas of special biological significance.

2. The cumulative effects of elevated temperature waste discharges shall not cause temperatures to be increased except or provided in specific water quality objectives contained herein.

3. The reclamation of waste heat energy from cooling water shall be encouraged.

4. Exceptions to the provisions of this policy may be included in waste discharge requirements to allow the use of heat on an intermittent basis to control organisms if it has been determined that other alternative methods will result in a greater potential for deleterious effects upon beneficial uses.

5. A conditional modification of the objectives of the policy may be authorized upon a finding that an elevated temperature waste discharge operating in compliance with modified objectives will result in the enhancement of beneficial uses.

6. Ambient water temperature will be compared with waste discharge temperature by near-simultaneous measurements accurate to within 1°F. In lieu of near-simultaneous measurements, measurements may be made under calculated conditions of constant waste discharge and receiving water characteristics.

7. Areas of special biological significance shall be designated by the State Board after review of regional board recommendations and public hearing.

Implementation

1. The State Water Resources Control Board and the California Regional Water Quality Control Boards will administer this policy by establishing waste discharge requirements for discharges of elevated temperature wastes.

2. This policy is effective as of the date of adoption by the State Water Resources Control Board and the sections pertaining to temperature control in each of the 32 policies for the individual interstate and coastal waters shall be void and superseded by all applicable provisions of this policy.

3. Existing discharges:

A. All dischargers of thermal waste shall be required to conduct a study to define the effect of the discharge on beneficial uses and submit the results thereof to the appropriate regional board prior to January 1973.

B. Waste discharge requirements for elevated temperature wastes shall be reviewed to determine the need for studies on the effect of the discharge on beneficial uses, changes in monitoring programs and revision of waste discharge requirements.

C. The scope of any necessary studies shall be as outlined by the regional board or State Board for each discharge.

D. The regional board shall review all studies and shall make necessary revisions to waste discharge requirements prior to July 1973 to assure compliance with all applicable provisions of this policy.

E. Revised waste discharge requirements shall include a time schedule which assures compliance at the earliest possible date but not later than January 1976.

4. New discharges:

A. Every discharger of thermal waste shall submit a predischarge study to the appropriate regional board defining the effect of the discharge on beneficial uses prior to the establishment of waste discharge requirements. Dischargers of elevated temperature wastes may be required by the regional board to submit such studies prior to the establishment of waste discharge requirements. The regional board shall include in its requirements appropriate postdischarge studies by the discharger.

Appendix E

Environmental Surveillance Coordinating Committee

PROBLEM: Develop action plan for States to deal with new nuclear facilities.

Dennis Dalley, Utah, *Chairman*
William L. Wagner ..... Alaska
Robert D. Siek ..... Colorado
E. Lee Stein ..... Delaware
Chester L. Nayfield, M.D. ..... Florida
Michael Christie ..... Idaho
Hal Stocks ..... Indiana
Warren Lawson, M.D. ..... Minnesota
Sherwood Davies ..... New York
Marshall Parrott, D.Sc. ..... Oregon
Paul B. Smith ..... BRH, Region VIII

I. Problem

As of March 31, 1970 there exists in the United States 17 operable power reactors, 49 under construction, 37 planned for which reactors have been ordered, and 7 planned for which reactors have not been ordered.

With the expected increase in power production, continued manufacture of defense devices, and emphasis on peaceful uses of radioisotopes it is expected that nuclear facilities, such as uranium mills, fuel processing and reprocessing plants, research laboratories, fabrication plants, and waste disposal sites will increase in number as well as expansion of present facilities.

The following factors indicate an increased use of reactors not only in areas where reactors have already been constructed but also in areas not now involved in reactor production:

1. According to the Atomic Energy Act, Section 3.d, the United States Atomic Energy Commission is to provide for a program to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and the health and safety of the public.

2. Recognition that in many areas nuclear power is competitive with fossil fuel for power production.

3. The present emphasis on eliminating visible atmospheric emissions from all sources increases the attraction to nuclear power generation. Environmental contamination has become a political and emotional subject necessitating pollution control authorities to look at all possible solutions.

II. Impact on the Environment of Routine Radioactive Releases

1. *Air*

The principal gaseous releases from reactors are radioiodine, tritium and the radioactive noble gases. Airborne wastes are usually released from a stack to take advantage of dilution possibilities. Releases are subject to meteorological influences, such as wind movement, temperature inversions, and precipitation.

2. *Water and Sedimentation*

Both fission and activation products are produced in reactors and may enter the waste system. While fission products are primarily contained within the fuel cladding assemblies, these products may also be found in the primary coolant due to cladding leaks, diffusion through the cladding, and contamination on the fuel and core structure. Activation products result from neutron activation of corrosion materials the primary system carried to the core area or erosion of activated structural materials.

Liquid waste injection into the environment may be controlled by:

a. Storage for decay.
b. Filtration to remove particulates.
c. Demineralization to remove dissolved substances.
d. Distillation to reduce volume.
e. Dilution of effluents.

3. *Food*

Radioactive contaminants may enter the food chain from either air or water contamination through plant uptake from the soil or by direct deposition on plants.

III. Environmental Surveillance Objectives

A surveillance program may be conducted by the health agency or the facility operator or by the two through a cooperative effort. Since an environmental polluter's data is quite frequently suspect and a health agency's acceptance of his data somewhat compromises the agency's position, it is recommended that the health agency conduct an independent program.

The objectives of an acceptable surveillance program are as follows:

1. To verify the continuing adequacy of source control;
2. To provide the data to estimate population exposure;
3. To provide data for public information;
4. To assess the impact on the environment of releases from all nuclear facilities. This includes a comprehensive study of the total environment by a central agency funded in some part by all who contribute to release of radioactive wastes to the environment.

IV. Preoccupational Planning and Surveillance

It is imperative that the health agency and the company establish good rapport in communication and cooperation early in the planning of a facility. One of the early activities should be the evaluation of the proposed site for the nuclear facility coordinated by the State agency with responsibility for radiological health. This study would include ecological evaluation in close proximity to the facility involving meteorological, hydrological, geological parameters, and recreational activities of the area. The establishment of a State site evaluation committee should be considered before locating any nuclear facility.

This should include representatives from contiguous States and interested State agencies, including, but not limited to:

1. Land Boards;
2. Natural Resources;
3. Recreation;
4. Zoning Boards.

The initial preoperational survey should be coordinated with the Bureau of Radiological Health, U. S. Public Health Service, and the U. S. Atomic Energy Commission.

Enough data should be collected to establish a baseline for background radioactivity. This preliminary survey will provide the necessary data for:

1. An early indication of any increase in radioactive material in the environment;
2. An evaluation of the surveillance program for providing useful data; and
3. To develop a method for generating useful data for *public information.*

Sampling locations, frequency of sampling, laboratory procedures, and data processing should be on the same basis as planned for the operational phase. Reliable data should be collected for at least one year prior to startup of the nuclear facility.

V. Environmental Surveillance During Operation

Routine environmental surveillance systems are essential for all nuclear facilities. The scope and details of such systems must be tailored to each individual facility. At the present time, many environmental monitoring programs extensively sample and analyze all portions of the biosphere. Sampling activities should be continually evaluated and modified to assure that the data is useful in terms of evaluating population exposure.

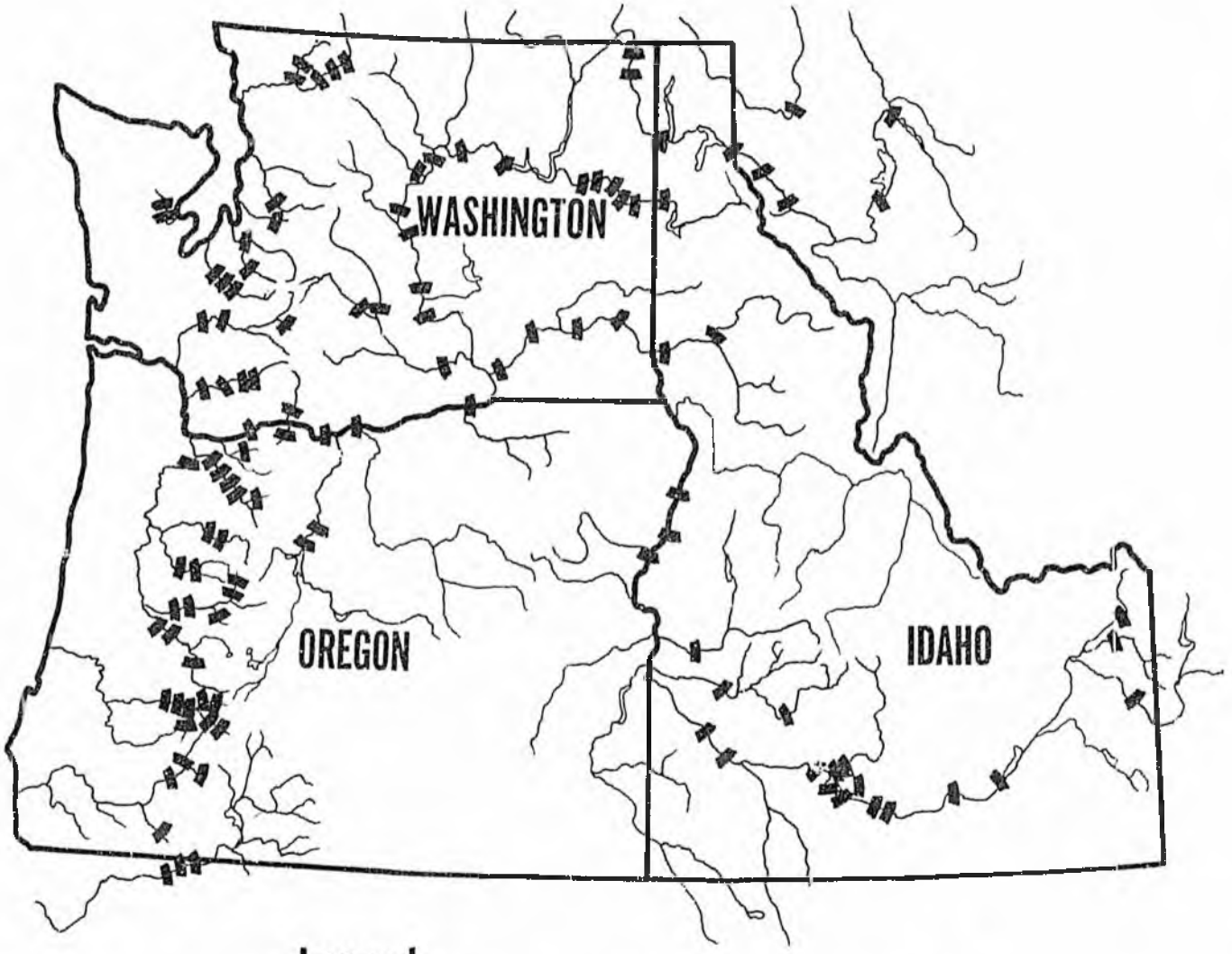
Existing systems must be continuously evaluated in terms of the latest technology emphasizing detailed and continuous emissions inventories coordinated with selective environmental pathways of specific isotopes. In addition, the costs of environmental surveillance should be balanced against the costs of refinements of waste treatment and containment.

Appendix F

Pacific Northwest Basic Power Needs and Resources

The Pacific Northwest is a unique region in the West. During 1965 hydroelectric sources were used to generate 99% of the power. Nationally the average was 20%. Because the generation is by federal projects on rivers that form the state boundaries, the resources cannot be associated with individual states. The entire region has enjoyed the low cost hydroelectric power, thus the behavior patterns of the residents and industries of the region are similar. Therefore, the general needs for electrical power have been grouped for the Pacific Northwest. This is the largest hydroelectric system in the U. S. Figure 25 shows where the water is utilized.

The region selected as constituting the Pacific Northwest is basically the same as the region administered by the Bonneville Power Administration. This region includes all of Washington, Oregon and Idaho plus that portion of Montana that lies west of



Legend

– Hydro projects existing or under construction
. . . 5,000 kilowatts and larger

PACIFIC NORTHWEST HYDROELECTRIC GENERATING FACILITIES

Figure 25

the Continental Divide. Two-thirds of this region is the Columbia River watershed. The balance is that portion of Washington and Oregon that drains to the ocean.

The Bonneville Power Administration (BPA) was created by the U. S. Congress before World War II to market the output from the Bonneville Dam. BPA is now the principal federal power contracting agency in the Northwest. BPA now markets the power from all dams on the U. S. Columbia River System. By 1968 BPA had built and maintained 11,000 miles of transmission lines to the principal utilities in the Northwest.

The Bonneville Power Administration has been instrumental in coordination of power imports and exports on an interregional basis also. Through the efforts of BPA, early construction of three dams in Canada is being accomplished and a high voltage D.C. intertie with California was completed in 1970. Interregional power exchanges have prompted the formation of the Western Systems Coordinating Council (WSCC). This Council provides for an exchange of information concerning utility planning among the Northwest, the Southwest and the Rocky Mountain utilities.

The Pacific Northwest constitutes 7.6% of the land area of the U. S. and uses 7.9% of the industrial power consumption. A description of the principal industrial power users follows along with a forecast of the growing power needs of this industry. The residents of the region are heavy users of electrical power also. Although they constitute only 3% of the U. S. population, their domestic use of electrical power is 6.7% of the domestic power used in 1965. Twenty percent of the homes in the Northwest are heated electrically compared with a national average of 2% in 1965. In 1960 electric water heaters were selected in the Northwest at a rate of four times the national average; three times as many electric stoves; and three times as many electric dryers.

The reason for the high domestic use is not simply the low cost of the electricity but the high cost of the other alternatives. All oil and gas are imported to the region. Very little coal exists except in two counties in south central Washington. Thus the power derived from the water in the Northwest has permitted an active economy without the necessity of burning fossil fuels.

After completion of current hydroelectric projects, further development of the hydroelectric potential of the Northwest is expected to be limited to improving peaking capacity. As the power demands of the region grow the increase will need to be met by thermal power additions or by power imports. Power imports are already common from Canada and California. There is a growing reliance on imports (or load displacement) from minemouth coal plants in Wyoming. Although some import capability adds to system reliability, a large fraction of import would decrease reliability and increase expense.

Therefore, on October 22, 1968, the Pacific Northwest utilities and the BPA announced an accord on a joint Hydro-Thermal Power Program. This program is a plan for meeting power needs in the region from 1970–1990. In the program the federal government would increase the peaking capability of the existing federal hydro projects by 20,000 MW and the utilities would construct and operate thermal power plants to meet any expected 20,000 MW of new base load. At the conclusion of the program further peaking will be obtainable from pumped storage projects and further base load additions by breeder reactors or possibly fusion.

As nuclear power plants become more prevalent in the U. S., the cost of electrical power will become less a function of location such as proximity to coal fields, hydroelectric projects, etc. Thus the location and growth of the power cost-sensitive industries such as the primary metals will be loss dependent on the hydroelectric power of the Northwest. The Northwest edge will depend upon mixing the low cost hydroelectric power with the more expensive thermally generated power. Such a mix is planned in the Hydro-Thermal Power Program but if environmental influences drastically raise the cost of thermally generated power, the competitive edge in the Northwest would disappear rapidly.

The Southeastern region of the United States has 29 nuclear power plants under construction. The expected cost of power near the bauxite mines (that now ship to the aluminum reduction plants in the Northwest) will be 5 mils/KW-HR. The Northwest manufacturing economy is export oriented primarily based on metals reduction and lumber. Retention of the metals reduction industry is vital to the economy of the area.

Currently, the growth of the primary metals industry in the Northwest is expected to continue. This will create a corresponding increase in the services employment. It has been estimated* that by 1985 a 1000-job increase in a basic industry such as primary metals will result in a 2917 increase in the non-basic industries such as construction, retail trade, finance, insurance, services, state and local government. Education in state institutions is exponentially linked to employment in the basic industries since both the basic and consequent non-basic employes in the Northwest devote 40% of their taxes to education.

Of the basic industries, a decrease in both agriculture and lumber employment is expected due to mechanization. Growth of manufacturing such as primary metals and paper will help to offset these decreases and provide for the basic and non-basic employment opportunities for 45,000 residents entering the Northwest work force each year for the next 20 years. These residents are youngsters that are already born, thus the statistic and needs are clear.

* Pacific Northwest Economic Base Study for Power Markets, U.S. Department of Interior, Bonneville Power Administration, 1970.

The extent of the growth in the electroprocess industries is shown in Table 18. Titanium growth may be less than shown due to lack of government support of the SST program. Growth of the Magnesium industry could be much greater than indicated depending on new process developments. Phosphorous was not included due to its future market uncertainty.

Table 18

Expected Growth of Electroprocess Industries in the Northwest (Thousands of Tons)

	1970	*1975*	*1980*	*1985*
Metals				
Aluminum	797.	1,100.	2,800.	3,800.
Steel	750.	870.	1,010.	1,180.
Copper	290.	310.	320.	330.
Lead	182.	189.	198.	208.
Zinc	225.	244.	266.	293.
Ferroalloys	190.	220.	260.	322.
Titanium	2.	12.	20.	40.
Magnesium	0	24.		100.
Non Metals				
Chlorine†	309.	393.	485.	607.
Caustic Soda†	271.	330.	395.	472.

† Chlorine and Caustic Soda are produced simultaneously in the same cell.

Aluminum is clearly the largest electroprocess metal in the Northwest now and is expected to be the primary growth item by 1985. Corresponding electrical power needs for aluminum reduction alone are:

	1970	*1975*	*1980*	*1985*
Approximate power demand in MW	1800	4000	5200	6900

The power consumption by the primary metals industry appears large but should not be confused with firm load. Most of the electroprocess industry is provided a class of power referred to as interruptible load. This class of power users utilize the energy that is in excess of the firm load requirements. During heavy runoff conditions, the energy would be dumped* if the interruptible load was not available.

* Allowed to pass over the dam instead of through the turbines.

The interruptible load is a handy contingency that permits a high utilization of installed resources. The 1800 MW above, for 1970, is roughly 8% of the peak load for the Northwest. The 5200 MW, for 1980, roughly 15%. If sufficient interruptible capacity is not available from BPA, the electroprocessors will sometimes import power from other sources.

One possible alternate source is the thermal plants that will be built in the Northwest during the next twenty years. Just as the electroprocess (primary metals) industry is basic to the regional economy, the electrical industry is vital to the primary metals industry. Possibly electrical power generation should be considered a basic industry in the Northwest also.

To examine the expected growth of the electrical industry in the Northwest one could examine the planned thermal portion of the Hydro-Thermal Program. The investment and employment for these plants will be in the Pacific Northwest except for the power imported from Canada, California and Wyoming.

Capacity, MW(e)		*Construction Cost @ 250/KW*	*Annual Revenue @ 5 mils/KW-HR (65% Duty Factor)*
Oregon	9,250	$2,305,000,000	261,000,000
Washington	9,250	2,305,000,000	261,000,000
Wyoming	1,500	375,000,000	42,500,000
	20,000	$4,985,000,000	564,500,000

Thus the thermal power industry in the Pacific Northwest by 1990 will approach a $5 billion investment and revenues of over $500 million/year. At least a third of this power will be directed to producing finished products for export from the region. The balance will be used to meet growing commercial and domestic demands.

Appendix G

Statutes of Nevada Chapter 311 — SB 287, Effective July 1, 1971

AN ACT providing for the regulation of the location, operation and maintenance of utility generation and transmission facilities to promote reliable, abundant and economical utility services with due regard for the preservation and enhancement of the environment and conservation of scenic, historic, recreational and other natural resources; and providing other matters properly relating thereto.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 704 of NRS is hereby amended by adding thereto the provisions set forth as sections 2 to 17, inclusive, of this act.

Sec. 2. Sections 2 to 17, inclusive, of this act shall be known and may be cited as the Utility Environmental Protection Act.

Sec. 3. 1. The legislature hereby finds and declares that:

(a) There is at present and will continue to be a growing need for electric, gas, telephone, telegraph, water and CATV utility services which will require the construction of new facilities. It is recognized that such facilities cannot be built without in some way affecting the physical environment where such facilities are located.

(b) It is essential in the public interest to minimize any adverse effect upon the environment and upon the quality of life of the people of the state which such new facilities might cause.

(c) Present laws and practices relating to the location of such utility facilities should be strengthened to protect environmental values and to take into account the total cost to society of such facilities.

(d) Existing provisions of law may not provide adequate opportunity for individuals, groups interested in conservation and the protection of the environment, state and regional agencies, local governments and other public bodies to participate in any and all proceedings before the public service commission of Nevada regarding the location and construction of major facilities.

2. The legislature, therefore, hereby declares that it is the purpose of sections 2 to 17, inclusive, of this act to provide a forum for the expeditious resolution of all matters concerning the location and construction of electric, gas, telephone, telegraph, water and CATV transmission lines and associated facilities.

Sec. 4. As used in sections 2 to 17, inclusive, of this act, the words and terms defined in sections 5 to 10, inclusive, of this act have the meanings ascribed to them in sections 5 to 10, inclusive, of this act, unless the context otherwise requires.

Sec. 5. "Commission" means the public service commission of Nevada.

Sec. 6. "Commence to construct" means any clearing of land, excavation or other action which would adversely affect the natural environment of the site or route of a utility facility, but does not include changes needed for temporary use of sites or routes for nonutility purposes, or uses in securing geological data, including necessary borings to ascertain foundation conditions.

Sec. 7. "Local government" means any county, municipality, district, agency or other unit of local government.

Sec. 8. "Person" includes any individual, group, firm, partnership, corporation, cooperative, association, government subdivision, government agency, local government or other organization.

Sec. 9. "Public utility" or "utility" includes those public utilities as defined in NRS 704.020, any oil pipeline carrier as described and regulated under chapter 708 of NRS, and any CATV company as defined in NRS 711.030.

Sec. 10. "Utility facility" means:

1. Electric generating plants and their associated facilities;

2. Electric transmission lines and their associated facilities of a designed capacity of 60 kilovolts or more, and not subject to undergrounding by local ordinances when constructed outside any incorporated city;

3. Gas transmission lines, storage plants, compressor stations and their associated facilities when constructed outside any incorporated city;

4. Telephone, telegraph and CATV equipment buildings, their associated facilities and the sites thereof;

5. Water storage and transmission facilities; and

6. Sewer transmission and treatment facilities.

Sec. 11. No public utility shall after July 1, 1971, commence to construct a utility facility in the state without first having obtained a permit therefor from the commission. The replacement of an existing facility with a like facility, as determined by the commission, shall not constitute construction of a utility facility. Any facility, with respect to which a permit is required, shall thereafter be constructed, operated and maintained in conformity with such permit and any terms, conditions and modifications contained therein. A permit may only be issued pursuant to sections 2 to 17, inclusive, of this act; but any authorization relating to a utility facility granted under other laws administered by the commission shall constitute a permit under such sections if the requirements of such sections have been complied with in the proceedings leading to the granting of such authorization.

2. A permit may be transferred, subject to the approval of the commission, to a public utility who agrees to comply with the terms, conditions and modifications contained therein.

3. Sections 2 to 17, inclusive, of this act do not apply to any utility facility:

(a) For which, prior to July 1, 1971, an application for the approval of such facility has been made to any federal, state, regional or local governmental agency which possesses the jurisdiction to consider the matters prescribed for finding and determination in subsection 1 of section 15 of this act;

(b) For which, prior to July 1, 1971, a governmental agency has approved the construction of such facility and such utility has incurred indebtedness to finance all or part of the cost of such construction; or

(c) Over which an agency of the Federal Government has exclusive jurisdiction.

4. Any public utility intending to construct a utility facility excluded from sections 2 to 17, inclusive, of this act pursuant to paragraph (a) or (b) of subsection 3 may elect to waive such exclusion by delivering notice of such waiver to the commission. Sections 2 to 17, inclusive, of this act shall thereafter apply to each such utility facility identified in such

notice from the date of its receipt by the commission.

Sec. 12. 1. An applicant for a permit shall file with the commission an application, in such form as the commission may prescribe, containing the following information:

(a) A description of the location and of the utility facility to be built thereon;

(b) A summary of any studies which have been made of the environmental impact of the facility;

(c) A statement explaining the need for the facility;

(d) A description of any reasonable alternate location or locations for the proposed facility, a description of the comparative merits or detriments of each location submitted, and a statement of the reasons why the primary proposed location is best suited for the facility; and

(e) Such other information as the applicant may consider relevant or as the commission may by regulation or order require. A copy or copies of the studies referred to in paragraph (b) shall be filed with the commission and be available for public inspection.

2. A copy of the application shall be filed with the chairman of the governor's environmental council.

3. Each application shall be accompanied by proof of service of a copy of such application on the clerk of each local government in the area in which any portion of such facility is to be located, both as primarily and as alternatively proposed.

4. Each application shall also be accompanied by proof that public notice thereof was given to persons residing in the municipalities entitled to receive notice under subsection 2 by the publication of a summary of the application in newspapers published and distributed in the area in which such utility facility is proposed to be located.

Sec. 12.5. The governor's environmental council shall review each application filed and may participate in any proceeding held pursuant to section 13 of this act.

Sec. 13. The commission, in its discretion, may dispense with the hearing on the application if, upon the expiration of the time fixed in the notice thereof, no protest against the granting of the permit has been filed by or in behalf of any interested party. The conduct of the hearing shall be the same as set forth in the applicable Rules of Practice and Procedure before the commission.

Sec. 14. 1. The parties to a permit proceeding shall include:

(a) The applicant.

(b) The governor's environmental council composed of:

(1) The chief of the bureau of environmental health of the health division of the department of health, welfare and rehabilitation.

(2) The director of the Nevada department of fish and game.

(3) The state highway engineer.

(4) The state forester firewarden.

(5) The state engineer.

(6) The director of the state department of conservation and natural resources.

(7) The secretary-manager of the state planning board.

(8) The executive director of the state department of agriculture.

(c) Each local government and state agency entitled to receive service of a copy of the application under subsection 2 of section 12 of this act, if it has filed with the commission a notice of intervention as a party, within 30 days after the date it was served with a copy of the application;

(d) Any person residing in a local government entitled to receive service of a copy of the application under subsection 2 of section 12 of this act if, such a person has petitioned the commission for leave to intervene as a party, within 30 days after the date of the published notice and if such petition has been granted by the commission for good cause shown.

(e) Any domestic nonprofit corporation or association, formed in whole or in part to promote conservation of natural beauty, to protect the environment, personal health or other biological values to preserve historical sites, to promote consumer interests, to represent commercial and industrial groups, or to promote the orderly development of the areas in which the facility is to be located, if it has filed with the commission a notice of intent to be a party within 30 days after the date of the published notice.

2. Any person may make a limited appearance in the proceeding by filing a statement of position within 30 days after the date of the published notice. A statement filed by a person making a limited appearance shall become part of the record. No person making a limited appearance shall have the right to present oral testimony or cross-examine witnesses.

3. The commission may, for good cause shown, grant a petition for leave to intervene as a party to participate in subsequent phases of the proceeding, filed by a municipality, government agency, person or organization who is indentified in paragraph (b), (c), (d) or (e) of subsection 1, but who failed to file a timely notice of intervention or petition for leave to intervene, as the case may be.

Sec. 15. 1. The commission shall render a decision upon the record either granting or denying the application as filed, or granting it upon such terms, conditions or modifications of the construction, operation or maintenance of the utility facility as the commission may deem appropriate. The commission may not grant a permit for the construction, operation and maintenance of a utility facility, either as proposed or as modified by the commission, unless it finds and determines:

(a) The basis for the need of the facility;

(b) The nature of the probable environmental impact;

(c) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations;

(d) That the location of the facility as proposed conforms to applicable state and local laws and regulations issued thereunder; and

(e) That the facility will serve the public interest.

2. If the commission determines that the location of all or part of the proposed facility should be modified, it may condition its permit upon such modification.

3. A copy of the order and any opinion issued therewith shall be served upon each party.

Sec. 16. 1. Any party aggrieved by any order issued on an application for a permit may apply for a rehearing within 15 days after issuance of the order. Any party aggrieved by the final order of the commission on rehearing may obtain judicial review thereof by filing of a complaint in a district court within 30 days after the issuance of such final order. Upon receipt of such complaint, the commission shall forthwith deliver to the court a copy of the written transcript of the record of the proceeding before it and a copy of its decision and opinion entered therein which shall constitute the record on judicial review.

2. The grounds for and the scope for review of the court shall be limited to whether the opinion and order of the commission is:

(a) In conformity with the constitution and the laws of the State of Nevada and of the United States;

(b) Supported by substantial evidence in the record;

(c) Made in accordance with the procedures set forth in sections 2 to 17, inclusive, of this act or established order, rule or regulation of the commission; and

(d) Arbitrary, capricious or an abuse of discretion.

Sec. 17. The commission, in the discharge of its duties under sections 2 to 17, inclusive, of this act or any other law, is authorized to make joint investigations, hold joint hearings within or without the state, and issue joint or concurrent orders in conjunction or concurrence with any official or agency of any state or of the United States, whether in the holding of such investigations or hearings, or in the making of such orders, the commission functions under agreements or compacts between states or under the concurrent power of states to regulate interstate commerce, or as an agency of the United States, or otherwise. The commission, in the discharge of its duties under sections 2 to 17, inclusive, of this act, is further authorized to negotiate and enter into agreements or compacts with agencies of other states, pursuant to any consent of the Congress, for cooperative efforts in permitting the construction, operation and maintenance of utility facilities in accord with the purpose of sections 2 to 17, inclusive, of this act and for the enforcement of the respective state laws regarding them.

Appendix H

State of Washington Engrossed Senate Bill No. 49

41ST LEGISLATURE—2ND EXTRAORDINARY SESSION

By Senators Canfield, Sandison, Pritchard, Andersen, Holman, McCormack, Peterson (Ted) and Talley (By Executive Request)

Filed with the Secretary of the Senate January 11, 1970, for introduction January 12, 1970.

An Act relating to the location of thermal power plants; providing for the certification of siting and associated transmission line routing; establishing a thermal power plant site evaluation council; adding a new chapter to Title 80 RCW; prescribing penalties; and declaring an emergency.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

New Section. Section 1. The legislature finds that the present and predicted growth in electrical power demands in the state of Washington requires the development of a procedure for the selection and utilization of sites for thermal generating facilities and the identification of a state position with respect to each proposed site. The legislature recognizes that the selection of sites and the routing of associated transmission lines will have a significant impact upon the welfare of the population, the location and growth of industry and the use of the natural resources of the state.

It is the policy of the state of Washington that, while recognizing the pressing need for increased power generation facilities, the state shall ensure through available and reasonable methods, that the location and operation of thermal power plants will

produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.

It is the intent to seek courses of action that will balance the increasing demands for thermal power plant location and operation in conjunction with the broad interests of the public. Such action will be based on these premises:

(1) To assure Washington state citizens that, where applicable, operational safeguards are at least as stringent as the criteria established by the federal government and are technically sufficient for their welfare and protection.

(2) To preserve and protect the quality of the environment; to enhance the public's opportunity to enjoy the esthetic and recreational benefits of the air, water and land resources; to promote air cleanliness; and to pursue beneficial changes in the environment.

(3) To provide abundant low-cost electrical energy.

New Section. Sec. 2. (1) "Applicant" means any electrical utility which makes application for a site location certification pursuant to the provisions of this act;

(2) "Application" means any request for approval of a particular site or sites filed in accordance with the procedures established pursuant to this act;

(3) "Person" means an individual, partnership, joint venture, private or public corporation, association, firm, public service company, political subdivision, municipal corporation, government agency public utility district, or any other entity, public or private, however organized;

(4) "Electrical utility" means cities and towns, public utility districts, regulated electric companies, electric cooperatives and joint operating agencies, or combinations thereof, engaged in or authorized to engage in the business of generating, transmitting or distributing electrical energy;

(5) "Site" means any proposed location wherein the power plant, related or supporting facilities, and associated transmission lines will be located;

(6) "Certification" means a binding agreement between an applicant and the state which shall embody compliance to the siting guidelines adopted in section 5 of this act as conditions to be met prior to or concurrent with the construction or operation of any thermal power plant coming under this act;

(7) "Associated transmission lines" means new transmission lines constructed to operate at nominal voltages in excess of 200,000 volts to connect a thermal power plant to the northwest grid;

(8) "Independent consultants" means those persons who have no financial interest in the applicant's proposals and who are retained by the council to evaluate the applicant's proposals, supporting studies, or to conduct additional studies;

(9) "Thermal power plant" means, for the purpose of certification, any electrical generating facility using any fuel, including nuclear materials, for distribution of electricity by electric utilities;

(10) "Thermal power plant site evaluation council" or "council" means the body defined under section 3 of this act;

(11) "Counsel for environment" means an assistant attorney general or a special assistant attorney general who shall represent the public in accordance with section 8 of this act;

(12) "Construction" means on-site work and construction shall not be deemed to have commenced until there has been an expenditure of not less than two hundred fifty thousand dollars in on-site improvements, excluding exploratory work;

(13) "Chairman" means the chairman of the thermal power plant site evaluation council;

(14) "Member agency" means departments, agencies and commissions enumerated in subsection (3) of section 3 of this act.

New Section. Sec. 3. (1) There is hereby created and established a "thermal power plant site evaluation council".

(2) The chairman of the council shall be appointed by the governor with the advice and consent of the senate and shall serve at the pleasure of the governor. The salary of the chairman shall be determined pursuant to the provisions of RCW 43.03.028 as now or hereafter amended.

(3) The council shall consist of the directors, administrators, or their designees, of the following departments, agencies and commissions or their statutory successors:

(a) Water pollution control commission
(b) Department of water resources
(c) Department of fisheries
(d) Department of game
(e) State air pollution control board
(f) Department of parks and recreation
(g) Department of health
(h) Interagency committee for outdoor recreation
(i) Department of commerce and economic development
(j) Utilities and transportation commission
(k) Office of program planning and fiscal management
(l) Department of natural resources
(m) Planning and community affairs agency
(n) Department of civil defense
(o) Department of agriculture.

(4) The county legislative authority of every county wherein an application for a proposed thermal power plant site is filed shall appoint a member to the council. The member so appointed shall sit with the council only at such times as the council considers the proposed site for the county which he represents and such member shall serve until there has been a final acceptance or rejection of such proposed site.

New Section. Sec. 4. The council shall have the following powers:

(1) To adopt, promulgate, amend, or rescind suitable rules and regulations to carry out the provisions of this act, and the policies and practices of the council in connection therewith;

(2) To appoint an executive secretary to serve at the pleasure of the council;

(3) To appoint and prescribe the duties of such clerks, employees and agents as may be necessary to carry out the provisions of this act: PROVIDED, That such persons shall be employed pursuant to the provisions of chapter 41.06 RCW;

(4) To develop and apply topical environmental and ecological guidelines in relation to the type, design, and location of thermal power plant sites and associated transmission line routes;

(5) To establish rules of practice for the conduct of public hearings pursuant to the provisions of the Administrative Procedure Act, as found in chapter 34.04 RCW;

(6) To prescribe the form, content, and necessary supporting documentation for site certification;

(7) To receive applications for site locations and to investigate the sufficieny thereof;

(8) To make and contract, when applicable, for independent studies of thermal power plant sites and transmission line routes proposed by the applicant;

(9) To conduct hearings on the proposed location of the thermal power plant sites and, when applicable, the associated transmission line routes;

(10) To prepare written reports to the governor which shall include: (a) a statement indicating whether the application is in compliance with the council's topical guidelines, (b) criteria specific to the site and transmission line routing, and (c) a council recommendation as to the disposition of the application;

(11) To prescribe the means for monitoring of the effects arising from the construction and the operation of thermal power plants, and where applicable, associated transmission lines to assure continued compliance with terms of certification.

New Section. Sec. 5. Promptly after it is organized under this act, the council shall give notice, pursuant to the Administrative Procedure Act, chapter 34.04 RCW, of intention to adopt as rules the comprehensive guidelines recommended by the thermal power plant evaluation council. The thermal power plant site evaluation council shall adopt the proposed guidelines as rules after making any changes or additions that are appropriate in view of facts and testimony presented at the hearing, provided that the guidelines so changed are consistent with the purposes of this act.

New Section. Sec. 6. (1) Provisions of this act shall apply to any stationary thermal power plant with generating capacity of two hundred fifty thousand kilowatts or more and floating thermal power plants of fifty thousand kilowatts or more, including associated transmission lines installed anywhere within the state of Washington. No construction of any such facility may be undertaken, after the effective date of this act, without first obtaining certification in the manner as herein provided, except that this act shall not apply to any such thermal power plant presently operating, or under construction, and its associated transmission lines.

(2) Applications for certification shall be upon forms prescribed by the council and shall be supported by such information and technical studies as the council may require.

New Section. Sec. 7. (1) The council shall receive all applications for thermal power plant site certification. A fee of twenty-five thousand dollars for each proposed site, to be applied toward the cost of any study authorized in subsection (2) of this section, shall accompany the application and shall be a condition precedent to any further consideration or action on the application by the council.

(2) After receiving an application for site certification, the council shall commission its own, independent consultant study to measure the consequences of the proposed power plant on the environment for each site application. The council shall direct the consultant to study any matter which it deems essential to an adequate appraisal of the site. The full cost of the study shall be paid by the applicant: PROVIDED, That said costs exceeding a total of twenty-five thousand dollars shall be payable subject to applicant giving prior approval to such excess amount.

(3) All payments required of the applicant under this section are to be made to the state treasurer, who in turn shall pay the consultant as instructed by the council. All such funds shall be subject to state auditing procedures. Any unexpended portions thereof shall be returned to the applicant.

New Section. Sec. 8. After the council has received a site application, the attorney general shall appoint an assistant attorney general or a special assistant attorney general as a counsel for the environment who shall be a member of the bar of the state of Washington. The counsel for the environment shall represent the public and its interest in protecting the quality of the environment for the duration of the certification proceedings, until such time as the certification is issued or denied. He shall be accorded all the rights, privileges and responsibilities of an attorney representing a party in a formal action. This section shall not be construed to prevent any person from being heard or represented by counsel in accordance with the other provisions of this act.

New Section. Sec. 9. (1) The council shall conduct a public hearing in the county of the proposed site within sixty days of receipt of an application for site certification: PROVIDED, That the place of such public hearing shall be as close as practical to the proposed site.

(2) The council must determine at the initial public hearing whether or not the proposed site is consistent and in compliance with county or regional land use plans or zoning ordinances. If it is determined that the proposed site does conform with existing land use plans or zoning ordinances in effect as of the date of the application, the county or regional planning authority shall not therafter change such land use plans or zoning ordinances so as to affect the proposed site.

(3) Prior to the issuance of a council recommendation to the governor under section 10 of this act a public hearing, conducted as a contested case under chapter 34.04 RCW, shall be held. At such public hearing any person shall be entitled to be heard in support of or in opposition to the application for certification.

(4) Additional public hearings shall be held as deemed appropriate by the council in the exercise of its functions under this act.

New Section. Sec. 10. (1) The council shall report to the governor its recommendations for the disposition of an application for certification within twelve months of receipt by the council of such an application, or such later time as is mutually agreed by the council and the applicant.

(2) Within sixty days of receipt of the council's report the governor shall approve or reject the application for certification.

(3) The issuance of denial of the certification by the governor shall be final as to that application.

(4) Upon approval by the governor of the application for certification the chairman of the council shall within thirty days compose and submit a certification agreement for execution by the governor and the applicant.

New Section. Sec. 11. (1) If any provision of this act is in conflict with any other provision, limitation, or restriction which is now in effect under any other law of this state, or any rule or regulation promulgated thereunder, this act shall govern and control and such other law or rule or regulation promulgated thereunder shall be deemed superseded for the purposes of this act.

(2) The state hereby preempts the regulation and certification of thermal power plant sites and thermal power plants as defined in section 2 of this act.

New Section. Sec. 12. (1) Subject to the conditions set forth therein any certification signed by the governor shall bind the state or any of its departments, agencies, divisions, bureaus, commissions or boards as to the approval of the site and the construction and operation of the proposed thermal power plant and any associated transmission lines.

(2) The certification shall authorize the electric utility named therein to construct and operate the proposed thermal power plant and any associated transmission lines subject only to the conditions set forth in such certification.

(3) The issuance of a certification shall be in lieu of any permit, certification or similar document required by any department agency, division, bureau, commission or board of this state.

New Section. Sec. 13. Any certification may be revoked or suspended:

(1) For any material false statement in the application or in the supplemental or additional statements of fact or studies required of the applicant when a true answer would have warrented the council's refusal to recommend certification in the first instance; or

(2) For failure to comply with the terms or conditions of the original certification; or

(3) For violation of the provisions of this act, regulations issued thereunder or order of the council.

New Section. Sec. 14 (1) The approval or rejection of an application for certification by the governor shall be subject to judicial review pursuant to the provisions of chapter 34.04 RCW.

(2) The rules and regulations adopted by the council shall be subject to judicial review pursuant to the provisions of chapter 34.04 RCW.

New Section. Sec 15. (1) The courts are authorized to grant such restraining orders, and such temporary and permanent injunctive relief as is necessary to secure compliance with this act and/or with a site certification agreement issued pursuant to this act. The court may assess civil penalties in an amount not less than one thousand dollars per day nor more than twenty-five thousand dollars per day for each day of construction or operation in material violation of this act, or in material violation of any site certification agreement issued pursuant to this act.

(2) Wilful violation of any provision of this act shall be a gross misdemeanor.

(3) Civil or criminal proceedings to enforce this act may be brought through the attorney general by the prosecuting attorney of any county effected by the violation.

(4) The remedies and penalties in this section, both civil and criminal, shall be cumulative and shall be in addition to any other penalties and remedies available at law, or in equity, to any person.

New Section. Sec. 16. The council shall make available for public inspection and copying during regular office hours at the expense of any person requesting copies, any information filed or submitted pursuant to this act.

New Section. Sec. 17. If any provision of this act, or its application to any person or circumstance is held invalid, with the exception of sections 11 and 12 of this act, the remainder of the act, or the application of the provision to other persons or circumstances, is not affected.

New Section. Sec. 18. This act is necessary for the immediate preservation of the public peace, health and safety, the support of the state government and its existing public institutions, and shall take

effect immediately.

New Section. Sec. 19. Sections 1 through 18 of this act shall constitute a new chapter in Title 80 RCW.

Passed the Senate January 31, 1970.
Passed the House February 9, 1970.

Approved February 23, 1970 with the exception of an item in section 17 which is vetoed.

Addendum

Oregon House Bill 1065 creating a Nuclear and Thermal Energy Council

OREGON LEGISLATIVE ASSEMBLY
1971 REGULAR SESSION

Sponsored by Representatives MEEKER, EYMANN, GWINN, Senators BROWNE, WINGARD

SUMMARY

The following summary is an editor's brief statement of the essential features of the measure.

Creates nine-member Nuclear and Thermal Energy Council to consist of five members appointed by Governor and four designated public officers, with authority to approve sites for thermal power plants with associated transmission lines and for nuclear installations. Prohibits construction or expansion of such plants and installations without site certification signed by Governor. Prohibits construction until three years after notice of intent to apply for site. Directs council to establish certification standards which take into account public health and safety, effect on environment and prospective land and water use of adjacent areas and other criteria. Prescribed judicial review for denial of application. Authorizes council to order halt of operations when necessary for public health and safety, and to apply to circuit court within 24 hours of order, or to require reduction or curtailment of operations. Declares that council may permit interested persons to become parties to siting proceedings. Establishes monitoring system an fixes annual fee for plants and installations to pay costs. Provides for revocation and suspension of certification for specified causes. (*Grants eminent domain to certificate holders.*) Exempts designated plants in operation, approved by Governor's Committee, and college and university reactors. Regulates intrastate transportation of radioactive materials. Requires designated electric utility companies to pay pro rata share of annual fees. Requires additional permits to be issued and enforced by affected agencies upon issuance of certificate.

Declares an emergency. *(Effective July 1, 1971.)*

A BILL FOR AN ACT

Relating to thermal energy; appropriating money; providing penalties; and declaring an emergency.

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OREGON:

Section 1. In the interests of the public health and the welfare of the people of this state, it is the declared public policy of this state that the beneficial development of peaceful uses of nuclear and thermal energy and the disposition of the wastes therefrom shall be accomplished in a manner consistant with protection to the public health and safety and in compliance with the air, water and other environmental protection policies of this state. It is, therefore, the purpose of this Act to exercise the jurisdiction of the State of Oregon to the maximum extent permitted by the United States Constitution and to establish in cooperation with the Federal Government a comprehensive system for the siting, monitoring and regulating of the location, construction and operation of all thermal power plants and nuclear installations in this state.

Section 2. As used in this Act, unless the context requires otherwise:

(1) "Applicant" means any person who makes application for a site certificate in the manner provided in this Act.

(2) "Application" means a request for approval of a particular site or sites or the expansion of use of a site for which a certificate has already been issued, filed in accordance with the procedures established pursuant to this Act.

(3) "Associated transmission lines" means new transmission lines constructed to operate at nominal voltages in excess of 200,000 volts to connect a thermal power plant to the first point of junction of such tranmission line or lines with either a power distribution system or an interconnected primary transmission system or both or to the Northwest Power Grid.

(4) "Construction" means on-site work and construction, the cost of which exceeds $250,000, excluding exploratory work.

(5) "Council" means the Nuclear and Thermal Energy Council established under section 5 of this Act.

(6) "Electric utility" means cities, individuals, regulated electrical companies, people's utility districts and electric cooperatives, or any combination thereof, engaged in or authorized to engage in the business of generating, transmitting or distributing electric energy. "Electric utility" includes any person or public agency generating electric energy for its own consumption.

(7) "Nuclear installation" means any power reactor; nuclear fuel fabrication plant; nuclear fuel reprocessing plant; storage or waste disposal facility for radioactive waste produced from the operation of thermal power plants or nuclear installations, as described by rule of the council; and any facility handling that quantity of fissionable materials sufficient to form a critical mass. Nuclear installation does not include any such facilities which are part of a thermal power plant.

(8) "Person" means an individual, partnership, joint venture, private or public corporation, association, firm, public service company, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

(9) "Site" means any proposed location on which any thermal power plant, related or supporting facilities, and associated transmission lines or nuclear installation may be located.

(10) "Site certificate" means the binding agreement between the State of Oregon and the applicant, authorizing the applicant to construct and operate a thermal power plant or nuclear installation on an approved site, incorporating all conditions imposed by the state on the applicant and all warranties given by the applicant to the state.

(11) "Thermal power plant" means an electrical or any other facility, except gas turbines, which is nuclear-fueled, geothermal-fueled or fossil-fueled with a name plate rating of more than 200,000 kilowatts, for generation and distribution of electricity, and associated transmission lines, but not including movable power plants the principle use of which is to supply power in emergencies.

(12) "Transportation" means intrastate transport of radioactive material destined for or derived from any nuclear installation or the delivery of such material to a carrier for transportation.

Section 3. After the effective date of this Act, no thermal power plant or nuclear installation shall be constructed or expanded unless a site certificate has been issued for the site thereof in the manner provided in this Act. No thermal power plant or nuclear installation shall operate except in conformity with the requirements of this Act.

Section 4. (1) Any applicant for a site certificate for a thermal power plant or nuclear installation shall be deemed to have met all the requirements of this Act relating to eligibility for a site certificate and a site certificate shall be issued by the governor upon the effective date of this act if:

(a) The site has been approved prior to the effective date of this Act by the Governor's Nuclear Coordinating Committee after public hearing; or

(b) The plant or installation was constructed and in operation at least one year prior to the effective date of this Act.

(2) Each applicant eligible for a site certficate under this section shall pay the fees required by subsections (3) and (4) of section 21 of this Act and shall execute a site certificate in which the applicant agrees:

(a) To abide by the conditions of all licenses, permits and certificates required by the State of Oregon or any subdivision in the state to operate the plant or installation and issued prior to the effective date of this Act; and

(b) On and after January 1, 1972, to abide by the rules of the Nuclear and Thermal Energy Council adopted pursuant to this Act.

Section 5. (1) There is established a Nuclear and Thermal Energy Council consisting of nine members, five of whom shall be appointed by the Governor as public members, subject to confirmation by the Senate in the manner prescribed in ORS 171.560 and 171.570. In addition to the public members, the Public Utility Commissioner, the State Engineer, the State Health Officer and the Director of the Department of Environmental Quality shall be members of the council.

(2) The term of office of each public member is four years, but a member serves at the pleasure of the Governor. Before the expiration of the term of a public member, the Governor shall appoint a successor whose term begins on July 1 next following. A public member is eligible for reappointment but no public member shall serve more than two full terms. If there is a vacancy for any cause, the Governor shall make an appointment to become immediately effective for the unexpired term.

(3) No member of the Nuclear and Thermal Energy Council shall be an employee, director or retired employee or director of or a consultant to or have any pecuniary interest, other than an incidental interest which is disclosed and made a matter of public record at the time of the appointment to the council, in any utility operating or interested in establishing a thermal power plant or nuclear installation in this state or in any manufacturer of electrical or nuclear equipment.

(4) No member shall for two years after the expiration of his term accept employment with any utility or nuclear installation.

Section 6. The Nuclear and Thermal Energy Council shall:

(1) Conduct and prepare, independently or in

cooperation with others, studies, investigation, research and programs relating to all aspects of site selection.

(2) After public hearings, designate areas within this state that are suitable or unsuitable for use as sites for thermal power plants and nuclear installations.

(3) Establish standards and promulgate rules that applicants for site certificates must meet including, but not limited to, standards of financial ability, and qualifications as to ability to construct and operate the thermal power plant or nuclear installation to which the site certificate applies and prescribe the form.

(4) Conduct public hearings on the proposed location of any site after application is filed therefor, and on the route of associated transmission lines.

(5) Encourage voluntary cooperation by the people, municipalities, counties, industries, agriculture, and other pursuits, in establishing standards for site selection.

(6) Advise, consult, and cooperate with other agencies of the state, political subdivisions, industries, other states, the Federal Government and affected groups, in furtherance of the purposes of this Act.

(7) Subject to the State Merit System Law, employ personnel, including specialists, consultants and hearing officers, purchase materials and supplies, and enter into contracts necessary to carry out the purposes of this Act.

(8) Disseminate information to the public with regard to the development of energy resource and nuclear programs.

(9) Perform such other and further acts as may be necessary, proper or desirable to carry out effectively the duties, powers and responsibilities of the council described in this Act.

Section 6a All rules adopted by the council pursuant to this Act shall be adopted in the manner required by ORS chapter 183.

Section 7 In performing its duties and exercising its powers under this Act, the Nuclear and Thermal Energy Council shall subject to section 14 of this Act set standards and promulgate rules for safety, construction and operation of thermal plants and nuclear installation which shall take into account the following:

(1) The health, safety and welfare of the public.

(2) The effects of waste heat, moisture and operational radioactive discharge or other impact on the environment and associated natural resources and physical processes, including humans, air, water, fish and wildlife.

(3) Rules and regulations of the federal Atomic Energy Commission and the Environmental Protection Agency, or their successors.

(4) Land and water use characteristics of any site, including but not limited to the aesthetics of the site and the environment and the impact on present and future use of adjacent areas.

(5) Present and future industrial, commercial and residential power needs by classes and amount for each class.

(6) Beneficial use of waste water developed by thermal power plant.

(7) The regulations, if any, of cities or counties relating to the installations of thermal power plants or nuclear installations within their respective borders.

(8) Ability of the affected area to absorb the industrial and population growth resulting from operation of the plant or installation.

Section 7a (1) Each applicant for a site certificate must file with the Nuclear and Thermal Energy Council a notice of intent to file an application for a site certificate. The notice of intent must describe the proposed site with sufficient detail to enable the council to identify the proposed site.

(2) The Nuclear and Thermal Energy Council shall cause public notice to be given whenever a notice of intent is filed and provide a description of the proposed site in sufficient detail to inform the public of its location.

Section 8. (1) Applications for site certificates shall be made to the Nuclear and Thermal Energy Council on a form prescribed by the council and accompanied by the fee required by section 21 of this Act. The application may be filed not sooner than 12 months after filing of the notice of intent.

(2) Proposed use of a site within an area designated by the council as suitable for location of thermal power plants or nuclear installations does not preclude the necessity of the applicant obtaining a site certificate for the specific site.

(3) Copies of the notice of intent and of the application shall be sent for comment and recommendation within specified deadlines established by the council to the Department of Environmental Quality, the State Water Resources Board, the Fish Commission of the State of Oregon, the State Game Commission, the State Board of Health, the State Engineer, the State Geologist, the State Forestry Department, the Public Utility Commissioner of Oregon, the State Department of Agriculture, the Department of Transportation and the Economic Development Division in the Executive Department.

Section 9. The Nuclear and Thermal Energy Council shall study each site application and may commission an independent study of the effects of the proposed plant on the environment. The full cost of the study shall be paid from the applicant's fee paid under subsection (2) of section 21 of this Act. However, if costs of the study exceed the fee paid under section 21 of this Act, the applicant must agree to pay any excess costs before they are incurred, and must pay such costs after they are incurred. If the costs are less than the fee paid, the

excess shall be refunded to the applicant. Expenses incurred for site studies, other than those incurred for studies authorized by this section, are the sole responsibility of the applicant.

Section 10. (1) The Nuclear and Thermal Energy Council shall hold public hearings in the affected area and elsewhere, as it deems necessary, on the application for a site certificate. At the conclusion of its hearings and upon receipt of the study authorized under section 9 of this Act, but in no case more than 24 months after the application is filed, the council shall either recommend or reject the application. The council must make its recommendations by the affirmative vote of at least six members, but with a majority of the public members, approving or rejecting any application for a certificate.

(2) Rejection or recommendation to grant an application together with any conditions that may be attached to the certificate, shall be subject to judicial review pursuant to the provisions of ORS chapter 183.

(3) The certificate, if any, with any conditions prescribed by the Nuclear and Thermal Energy Council, shall be prepared and submitted to the Governor.

Section 11. Except as provided in section 4 of this Act, no site certificate shall be issued under this Act until three years after the notice of intent to apply for such a certificate is filed with the Nuclear and Thermal Energy Council unless the council waives the time requirement. The council shall not waive the time requirement of this section until it has completed area studies of the entire state.

Section 12. (1) After expiration of the appeal period authorized by ORS 183.480 or after an appeal is completed, the site certificate shall be executed by the Gorvernor for the State of Oregon and by the president and secretary of the applicant on resolution of the board of directors of the applicant.

(2) The certificate shall authorize the applicant to construct and operate the proposed thermal power plant or nuclear installation subject to the conditions set forth in such certificate.

(3) The site certificate shall contain conditions for the protection of the public health and safety and shall require both parties to abide by state law and rules of the council in effect on the date the site certificate is executed except that upon a clear showing that there is danger to the public health and safety that requires stricter laws or rules, the state may subject to section 14 of this Act require compliance with such stricter laws or rules.

(4) The site certificate shall contain the applicant's warrenties as to its abilities required under subsection (3) of section 6 of this Act, its provisions as to protection of the public health and safety and as to time of completion of construction.

(5) Subject to the conditions set forth therein, any certificate signed by the Governor shall bind the state and all counties and cities and political subdivisions in this state as to the approval of the site and the construction and operation of the proposed thermal power plant or nuclear installation. Affected state agencies shall issue the appropriate permits, licenses and certificates necessary to construction and operation of the plant or installation, subject only to condition of the site certificate. Each state agency that issues a permit, license or certificate shall continue to exercise enforcement authority over such permit, license or certificate.

(6) Except as site certificates are authorized under section 4 of this Act, the Governor may refuse to execute a site certificate submitted by the Nuclear and Thermal Energy Council but he cannot execute a site certificate application rejected by the council. If the Governor does not sign the certificate within 30 days after it is submitted to him, the certificate is void.

Section 13. The Nuclear and Thermal Energy Council has continuing authority over the site for which the site certificate is issued and may inspect the site at any time.

Section 14 (1) The Nuclear and Thermal Energy Council shall adopt safety standards promulgated as rules for the operation of all thermal power plants and nuclear installations, provided, however, that the state shall not require a certificate holder to meet safety standards more stringent than those of the federal Atomic Energy Commission or to use any equipment or procedures that would cause the holder to lose any federal license required for operation of the plant or installation. Such standards shall include but need not be limited to:

(a) Emission standards at the lowest practicable limits, taking into account the state of technology and the economics of improvements in relation to the benefits to public health and safety and in relation to the utilzation of nuclear energy in the public interest;

(b) All necessary safety devices and procedures; and

(c) The accumulation, storage, disposal and transportation of wastes including nuclear wastes.

(2) The Nuclear and Thermal Energy Council shall establish a 24-hour, continuing program for monitoring the environmental and ecological effects of the construction and operation of thermal power plants and nuclear installations to assure continued compliance with the terms and conditions of the certificate and the safety standards adopted under subsection (1) of this section.

(3) The council may perform the testing and sampling necessary for the monitoring program or it may require the operator of the plant to perform the necessary testing or sampling pursuant to standards established by the council. The council shall have access to operating logs, records and reprints of the certificate holder, including those required by

the federal Atomic Energy Commission.

(4) The monitoring program may be conducted in cooperation with any federally operated program if the information available therefrom is acceptable to the council, but no federal program shall be substituted totally for monitoring supervised by the council.

(5) The monitoring program shall include monitoring of the transportation process for all radioactive material removed from any nuclear installation.

Section 15. (1) In cooperation with appropriate federal agencies, the Nuclear and Thermal Energy Council shall regulate the transportation process for all radioactive material derived from or destined for any nuclear installation.

(2) The holder of a site certificate for a nuclear installation and any transporter of radioactive materials from such installation must keep the council informed on the procedures, routes and schedules for the transportation of such materials.

Section 16. (1) The Nuclear and Thermal Energy Council shall appoint a Nuclear and Thermal Energy Coordinator who shall serve at the pleasure of the council and who shall have no pecuniary interest in the electrical or nuclear industry. In addition to his other duties, the coordinator shall serve as executive secretary to the council and perform such other duties as the council requires.

(2) Unless otherwise provided by ORS 292.505 to 292.790, the coordinator shall receive such salary as is fixed by the Nuclear and Thermal Energy Council. In addition to his salary, subject to applicable law regulating travel and other expenses of state officers and employes, the coordinator shall be reimbursed for his actual and necessary travel and other expenses incurred in the performance of his official duties.

Section 17. (1) The Nuclear and Thermal Energy Council shall designate the county planning commission or commissions as a special advisory group in any county or counties wherein a proposed site is located upon filing of a site application therefor. If no planning commission exists in any county or counties, an advisory group shall be selected by the governing body or bodies of the affected county or counties.

(2) In addition to advisory groups required by subsection (1) of this section the Nuclear and Thermal Energy Council may establish such special advisory groups as are considered necessary. Such advisory groups shall include membership as determined by the council to represent interests and disciplines as needed to carry out the responsibility assigned to such advisory groups, which shall report findings, recommendations and decisions to the council.

(3) Subject to applicable laws regulating travel and other expenses of state officers and employes, members of any advisory committee appointed under subsection (1) of this section shall receive no compensation but may receive their actual and necessary travel and other expenses incurred in the performance of their official duties.

Section 18. (1) Each state agency and political subdivision in this state that is concerned with the applications and uses of thermal energy and radiation shall inform the Nuclear and Thermal Energy Council promptly of its activities and programs relating to thermal energy and radiation.

(2) Each state agency proposing to adopt, amend or rescind a rule relating to nuclear and thermal energy development first shall file a copy of its proposal with the Nuclear and Thermal Energy Council, which may order such changes as it considers necessary to conform to state policy as stated in section 1 of this Act.

(3) The effective date of a rule relating to nuclear and thermal energy development, or an amendment or rescission thereof, shall not be sooner than 10 days subsequent to the filing of a copy of such proposal with the Nuclear and Thermal Energy Council.

(4) The requirements of this section are in addition to, and not in lieu of the provisions of ORS 183.350.

Section 19. (1) The Nuclear and Thermal Energy Council shall annually elect from among the public members a chairman and vice chairman with such powers and duties as the council imposes. The council may meet as often as it requires at a time and place determined by the council. Six members constitute a quorum. The Governor or the chairman of the council may call a special meeting, to be held at any place in this state designated by the person calling the meeting, upon 24 hours' notice to each member.

(2) Council members shall be entitled to compensation and expenses as provided in ORS 292.495.

Section 20. (1) Except as provided in subsection (2) of this section, any information filed or submitted pursuant to this Act shall be made available for public inspection and copying during regular office hours of the Nuclear and Thermal Energy Council at the expense of any person requesting copies.

(2) Any information, other than that relating to the public safety, relating to secret process, device, or method of manufacturing or production obtained in the course of inspection, investigation or activities under this Act shall be kept confidential and shall not be made a part of public record of any hearing.

Section 21. (1) Every person filing notice of intent to file for a site certificate shall submit a fee of $5,000 for each site so indicated. If the person subsequently becomes an applicant for a site certificate, the amount paid at the time notice of intent is

filed shall be credited against the amount otherwise due under subsection (2) of this section.

(2) Every applicant for a site certificate shall submit to the Nuclear and Thermal Energy Council along with the application for a site certificate an amount equal to $0.05 per kilowatt of net electric capacity for the proposed thermal power plant or an amount equal to $1,000 for each $1 million of capital investment in the proposed nuclear installation, less any amount credited under subsection (1) of this section. However, the fee shall not be less than $5,000 for each application for a site or for expansion thereof.

(3) Each holder of a certificate under this Act shall pay an annual fee, due July 1 of each year, of $0.025 per kilowatt of net electric capacity of a thermal power plant or $300 for each $1 million of capital investment in a nuclear installation. However, the annual fee shall not be less than $250 for each certificate.

(4) In addition to the annual fee required under subsection (3) of this section, each electric utility in this state shall pay annually, by July 1 of each year, its share of $100,000. Each share shall be determined on the ratio that the annual kilowatt hour sales of each electric utility bears to the annual total kilowatt hour sales of all such utilities, as determined by the Public Utility Commissioner.

(5) Except as a portion of the application fee may be refunded under section 9 of this Act, funds received under this section are continuously appropriated to the Nuclear and Thermal Energy Council to pay expenses incurred under this Act.

(6) Reactors operated by a college, university or graduate center for research purposes and electric utilities not connected to the Northwest Power Grid are exempt from the fee requirements of subsections (3) and (4) of this section.

Section 21a. The Nuclear and Thermal Energy Council may receive gifts and grants and expend funds received only for the purposes of this Act, in the manner consistent with state law.

Section 22. (1) Any person may appear personally or by counsel to present testimony in any hearing before the Nuclear and Thermal Energy Council on any application for a site certificate.

(2) The council may, by proper order, permit any person to become a party complainant or defendant by intervention who appears to have an interest in the results of the hearing or who represents a public interest in such results. However, the request for intervention must be made before the final taking of evidence in the hearing.

(3) Any person authorized to intervene in the hearing on a site certificate may appeal the recommendation of the council's recommendation in the manner prescribed in ORS chapter 183. Such recommendation shall be deemed a final order for purposes of such appeal.

Section 23. Pursuant to the procedures for contested cases in ORS chapter 183, a certificate may be revoked or suspended:

(1) For any breach of a warranty; or

(2) For failure to maintain safety standards or to comply with the terms or conditions of the certificate; or

(3) For violation of the provisions of this Act or rules adopted pursuant to this Act.

Section 24. Without prior administrative proceedings, a circuit court may issue such restraining orders, and such temporary and permanent injunctive relief as is necessary to secure compliance with this Act or with a site certificate issued pursuant to this Act.

Section 25. (1) In instances where the Nuclear and Thermal Energy Council determines either from its monitoring or surveillance that there is danger of violation of a safety standard adopted under section 14 of this Act from the continued operation of a plant or installation, it may order temporary reductions or curtailmant of operations until such time as proper safety precautions can be taken.

(2) An order of reduction or curtailment shall be entered only after notice to the plant or installation and only after a reasonable time, considering the extent of the danger, has been allowed for repairs or other alterations that would bring the plant or installation into conformity with applicable safety standards.

Section 26. (1) Whenever in the judgment of the Nuclear and Thermal Energy Council from the results of monitoring or surveillance of operation of any thermal power plant there is cause to believe that there is clear and immediate danger to the public health and safety from continued operation of the plant or installation, the council shall, in cooperation with appropriate state and federal agencies, without hearing or prior notice, order the operation of the plant halted by service of the order on the plant superintendent. Within 24 hours after such order, the council must appear in the appropriate circuit court to petition for such relief as is afforded under section 24 of this Act and may commence proceedings for revocation of the site certificate if grounds thereof exist.

(2) Whenever, in the judgment of the Nuclear and Thermal Energy Council, there is cause to believe that there is clear and immediate danger to the public health and safety from the accumulation, storage, disposal or transportation of radioactive waste of the nuclear installation, the council shall in cooperation with appropriate state and federal agencies, without hearing or prior notice, order such accumulation, storage, disposal or transportation halted or immediately impose safety precautions by service of the order on the officer responsible for the accumulation, storage, disposal or transportation.

Within 24 hours after such an order, the council must appear in the appropriate circuit court to petition for the relief afforded under section 24 of this Act.

Section 27. (1) A civil penalty in an amount not less than $1,000 per day nor more than $25,000 per day for each day of construction or operation in material violation of this Act or in material violation of any site certificate issued pursuant to this Act may be assessed by the circuit court.

(2) Violation of an order entered pursuant to section 26 of this Act is punishable upon conviction by a fine of $50,000. Each day of violation constitutes a separate offense.

Section 28. Notwithstanding section 5 of this Act, of the public members first appointed to the Nuclear and Thermal Energy Council:

(1) One shall be appointed for a term expiring June 30, 1973.

(2) Two shall be appointed for terms expiring June 30, 1974.

(3) Two shall be appointed for terms expiring June 30, 1975.

Section 29. This Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this Act shall take effect on its passage.

Signed by Governor Tom McCall, June 30, 1971

RECORDS CERTIFICATION

I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

James D. Smith
Signature of Camera Operator

4/4/89
Date

02-619 (REV 8/78)

Pol: 3/15/72

Committee Report

S E N A T E

3/27/72
Date

Mr. President:

The Committee on FINANCE has had SB 311
(re enabl. Authority participation in Western Nuclear Company)
under consideration. A majority of the members of the Committee

☒ recommends it do pass

☐ recommends it do not pass

☐ recommends it do pass with attached amendment(s)

☐ recommends it be replaced with CS for _____ and that CS for _____ do pass

☐ (and) recommends it be referred to the _____ committee

☐ reports it back without recommendation

☐ (other) _____

MEMBERS SIGNING THE MAJORITY REPORT:

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

John Patrick
CHAIRMAN

Introduced: 1/14//2
Referred: State Affairs
and Finance

IN THE HOUSE

BY THE RULES COMMITTEE BY
REQUEST OF THE GOVERNOR

HOUSE BILL NO. 511

IN THE LEGISLATURE OF THE STATE OF ALASKA

SEVENTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act making a supplemental appropriation to the Office of the Governor for participation in the Western Nuclear Compact; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. The sum of $10,000 is appropriated from the general fund to the Office of the Governor for purposes of state participation in the Western Nuclear Compact for the fiscal year ending June 30, 1972.

* Sec. 2. This Act takes effect on the day after its passage and approval or on the day it becomes law without approval.

WILLIAM A. EGAN
GOVERNOR

511

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

January 13, 1972

The Honorable Gene Guess
Speaker of the House
Alaska State Legislature
Juneau, Alaska 99801

Dear Mr. Speaker:

Pursuant to the Uniform Rules of the Legislature, I am transmitting a bill entitled "An Act making a supplemental appropriation to the Office of the Governor for participation in the Western Nuclear Compact, and providing for an effective date."

This bill appropriates $10,000 from the general fund to the Office of the Governor for purposes of state participation in the Western Nuclear Compact for the fiscal year ending June 30, 1972.

Sincerely yours,

William A. Egan

William A. Egan
Governor

HB 511

STATE OF ALASKA

OFFICE OF THE GOVERNOR

TO: Myrton Charney, Director
Division of Budget and Management
Department of Administration

DATE: October 5, 1971

FROM: Warren W. Wiley
Administrative Assistant
to the Governor

SUBJECT: Supplemental Request

Due to an oversight in preparation of the Fiscal Year 1972 budget, funds were not appropriated for Alaska's membership in the Western Interstate Nuclear Compact.

It is, therefore, necessary that a request be made for supplemental funding for the $10,000 membership fee. I would appreciate your assistance and consideration.

HB 511

RECEIVED
OCT 6 1971
BUDGET & MANAGEMENT

STATE OF ALASKA
Dept. of Administration
Budget & Management Div.

STATEMENT OF PROGRAM

For the Fiscal Year Ending June 30, 1972

		COLS
AGENCY	Office of the Gov.	01
OPERATING PROGRAM	Executive Office	01
ACTIVITY		
FUNCTION		

The Western Interstate Nuclear Compact was organized to promote cooperation among member states in the development and utilization of nuclear technology and its application to industry. Alaska's membership gains for the state a rich source of current information on the peaceful uses of nuclear energy.

The Compact staff is involved in collecting, correlating, and making available to member states information developed as a result of usage for nuclear energy other than for defense or power generation.

Compact membership entitles member states to participate in training programs pertinent to nuclear energy, medicine, or education.

The Board and its staff continually studies State laws and regulations that concern industry, health, safety, and industrial uses of nuclear energy.

The Compact has formulated and continues to update a regional plan for coping with a nuclear incident of any type or magnitude.

Membership in the Compact guarantees member states full cooperation and assistance from other member states in case of nuclear incident.

RECORDS CERTIFICATION

I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

James D. Smith
Signature of Camera Operator

4/4/89
Date

02-519 (REV 8/78)

The Legislature of the State of Alaska
FISCAL NOTE
Second Session - Seventh State Legislature

I. REQUEST

Bill Identification: House Bill No. 512

Title: Relating to computation of taxable income under the Alaska Net Income Tax

Requested by: Legislative Finance Date: 1-17-72

Return Date Requested: 1-31-72

Agency: Revenue Program: Fiscal Services

II. FISCAL DETAIL

Budget Request Unit(s) Affected:

A. EXPENDITURES: (Thousands of dollars)

OBJECT		FY 72	FY 73	FY 74	FY 75	FY 76	FY 77
100	PERSONAL SERVICES						
200	TRAVEL						
300	CONTRACTUAL						
400	COMMODITIES						
500	EQUIPMENT						
600	LAND & STRUCTURES						
700	GRANTS, CLAIMS, ETC.						
	TOTAL	NONE	NONE	NONE	NONE	NONE	NONE

B. FUNDING: (Thousands of dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						

C. POSITIONS:

PERMANENT/TEMPORARY	-0-/	/	/	/	/	/
MAN MONTHS (P./T.)	-0-/	/	/	/	/	/

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

See attached memorandum from A. L. Bue, Supervisor, Corporate Income Tax Unit, Audit Division, Department of Revenue concerning additional revenues to be gained under the provisions of House Bill 512 which does not allow the taxpayer to apply as a credit against his tax liability the job development investment credit allowed as to Federal taxes under Internal Revenue Code Sec. 50.

IV. ATTACHMENTS

V. DATE: January 27, 1972 PREPARED BY: R. D. Stevenson

R. D. Stevenson
Deputy Commissioner
Department of Revenue

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)

STATE
of ALASKA

MEMORANDUM

TO: R. D. Stevenson
Deputy Commissioner

Through: T. L. File, Chief
Income Tax Section

FROM: A. L. Bue, Supervisor
Corporate Income Tax Unit

DATE: January 26, 1972

FILE NO:

SUBJECT: Fiscal Note Request--
HB 512

Following are revised Corporate Income Tax Unit revenue projections (which take into consideration HB 512) compared with current projections:

(Thousands of dollars)

	FY 73	FY 74	FY 75	FY 76	FY 77
HB 512 projection	$7,072.6	$8,454.0	$8,893.3	$8,930.7	$8,776.3
Current projection	6,906.9	8,288.3	8,726.6	8,708.7	8,563.1
Net gain in revenues	$ 165.7	$ 165.7	$ 166.7	$ 222.0	$ 213.2

BASIS FOR PROJECTIONS: (Percentages)

	FY 73	FY 74	FY 75	FY 76	FY 77
HB 512 growth rate	8.4	22.4	23.2	16.2	7.2
Projected growth rate	6.0	20.0	20.0	13.0	4.0
Growth rate increase	2.4	2.4	3.2	3.2	3.2

These growth rates take into consideration the new accelerated depreciation of the North Slope Pipeline, the advent of increased activity centered around oil feeder and gathering system construction in 1977, and the provisions of HB 512 which does not allow the taxpayer to apply as a credit against his tax liability the job development investment credit allowed as to Federal taxes under Internal Revenue Code Sec. 50.

ALB:mbc

02-001

Senate A.K copy

FISCAL NOTE
HB 512

(c) AMENDMENT OF 1954 CODE.—Except as otherwise expressly provided, whenever in this Act an amendment is expressed in terms of an amendment to a section or other provision, the reference is to a section or other provision of the Internal Revenue Code of 1954.

TITLE I—JOB DEVELOPMENT INVESTMENT CREDIT; DEPRECIATION REVISION

SEC. 101. RESTORATION OF INVESTMENT CREDIT.

(a) Subpart B of part IV of subchapter A of chapter 1 (relating to rules for computing credit for investment in certain depreciable property) is amended by adding at the end thereof the following new section:

"SEC. 50. RESTORATION OF CREDIT.

"(a) GENERAL RULE.—Section 49 (a) (relating to termination of credit) shall not apply to property—

"(1) The construction, reconstruction, or erection of which—

"(A) is completed by the taxpayer after August 15, 1971, or

"(B) is begun by the taxpayer after March 31, 1971, or

"(2) which is acquired by the taxpayer—

"(A) After August 15, 1971, or

"(B) after March 31, 1971, and before August 16, 1971, pursuant to an order which the taxpayer establishes was placed after March 31, 1971.

"(b) TRANSITIONAL RULE.—In applying section 46(c)(1)(A) in the case of property described in subsection (a)(1)(A) the construction, reconstruction, or erection of which is begun before April 1, 1971, there shall be taken into account only that portion of the basis which is properly attributable to construction, reconstruction, or erection after August 15, 1971. This subsection shall not apply to pre-termination property (within the meaning of section 49(b))."

(b) CONFORMING AMENDMENTS.—

(1) Section 49(a) (relating to termination of credit) is amended by adding at the end thereof the following new sentence: "This subsection shall not apply to property described in section 50."

(2) Section 49(b) (defining pre-termination property) is amended by striking out "For purposes of this section" and inserting in lieu thereof "For purposes of this subpart".

(3) Section 49(d) (relating to property placed in service after 1975) is hereby repealed.

(4) The heading for section 49 is amended to read as follows:

"SEC. 49. TERMINATION FOR PERIOD BEGINNING APRIL 19, 1969, AND ENDING DURING 1971."

(5) The table of sections for subpart B of part IV of subchapter A of chapter 1 is amended by striking out the item relating to section 49 and inserting in lieu thereof the following:

"Sec. 49. Termination for period beginning April 19, 1969, and ending during 1971.
"Sec. 50. Restoration of credit."

(c) ACCOUNTING FOR INVESTMENT CREDIT IN CERTAIN FINANCIAL REPORTS AND REPORTS TO FEDERAL AGENCIES.—

(1) IN GENERAL.—It was the intent of the Congress in enacting, in the Revenue Act of 1962, the investment credit allowed by section 38 of the Internal Revenue Code of 1954, and it is the intent of the Congress in restoring that credit in this Act, to provide an incentive for modernization and growth of private industry. Accordingly, notwithstanding any other provision of law, on and after the date of the enactment of this Act—

(A) no taxpayer shall be required to use, for purposes of financial reports subject to the jurisdiction of any Federal agency or reports made to any Federal agency, any particular method of accounting for the credit allowed by such section 38,

(B) a taxpayer shall disclose, in any such report, the method of accounting for such credit used by him for purposes of such report, and

(C) a taxpayer shall use the same method of accounting for such credit in all such reports made by him, unless the Secretary

of the Treasury or his delegate consents to a change to another method.

(2) EXCEPTIONS. — Paragraph (1) shall not apply to taxpayers who are subject to the provisions of section 46(e) of the Internal Revenue Code of 1954 (as added by section 105(c) of this Act) or to section 203 (e) of the Revenue Act of 1964 (as modified by section 105(e) of this Act).

SEC. 102. DETERMINATION OF QUALIFIED INVESTMENT.

(a) CHANGE IN USEFUL LIFE BRACKETS.—

(1) Section 46(c)(2) (relating to applicable percentage for purposes of determining qualified investment) is amended—

(A) by striking out "4 years" and inserting in lieu thereof "3 years",

(B) by striking out "6 years" each place it appears and inserting in lieu thereof "5 years", and

(C) by striking out "8 years" each place it appears and inserting in lieu thereof "7 years".

(2) The second sentence of section 48(a)(1) (defining section 38 property) is amended by striking out "4 years" and inserting in lieu thereof "3 years".

(b) USEFUL LIFE FOR INVESTMENT CREDIT PURPOSES.—The second sentence of section 46(c)(2) is amended to read as follows:

"For purposes of this subpart, the useful life of any property shall be the useful life used in computing the allowance for depreciation under section 167 for the taxable year in which the property is placed in service."

(c) TECHNICAL AMENDMENT.—Section 47(a)(6)(A) (relating to aircraft used outside the United States after April 18, 1969) is amended by striking out "4 years" and inserting in lieu thereof "3½ years".

(d) EFFECTIVE DATES.—

(1) The amendments made by subsections (a) and (b) shall apply to property described in section 50 of the Internal Revenue Code of 1954.

(2) In redetermining qualified investment for purposes of section 47 (a) of the Internal Revenue Code of 1954 in the case of any property which ceases to be section 38 property with respect to the taxpayer after August 15, 1971, or which becomes public utility property after such date, section 46(c)(2) of such Code shall be applied as amended by subsection (a).

(3) The amendment made by subsection (c) shall apply to leases executed after April 18, 1969.

SEC. 103. LIMITATION OF CREDIT TO DOMESTIC PRODUCTS.

Section 48(a) (relating to definition of section 38 property) is amended by adding after paragraph (6) the following new paragraph:

"(7) PROPERTY COMPLETED ABROAD OR PREDOMINANTLY OF FOREIGN ORIGIN.—

"(A) IN GENERAL.—Property (other than pre-termination property) shall not be treated as section 38 property if—

"(i) such property was completed outside the United States, or

"(ii) less than 50 percent of the basis of such property is attributable to value added within the United States.

"For purposes of this subparagraph, the term 'United States' includes the Commonwealth of Puerto Rico and the possessions of the United States.

"(B) PERIOD OF APPLICATION OF PARAGRAPH.—Except as provided in subparagraph (D), subparagraph (A) shall apply only with respect to property described in section 50—

"(i) the construction, reconstruction, or erection of which by the taxpayer is begun after August 15, 1971, and on or before the date of termination of Proclamation 4074, or

"(ii) which is acquired pursuant to an order placed on or before the date of termination of Proclamation 4074, unless acquired pursuant to an order which the taxpayer establishes was placed before August 16, 1971.

"(C) PRESIDENT MAY EXEMPT ARTICLES.—If the President of the United States shall at any time determine that the application of subparagraph (A) to any article or class of articles is not in the public interest, he may by Executive order specify that subparagraph (A) shall not apply to such article or class of articles. Subparagraph (A) shall not apply to an article or class of articles for the period specified in such Executive order. Any period specified under the preceding sentence shall not apply to property ordered before (or to property the construction, reconstruction, or erection of which began before) the date of the Executive order specifying such period, except that, if the President determines it to be in the public interest, such period shall apply to property ordered (or property the construction, reconstruction, or erection of which began) after a date (before the date of the Executive order) specified in the Executive order.

"(D) COUNTRIES MAINTAINING TRADE RESTRICTIONS OR ENGAGING IN DISCRIMINATORY ACTS.—If, on or after the date of the termination of Proclamation 4074, the President determines that a foreign country—

"(i) maintains nontariff trade restrictions, including variable import fees, which substantially burden United States commerce in a manner inconsistent with provisions of trade agreements, or

"(ii) engages in discriminatory or other acts (including tolerance of international cartels) or policies unjustifiably restricting United States commerce,

he may provide by Executive order for the application of subparagraph (A) to any article or class of articles manufactured or produced in such foreign country for such period as may be provided by Executive order."

SEC. 104. DEFINITION OF SECTION 38 PROPERTY.

(a) STORAGE FACILITIES.—

(1) IN GENERAL.—Section 48(a)(1)(B) (relating to other tangible property constituting section 38

property) is amended by striking out clause (ii) and inserting in lieu thereof the following:

"(ii) constitutes a research facility used in connection with any of the activities referred to in clause (i), or

"(iii) constitutes a facility used in connection with any of the activities referred to in clause (i) for the bulk storage of fungible commodities (including commodities in a liquid or gaseous state), or".

(2) CONFORMING AMENDMENT.—Section 1245(a)(3)(B) (relating to other property constituting section 1245 property) is amended by striking out "or" at the end of clause (i), and by striking out clause (ii) and inserting in lieu thereof the following:

"(ii) constituted a research facility used in connection with any of the activities referred to in clause (i), or

"(iii) constituted a facility used in connection with any of the activities referred to in clause (i) for the bulk storage of fungible commodities (including commodities in a liquid or gaseous state),".

(b) COIN-OPERATED MACHINES IN APARTMENT BUILDINGS.—Section 48(a)(3) (relating to property used for lodging) is amended—

(1) by striking out "and" at the end of subparagraph (A),

(2) by striking out the period at the end of subparagraph (B) and inserting in lieu thereof ", and", and

(3) by adding after subparagraph (B) the following new subparagraph:

"(C) coin-operated vending machines and coin-operated washing machines and dryers."

(c) CERTAIN PROPERTY USED IN FURNISHING COMMUNICATION SERVICES.—

(1) Section 48(a)(5) (relating to property used by governmental units) is amended by inserting after "international organization" the following: "(other than the International Telecommunications Satellite Consortium or any successor organization)".

(2) Section 48(a)(2)(B) (relating to exceptions from rule for property used outside the United States) is amended by striking out "and" at the end of clause (vi), by striking out the period at the end of clause (vii) and inserting in lieu thereof a semicolon, and by adding at the end thereof the following new clause:

"(viii) any communications satellite (as defined in section 103(3) of the Communications Satellite Act of 1962, 47 U.S.C., sec. 702(3)), or any interest therein, of a United States person;".

(3) Section 48(a)(2)(B) (relating to exceptions from rule for property used outside the United States) is amended by inserting after clause (viii) (as added by paragraph (2)) the following new clause:

"(ix) any cable, or any interest therein, of a domestic corporation engaged in furnishing telephone service to which section 46(c)(3)(B)(iii) applies (or of a wholly owned domestic subsidiary of such a corporation), if such cable is part of a submarine cable system which constitutes part of a communication link exclusively between the United States and one or more foreign countries; and ".

(d) CERTAIN PROPERTY USED TO EXPLORE FOR, DEVELOP, REMOVE, AND TRANSPORT RESOURCES FROM OCEAN WATERS AND SUBMARINE DEPOSITS.—Section 48(a)(2)(B) (relating to exceptions from rule for property used outside the United States) is amended by inserting after clause (ix) (as added by subsection (c)(3)) the following new clause:

"(x) any property (other than a vessel or an aircraft) of a United States person which is used in international or territorial waters for the purpose of exploring for, developing, removing, or transporting resources from ocean waters or deposits under such waters."

(e) LIVESTOCK.—Section 48(a)(6) (relating to livestock) is amended to read as follows:

"(6) LIVESTOCK. — Livestock (other than horses) acquired by the taxpayer shall be treated as section 38 property, except that if substantially identical livestock is sold or otherwise disposed of by the taxpayer during the one-year period beginning 6 months before the date of such acquisition and if section 47(a) (relating to certain dispositions, etc., of section 38 property) does not apply to such sale or other disposition, then, unless such sale or other disposition constitutes an involuntary conversion (within the meaning of section 1033), the cost of the livestock acquired shall, for purposes of this subpart, be reduced by an amount equal to the amount realized on such sale or other disposition. Horses shall not be treated as section 38 property."

(f) AMORTIZED PROPERTY.—

(1) IN GENERAL.—Section 48(a) (relating to definition of section 38 property) is amended by adding after paragraph (7) (as added by section 103 of this Act) the following new paragraph:

"(8) AMORTIZED PROPERTY.—Any property with respect to which an election under section 167(k), 169, 184, 187, or 188 applies shall not be treated as section 38 property. In the case of any property to which section 169 applies, the preceding sentence shall apply only to so much of the adjusted basis of the property as (after the application of section 169(f)) constitutes the amortizable basis for purposes of section 169."

(2) CONFORMING AMENDMENT.—Section 169 (relating to amortization of pollution control facilities) is amended by striking out subsection (h).

(g) RAILROAD TRACK.—Section 48(a) (relating to definition of section 38 property) is amended by inserting after paragraph (8) (as added by subsection (f)) the following new paragraph:

"(9) RAILROAD TRACK.—In the case of a railroad (including a railroad switching or terminal company) which uses the retirement-replacement method of accounting for depreciation of its railroad track, the term 'section 38 property' includes replacement track material, if—

"(A) the replacement is made pursuant to a scheduled program for replacement,

"(B) the replacement is made pursuant to observations by maintenance-of-way personnel of spe-

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cific track material needing replacement,

"(C) the replacement is made pursuant to the detection by a rail-test car of specific track material needing replacement, or

"(D) the replacement is made as a result of a casualty.

"Replacements made as a result of a casualty shall be section 38 property only to the extent that, in the case of each casualty, the qualified investment with respect to the replacement track material exceeds $50,000. For purposes of this paragraph, the term 'track material' includes ties, rail, other track material, and ballast."

(h) EFFECTIVE DATES.—The amendments made by this section (other than by subsections (c)(1), (c)(2), and (g)) shall apply to property described in section 50 of the Internal Revenue Code of 1954. The amendments made by subsections (c)(1), (c)(2), and (g) shall apply to taxable years ending after December 31, 1961.

SEC. 105. REGULATED COMPANIES.

(a) INCREASE IN QUALIFIED INVESTMENT FOR PUBLIC UTILITY PROPERTY.—Section 46(c)(3)(A) (relating to qualified investment in case of public utility property) is amended by striking out "3/7" and inserting in lieu thereof "4/7".

(b) DEFINITION OF PUBLIC UTILITY PROPERTY, ETC.—Section 46(c)(3) (relating to public utility property) is amended—

(1) by inserting "or" at the end of clause (ii) of subparagraph (B), and by striking out clauses (iii) and (iv) of such subparagraph and inserting in lieu thereof the following:

"(iii) telephone service, telegraph service by means of domestic telegraph operations (as defined in section 222(a)(5) of the Communications Act of 1934, as amended; 47 U.S.C., sec. 222(a)(5)), or other communication services (other than international telegraph service),";

(2) by adding at the end of subparagraph (B) the following new sentence: "Such term also means communication property of the type used by persons engaged in providing telephone or microwave communication services to which clause (iii) applies, if such property is used predominantly for communication purposes."; and

(3) by adding after subparagraph (B) the following new subparagraph:

"(C) In the case of any interest in a submarine cable circuit used to furnish telegraph service between the United States and a point outside the United States of a taxpayer engaged in furnishing international telegraph service (if the rates for such furnishing have been established or approved by a governmental unit, agency, instrumentality, commission, or similar body described in subparagraph (B)), the qualified investment shall not exceed the qualified investment attributable to so much of the interest of the taxpayer in the circuit as does not exceed 50 percent of all interests in the circuit."

(c) CREDIT NOT AVAILABLE IN CERTAIN CASES.—Section 46 (relating to amount of credit) is amended by adding at the end thereof the following new subsection:

"(e) LIMITATION IN CASE OF CERTAIN REGULATED COMPANIES.—

"(1) GENERAL RULE.—Except as otherwise provided in this subsection, no credit shall be allowed by section 38 with respect to any property described in section 50 which is public utility property (as defined in paragraph (5)) of the taxpayer—

"(A) COST OF SERVICE REDUCTION.—If the taxpayer's cost of service for ratemaking purposes is reduced by reason of any portion of the credit allowable by section 38 (determined without regard to this subsection); or

"(B) RATE BASE REDUCTION.—If the base to which the taxpayer's rate of return for ratemaking purposes is applied is reduced by reason of any portion of the credit allowable by section 38 (determined without regard to this subsection).

Subparagraph (B) shall not apply if the reduction in the rate base is restored not less rapidly than ratably. If the taxpayer makes an election under this sentence within 90 days after the date of the enactment of this paragraph in the manner prescribed by the Secretary or his delegate, the immediately preceding sentence shall not apply to property described in paragraph (5)(B) if any agency or instrumentality of the United States having jurisdiction for ratemaking purposes with respect to such taxpayer's trade or business referred to in paragraph (5)(B) determines that the natural domestic supply of the product furnished by the taxpayer in the course of such trade or business is insufficient to meet the present and future requirements of the domestic economy.

"(2) SPECIAL RULE FOR RATABLE FLOW-THROUGH.—If the taxpayer makes an election under this paragraph within 90 days after the date of the enactment of this paragraph in the manner prescribed by the Secretary or his delegate, paragraph (1) shall not apply, but no credit shall be allowed by section 38 with respect to any property described in section 50 which is public utility property (as defined in paragraph (5)) of the taxpayer—

"(A) COST OF SERVICE REDUCTION.—If the taxpayer's cost of service for ratemaking purposes or in its regulated books of account is reduced by more than a ratable portion of the credit allowable by section 38 (determined without regard to this subsection), or

"(B) RATE BASE REDUCTION.—If the base to which the taxpayer's rate of return for ratemaking purposes is applied is reduced by reason of any portion of the credit allowable by section 38 (determined without regard to this subsection).

"(3) SPECIAL RULE FOR IMMEDIATE FLOW-THROUGH IN CERTAIN CASES.—In the case of property to which section 167(l)

(2)(C) applies, if the taxpayer makes an election under this paragraph within 90 days after the date of the enactment of this paragraph in the manner prescribed by the Secretary or his delegate, paragraphs (1) and (2) shall not apply to such property.

"(4) LIMITATION.—

"(A) IN GENERAL.—The requirements of paragraphs (1) and (2) regarding cost of service and rate base adjustments shall not be applied to public utility property of the taxpayer to disallow the credit with respect to such property before the first final determination which is inconsistent with paragraph (1) or (2) (as the case may be) is put into effect with respect to public utility property (to which this subsection applies) of the taxpayer. Thereupon, paragraph (1) or (2) shall apply to disallow the credit with respect to public utility property (to which this subsection applies) placed in service by the taxpayer—

"(i) before the date that the first final determination, or a subsequent determination, which is inconsistent with paragraph (1) or (2) (as the case may be) is put into effect, and

"(ii) on or after the date that a determination referred to in clause (i) is put into effect and before the date that a subsequent determination thereafter which is consistent with paragraph (1) or (2) (as the case may be) is put into effect.

"(B) DETERMINATIONS.—For purposes of this paragraph, a determination is a determination made with respect to public utility property (to which this subsection applies) by a governmental unit, agency, instrumentality, or commission or similar body described in subsection (c)(3)(B) which determines the effect of the credit allowed by section 38 (determined without regard to this subsection)—

"(i) on the taxpayer's cost of service or rate base for ratemaking purposes, or

"(ii) in the case of a taxpayer which made an election under paragraph (2), on the taxpayer's cost of service for ratemaking purposes or in its regulated books of account or rate base for ratemaking purposes.

"(C) SPECIAL RULES.—For purposes of this paragraph—

"(i) a determination is final if all rights to appeal or to request a review, a rehearing, or a redetermination, have been exhausted or have lapsed,

"(ii) the first final determination is the first final determination made after the date of the enactment of this subsection, and

"(iii) a subsequent determination is a determination subsequent to a final determination.

"(5) PUBLIC UTILITY PROPERTY.—For purposes of this subsection, the term 'public utility property' means—

"(A) property which is public utility property within the meaning of subsection (c)(3)(B), and

"(B) property used predominantly in the trade or business of the furnishing or sale of (i) steam through a local distribution system or (ii) the transportation of gas or steam by pipeline, if the rates for such furnishing or sale are established or approved by a governmental unit, agency, instrumentality, or commission described in subsection (c)(3)(B).

"(6) RATABLE PORTION.—For purposes of determining ratable restorations to base under paragraph (1) and for purposes of determining ratable portions under paragraph (2)(A), the period of time used in computing depreciation expense for purposes of reflecting operating results in the taxpayer's regulated books of account shall be used.

"(7) REORGANIZATIONS, ASSETS ACQUISITIONS, ETC.—If by reason of a corporate reorganization, by reason of any other acquisition of the assets of one taxpayer by another taxpayer, by reason of the fact that any trade or business of the taxpayer is subject to ratemaking by more than one body, or by reason of other circumstances, the application of any provisions of this subsection to any public utility property does not carry out the purposes of this subsection, the Secretary or his delegate shall provide by regulations for the application of such provisions in a manner consistent with the purposes of this subsection."

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property described in section 50 of the Internal Revenue Code of 1954.

(e) APPLICATION OF SECTION 203(e) OF REVENUE ACT OF 1964.—Section 203(e) of the Revenue Act of 1964 shall not apply to public utility property to which section 46(e) of the Internal Revenue Code of 1954 (as added by subsection (c)) applies.

SEC. 106. INVESTMENT CREDIT CARRYOVERS AND CARRYBACKS.

(a) PRIORITY OF APPLICATION.—Section 46(b) relating to carryback and carryover of unused credits) is amended by inserting after paragraph (2) the following new paragraph:

"(3) SPECIAL RULES FOR CARRYOVERS FROM PRE-1971 UNUSED CREDIT YEARS.—The extent to which an investment credit carryover from an unused credit year ending before January 1, 1971, may be added under paragraph (1) for a taxable year beginning after December 31, 1970, shall be determined without regard to paragraph (2)(A). In determining the excess under paragraph (1) for any taxable year beginning after December 31, 1970, the limitation provided by subsection (a)(2) for such taxable year shall be reduced by the investment credit carryovers from such unused credit

years (to the extent such unused credit may not be added for a prior taxable year)."

(b) EXTENSION OF CARRYOVER PERIOD.—Section 46(b)(1) (relating to allowance of carryback and carryover of unused credits) is amended by adding at the end thereof the following new sentence: "In the case of an unused credit for an unused credit year ending before January 1, 1971, which is an investment credit carryover to a taxable year beginning after December 31, 1970 (determined without regard to this sentence), this paragraph shall be applied by substituting '10 taxable years' for '7 taxable years' in subparagraph (B) and by substituting '13 taxable years' for '10 taxable years' and '12 taxable years' for '9 taxable years' in the preceding sentence."

(c) REMOVAL OF 20-PERCENT LIMITATION ON USE OF CARRYOVERS AND CARRYBACKS.—

(1) REMOVAL OF LIMITATION.—Section 46(b)(5) (relating to carryback and carryover of unused credits to taxable years beginning after December 31, 1968, and ending after April 18, 1969) is amended—

(A) by striking out the heading and inserting:

"(5) CERTAIN TAXABLE YEARS ENDING IN 1969, 1970, OR 1971.—", and

(B) by striking out "ending after April 18, 1969," and inserting in lieu thereof "ending after April 18, 1969, and before January 1, 1972,", and

(C) by adding at the end thereof the following new sentence:

"In the case of a taxable year ending after August 15, 1971, and before January 1, 1972, the percentage contained in the preceding sentence shall be increased by 6 percentage points for each month (or portion thereof) in the taxable year after August 15, 1971."

(2) CONFORMING AMENDMENT TO ADDITIONAL 3-YEAR CARRYOVER PROVISION.—Section 46(b)(6) (relating to additional 3-year carryover period in certain cases) is amended—

(A) by striking out "ending after April 18, 1969," and inserting in lieu thereof "ending after April 18, 1969, and before January 1, 1971,", and

(B) by striking out "following the last taxable year for which such portion may be added under paragraph (1)" and inserting in lieu thereof "following the 7th taxable year after the unused credit year".

(d) EFFECTIVE DATES.—The amendments made by subsections (a), (b), and (c)(2) shall apply to taxable years beginning after December 31, 1970. The amendments made by subsection (c)(1) shall apply to taxable years ending after August 15, 1971.

SEC. 107. TREATMENT OF CASUALTIES AND CERTAIN REPLACEMENTS.

(a) CASUALTIES TREATED AS DISPOSITIONS.—

(1) Sections 46(c)(4) (relating to certain replacements of section 38 property) and 47(a)(4) (relating to property destroyed by casualty, etc.) are hereby repealed.

(2) The repeals made by paragraph (1) shall apply to casualties and thefts occurring after August 15, 1971.

(b) CERTAIN REPLACEMENTS DURING TERMINATION PERIOD.—

(1) Section 47(a)(5) (relating to certain property replaced after April 18, 1969) is hereby repealed.

(2) The repeal made by paragraph (1) shall not apply if replacement property described in subparagraph (B) of such section 47(a)(5) is not property described in section 50 of the Internal Revenue Code of 1954.

SEC. 108. AVAILABILITY OF CREDIT TO CERTAIN LESSORS.

(a) IN GENERAL.—Section 46(d) (relating to limitations with respect to certain persons) is amended by adding at the end thereof the following new paragraph:

"(3) NONCORPORATE LESSORS.—A credit shall be allowed by section 38 to a person which is not a corporation with respect to property of which such person is the lessor only if—

"(A) the property subject to the lease has been manufactured or produced by the lessor, or

"(B) the term of the lease (taking into account options to renew) is less than 50 percent of the useful life of the property, and for the period consisting of the first 12 months after the date on which the property is transferred to the lessee the sum of the deductions with respect to such property which are allowable to the lessor solely by reason of section 162 (other than rents and reimbursed amounts with respect to such property) exceeds 15 percent of the rental income produced by such property.

In the case of property of which a partnership is the lessor, the credit otherwise allowable under section 38 with respect to such property to any partner which is a corporation shall be allowed notwithstanding the first sentence of this paragraph. For purposes of this paragraph, an electing small business corporation (as defined in section 1371) shall be treated as a person which is not a corporation."

(b) CREDIT MAY BE USED BY LESSEE.—Section 48(d) (relating to certain leased property) is amended by striking out "section 46(d)" and inserting in lieu thereof "section 46(d)(1)".

(c) CERTAIN PROPERTY LEASED FOR SHORT TERM.—Section 48(d) (relating to investment credit for certain leased property) is amended to read as follows:

"(d) CERTAIN LEASED PROPERTY.—

"(1) GENERAL RULE.—A person (other than a person referred to in section 46(d)(1)) who is a lessor of property may (at such time, in such manner, and subject to such conditions as are provided by regulations prescribed by the Secretary or his delegate) elect with respect to any new section 38 property (other than property described in paragraph (4)) to treat the lessee as having acquired such property for an amount equal to—

"(A) except as provided in subparagraph (B), the fair market value of such property, or

"(B) if the property is leased by a corporation which is a component member of a controlled group (within the meaning of section 46(a)(5)) to another corporation which is a component member of the same controlled group, the basis of such property to the lessor.

"(2) SPECIAL RULE FOR CERTAIN SHORT TERM LEASES.—

"(A) IN GENERAL.—A person (other than a person referred to in section 46(d)(1)) who is a lessor of property described in paragraph (4) may (at such time, in such manner, and subject to such conditions as are provided by regulations prescribed by the Secretary or his delegate) elect with respect to such property to treat the lessee as having acquired a portion of such property for the amount determined under subparagraph (B).

(B) DETERMINATION OF LESSEE'S INVESTMENT.—The amount for which a lessee of property described in paragraph (4) shall be treated as having acquired a portion of such property is an amount equal to a fraction, the numerator of which is the term of the lease and the denominator of which is the class life of the property leased (determined under section 167 (m)), of the amount for which the lessee would be treated as having acquired the property under paragraph (1).

"(C) DETERMINATION OF LESSOR'S QUALIFIED INVESTMENT.—The qualified investment of a lessor of property described in paragraph (4) in any such property with respect to which he has made an election under this paragraph is an amount equal to his qualified investment in such property (as determined under section 46(c)) multiplied by a fraction equal to the excess of one over the fraction used under subparagraph (B) to determine the lessee's investment in such property.

"(3) LIMITATIONS.—The elections provided by paragraphs (1) and (2) may be made with respect to property which would be new section 38 property if acquired by the lessee. For purposes of the preceding sentence and section 46(c), the useful life of property in the hands of the lessee is the useful life of such property in the hands of the lessor. If a lessor makes the election provided by paragraph (1) with respect to any property, the lessee shall be treated for all purposes of this subpart as having acquired such property. If a lessor makes the election provided by paragraph (2) with respect to any property, the lessee shall be treated for all purposes of this subpart as having acquired a fractional portion of such property equal to the fraction determined under paragraph (2)(B) with respect to such property.

"(4) PROPERTY TO WHICH PARAGRAPH (2) APPLIES.—Paragraph (2) shall apply only to property which—

"(A) is new section 38 property,

"(B) has a class life (determined under section 167(m) in excess of 14 years,

"(C) is leased for a period which is less than 80 percent of its class life, and

"(D) is not leased subject to a net lease (within the meaning of section 57(c)(2))."

(d) EFFECTIVE DATES. — The amendments made by subsections (a) and (b) shall apply to leases entered into after September 22, 1971. The amendment made by subsection (c) shall apply to leases entered into after November 8, 1971.

SEC. 109. REASONABLE ALLOWANCE FOR DEPRECIATIONS; REPAIR ALLOWANCE

(a) Section 167 (relating to depreciation) is amended by redesignating subsection (m) as subsection (n) and by inserting after subsection (l) the following new subsection:

"(m) CLASS LIVES.—

"(1) IN GENERAL.—In the case of a taxpayer who has made an election under this subsection for the taxable year, the term 'reasonable allowance' as used in subsection (a) means (with respect to property which is placed in service during the taxable year and which is included in any class for which a class life has been prescribed) only an allowance based on the class life prescribed by the Secretary or his delegate which reasonably reflects the anticipated useful life of that class of property to the industry or other group. The allowance so prescribed may (under regulations prescribed by the Secretary or his delegate) permit a variance from any class life by not more than 20 percent (rounded to the nearest half year) of such life.

"(2) CERTAIN FIRST-YEAR CONVENTIONS NOT PERMITTED.—No convention with respect to the time at which assets are deemed placed in service shall be permitted under this section which generally would provide greater depreciation allowances during the taxable year in which the assets are placed in service than would be permitted if all assets were placed in service ratably throughout the year and if depreciation allowances were computed without regard to any convention.

"(3) MAKING OF ELECTION.—An election under this subsection for any taxable year shall be made at such time, in such manner, and subject to such conditions as may be prescribed by the Secretary or his delegate by regulations."

(b) REASONABLE REPAIR ALLOWANCE.—Section 263 (relating to capital expenditures) is amended by adding at the end thereof the following new subsection:

"(f) REASONABLE REPAIR ALLOWANCE.—The Secretary or his delegate may by regulations provide that the taxpayer may make an election under which amounts representing either repair expenses or specified repair, rehabilitation, or improvement expenditures for any class of depreciable property—

"(1) are allowable as a deduction under section 162(a) or 212 (whichever is appropriate) to the extent of the repair allowance for that class, and

"(2) to the extent such amounts exceed for the taxable year such re-

pair allowance, are chargeable to capital account.

Any allowance prescribed under this subsection shall reasonably reflect the anticipated repair experience of the class of property in the industry or other group."

(b) RAILROAD ROLLING STOCK.—Section 263(c) (relating to expenditures in connection with certain railroad rolling stock) is amended—

(1) by striking out "shall be treated" and inserting in lieu thereof "shall, at the election of the taxpayer, be treated", and

(2) by adding at the end thereof the following new sentences: "An election under this subsection shall be made for any taxable year at such time and in such manner as the Secretary or his delegate prescribes by regulations. An election may not be made under this subsection for any taxable year to which an election under subsection (f) applies to railroad rolling stock (other than locomotives)."

(d) EFFECTIVE DATES.—

(1) The amendments made by subsection (a) shall apply to property placed in service after December 31, 1970.

(2) The amendment made by subsection (b) shall apply to taxable years ending after December 31, 1970.

(3) The amendments made by subsection (c) shall apply to taxable years beginning after December 31, 1969.

(e) TRANSITIONAL RULES.—

(1) REAL PROPERTY.—In the case of buildings and other items of section 1250 property for which a separate guideline life is prescribed in Revenue Procedure 62–21 (as amended and supplemented), the class lives first prescribed by the Secretary of the Treasury or his delegate under section 167(m) of the Internal Revenue Code of 1954 shall be the same as the guideline lives for such property in effect on December 31, 1970. Any such property which is placed in service by the taxpayer during the period beginning on January 1, 1971, and ending on December 31, 1973 (or such earlier date on which a class life subsequently prescribed by the Secretary of the Treasury or his delegate under such section becomes effective for such property) may, in accordance with regulations prescribed by the Secretary of the Treasury or his delegate, be excluded by the taxpayer from an election under such section if a life for such property shorter than the class life prescribed in accordance with the preceding sentence is justified under Revenue Procedure 62–21 (as amended and supplemented).

(2) SUBSIDIARY ASSETS.—If a significant portion of a class of property first prescribed by the Secretary of the Treasury or his delegate under section 167(m) of the Internal Revenue Code of 1954 consists of subsidiary assets, all such subsidiary assets in such class placed in service by the taxpayer during the period beginning on January 1, 1971, and ending on December 31, 1973 (or such earlier date on which a class which includes such subsidiary assets subsequently prescribed by the Secretary of the Treasury or his delegate under such section becomes effective), may, in accordance with regulations prescribed by the Secretary of the Treasury or his delegate, be excluded by the taxpayer from an election under such section.

TITLE II—CHANGES IN PERSONAL EXEMPTIONS, MINIMUM STANDARD DEDUCTION, WITHHOLDING, ETC.

SEC. 201. INCREASE IN PERSONAL EXEMPTION.

(a) INCREASE IN PERSONAL EXEMPTION TO $675 FOR 1971.—Effective with respect to taxable years beginning after December 31, 1970, and before January 1, 1972—

(1) section 151 (relating to allowance of deductions for personal exemptions) is amended by striking out "$650" each place it appears and inserting in lieu thereof "$675"; and

(2) section 6013(b)(3)(A) (relating to assessment and collection in case of certain returns of husband and wife) is amended by striking out "$650" each place it appears and inserting in lieu thereof "$675"; and by striking out "$1,300" each place it appears and inserting in lieu thereof "$1,350".

(b) INCREASE IN PERSONAL EXEMPTION TO $750 FOR 1972 AND SUBSEQUENT YEARS.—Effective with respect to taxable years beginning after December 31, 1971—

(1) section 151 (relating to allowance of deductions for personal exemptions) is amended by striking out "$675" each place it appears and inserting in lieu thereof "$750"; and

(2) section 6013(b)(3)(A) (relating to assessment and collection in the case of certain returns of husband and wife) is amended by striking out "$675" each place it appears and inserting in lieu thereof "$750"; and by striking out "$1,350" each place it appears and inserting in lieu thereof "$1,500".

(c) TECHNICAL AMENDMENT.—Subsections (c) and (d) of section 801 of the Tax Reform Act of 1969 are hereby repealed.

SEC. 202. INCREASE IN PERCENTAGE STANDARD DEDUCTION.

Effective with respect to taxable years beginning after December 31, 1971, the last two lines in the table in section 141(b) (relating to percentage standard deduction) are amended to read as follows:

SEC. 203. LOW INCOME ALLOWANCE.

(a) ELIMINATION OF PHASEOUT FOR 1971.—Effective with respect to taxable years beginning after December 31, 1970, and before January 1, 1972, section 141(c) (relating to low income allowance) is amended to read as follows:

"(c) LOW INCOME ALLOWANCE.—The low income allowance is $1,050 ($525 in the case of a married individual filing a separate return)."

(b) INCREASE OF LOW INCOME ALLOWANCE FOR 1972 AND THEREAFTER.—Effective with respect to taxable years beginning after December 31, 1971, section 141(c) (relating to low income allowance) is amended to read as follows:

"(c) LOW INCOME ALLOWANCE.—The low income allowance is $1,300

[¶ 5897] Community income.—A spouse in a community property state should treat his share of income earned by the other spouse as earned income received by him. Social security benefits, as well as taxable pensions, attributable to earnings which constitute community income, are similarly handled.

For addition to maximum limitation for married taxpayers both 65 or over, see ¶ 5895-A.

Example.—A husband and wife each qualify for the credit, as explained at ¶ 5892(e). Both are over 65, but under 72.

In the calendar year, the husband received earned income of $900, social security benefits of $600, and a fully taxable employee's pension of $1,800.

In the same year, the wife received earned income of $200, social security benefits of $800, and a fully taxable employee's pension of $600.

The retirement income of each is $1,100 or ½ of ($1,600 + $600).

The limitation on the retirement income of each is $1,074, and each is entitled to a credit of $161.10 (15% of $1,074). The limitation is computed as follows:

1.		$1,524
2. Amount (under Sec. 37(d)(2)(B)) by which earned income ($550)* exceeds $1,200	$ 0	
3. Social security benefits—½ of ($600 + $800)	450	450
4. Retirement income may not exceed		$1,074

* ½ of ($900 + $200)

(5) Community share in spouse's earned income. — Retirement income credit of wife reduced by her community share in husband's earned income. Retirement income and earned income community property; both must be equally divided between spouses. *Warren R. Miller, Sr.*, 51 TC 755.

(10) Retirement annuity as community property.—Federal employee's retirement annuity was community property in proportion that domicile of community in community property state bears to his entire period of employment. Character of retirement income is determined by marital status and domicile at time retirement income is received. Taxpayer acquired rights in fund throughout employment period not after it. *W. F. Williams*, 51 TC 346.

[¶ 5898] Retirement income—additional references.—

Credit for retirement income does not affect requirement for withholding on such income ..... ¶ 34,538

INVESTMENT IN CERTAIN DEPRECIABLE PROPERTY

[¶ 5901] Basic rules.—For taxable years ending after 1961, Sec. 38, ¶ 5902, allowed a credit against tax for investment in certain depreciable property. This investment credit was terminated, with certain exceptions, by the '69 Tax Reform Act. Generally, the credit is not available as to property constructed or acquired after 4-18-69. For extended discussion, see ¶ 5921.

LAW

[¶ 5902] CODE SEC. 38. INVESTMENT IN CERTAIN DEPRECIABLE PROPERTY.

(a) General Rule.—There shall be allowed, as a credit against the tax imposed by this chapter, the amount determined under subpart B of this part.

(b) Regulations.—The Secretary or his delegate shall prescribe such regulations as may be necessary to carry out the purposes of this section and subpart B.

[Footnote ¶ 5902] Added by section 2(a) Revenue Act of 1962, which redesignated former Code Sec. 38 as Sec. 39.

Effective date (Sec. 2(b), Revenue Act of 1962).—Applies to taxable years ending after December 31, 1961.

[¶ 5903] Reg. § 1.38-1 (TD 6931, filed 10-9-67.) Investment in certain depreciable property.

Sections 1.46-1 through 1.48-7, inclusive, are prescribed under the authority granted the Secretary or his delegate by section 38 (b) of the Code to prescribe such regulations as may be necessary to carry out the purposes of section 38 and subpart B, part IV, subchapter A, chapter 1 of the Code.

GASOLINE, SPECIAL FUELS, AND LUBRICATING OIL TAX CREDITS

[¶ 5905] Basic rules.—The Airport and Airway Revenue Act of 1970 (P.L. 91-258, 5-21-70) changed the method of claiming refunds or credits of taxes for certain uses of gasoline, special fuel, and lubricating oil. For taxable years ending after 6-30-70, claims for refunds under Secs. 6420, 6421, 6424, and 6427, or credits under Sec. 39 for amounts payable under such provisions, must be filed not later than the time prescribed by law for filing a claim for credit or refund for the taxable year involved. ¶ 36,571. The refund is ordinarily taken as a direct credit on the income tax return. This is a 3-year extension of the rule under prior law: individual taxpayers now have 39½ months, rather than 3½ months (corporations 38½ months, rather than 2½) after the close of the taxable year of overpayment in which to file a claim for refund or credit. However, refund claims of $1,000 or more per quarter will continue to be filed within 3 months of the close of the quarter for which the refund is sought. Refund claims by governmental bodies and organizations exempt under Sec. 501(a) which don't file income tax returns may also be filed within the time for claiming income tax refund claims.

A claim for refund or credit of the tax on gasoline imposed by Sec. 4081 may be filed for: gasoline used during the taxable year for farming purposes (Sec. 6420) and gasoline used otherwise than as a fuel in a highway vehicle, or in vehicles while engaged in furnishing certain public passenger land transportation service (Sec. 6421). Refund or credit of the tax on lubricating oil imposed by Sec. 4091 may be claimed for lubricating oil not used during the taxable year in a highway motor vehicle (Sec. 6424). The tax on special fuels imposed by Sec. 4041(a) and (b), and the tax on fuel and gasoline used in noncommercial aviation imposed by Sec. 4041(c) are refunded or credited if the fuels aren't used for taxable purposes, or are resold during a taxable year ending after 6-30-70 (Sec. 6427).

The total Sec. 39 credit is the sum of the amounts payable as refunds to the taxpayer in the above situations. Exempt organizations and governments (U.S., State and local) can't use the credit as they receive direct payment of the refund from IRS. Sec. 39(c).

For transitional rules involving certain credits for taxable years beginning after 6-30-65, see Sec. 39(b).

Any individual, estate, trust, or corporation, including a small business corporation, claiming the credit must file and attach Form 4136 to the income tax return. See ¶ 5911(10).

LAW [¶ 5906] CODE SEC. 39. CERTAIN USES OF GASOLINE, *SPECIAL FUELS*, AND LUBRICATING OIL.

(a) General Rule.—There shall be allowed as a credit against the tax imposed by this subtitle for the taxable year an amount equal to the sum of the amounts payable to the taxpayer—

on gasoline used after 6-30-65, for certain nonhighway purposes. *Rev. Rul. 67-28*, 1967-1 CB 350, supplementing. *Rev. Rul. 66-48*, above, and *Rev. Rul. 66-276*, above.

Interest is payable on an overpayment of income tax resulting from a credit allowed on certain uses of gasoline and lubricating oil. *Rev. Rul. 67-314*, 1967-2 CB 416.

(10) Revised Form 4136 is used to claim credit on income tax return for excise tax: (1) on gasoline used for nonhighway purposes, by certain local transit systems, and on a farm for farming purposes; (2) on lubricating oil used otherwise than in a highway motor vehicle; and (3) on special fuels used after June 30, 1970, on a farm for farming purposes, by certain local transit systems, and for certain other nontaxable purposes (for example, aviation fuels used in aircraft in other than noncommercial aviation). *TIR-1077*, ¶ 55,411 P-H Fed. 1970.

Credit under Sec. 6421(a) for tax paid on gasoline by non-resident must be made on income tax return (with Form 4136) even though return not otherwise required. *Rev. Rul. 69-405*, 1969-2 CB 261.

(15) Small business corporations. — Procedures are provided for small business corp. to file claim for credit of Federal excise tax on gasoline used for nonhighway purposes during taxable year beginning after 6-30-65, and ending before 12-31-66. *Rev. Proc. 67-5 (TIR 869)*, 1967-1 CB 575.

(20) Timely filing.—Both return and request for extension untimely; credit not allowed. *Robert E. Kennedy*, ¶ 70,058 P-H Memo TC (pending before 3 Cir.).

TERMINATION OF INVESTMENT CREDIT

[¶ 5921] Basic rules.—The investment credit, established by the '62 Revenue Act, was repealed by Sec. 49, ¶ 5977, added by the '69 Tax Reform Act. However, a taxpayer may still use the credit provided the following conditions are met:

(1) property which would qualify for the investment credit is acquired on or before April 18, 1969, or

(2) the physical construction, reconstruction, or erection of such property is begun on or before April 18, 1969, or

(3) such property is constructed, reconstructed, erected, or acquired after April 18, 1969 pursuant to a contract which was, on April 18, 1969, and at all times thereafter binding on the taxpayer, or

(4) the property is "pre-termination" property (defined below), and

(5) in each case, the property is placed in service on or before December 31, 1975. Sec. 49(a), (d).

For property qualifying for the investment credit, see ¶ 5925 and ¶ 5926.

Binding contract rule. The investment credit remains available for property which is constructed, reconstructed, erected, or acquired pursuant to a contract that was binding on the taxpayer on April 18, 1969 and thereafter. The contract must be between taxpayer and the builder or supplier of the property, and the construction or acquisition of the property must be the subject of the contract. The determination of whether an arrangement between taxpayer and a builder is a "contract" is left to local law. An oral contract may be enough to preserve the investment credit, if taxpayer can prove, by memorandums or other evidence, that the contract was actually entered into by April 18. Sec. 49(b)(1).

A contract may be considered binding even though (a) the price is to be determined later, (b) it is subject to conditions under the control of a third party, or (c) it is subject to minor modifications. But, even though a contract is binding on a taxpayer on April 18, 1969, it is not considered binding if it is substantially modified later. An option is treated as a binding contract only if the amount paid for the option (a) will be forfeited by the option holder upon failure to exercise it, (b) is more than nominal in relation to the total purchase price of the property, and (c) is to be applied against the purchase price if the option is exercised, or was taken into account in setting the price.

Example.—On April 1, 1969, X Corp. got an option to buy a generator which the seller-manufacturer generally sells for $200,000. X paid $30,000 for the option and agreed to pay $170,000 for the generator if it exercises the option. If X doesn't exercise the option, no part of the $30,000 will be returned to it. As X, upon failure to exercise the option, would forfeit an amount which is more than nominal, and since the amount paid for the option was taken into account in fixing the purchase price, X has a building contract and the entire cost of the generator qualifies for the credit.

If taxpayer is bound under a contract to buy two or more specified items, the credit is available only for the least costly of the items which he could purchase.

Example.—Smith's contract requires him to buy either machine A for $25,000 or machine B for $20,000. The contract is binding only as to machine B.

Pre-termination property. Sec. 49(b) defines pre-termination property to which the repeal of the investment credit doesn't apply, if the property is placed in service before 1976. The following rules make up the definition:

(1) *Equipped building rule.*—The taxpayer may use the investment credit if, (a) pursuant to a plan existing on April 18, 1969, and not substantially modified thereafter, he constructs (reconstructs or erects) or acquires a building and the machinery and equipment necessary to the planned use of the building, and (b) more than 50% of the cost of the entire project (building and equipment) is attributable to property on which construction was begun by taxpayer before April 19, 1969, or which was acquired by taxpayer or was under binding order before that date. The credit is then available for the building and necessary equipment and for any incidental adjacent property which is necessary to the planned use of the building (the so-called "appurtenances"). However, these appurtenances are not to be included in the computation of the entire cost of the project which determines whether the equipped building rule will apply. Nor does the equipped building rule apply to any building, machinery, equipment, or appurtenances which don't otherwise qualify for the credit. Sec. 49(b)(2).

Example.—A taxpayer's expansion plans included the building of a new factory costing $400,000 and equipping it with new machinery costing $300,000. construction of the building began on April 1, 1969, but there were no binding con on April 18, 1969 for any of the equipment. Result: The entire $300,000 cost the equipment qualifies for the investment credit. The reason: Starting construction on the building ($400,000) is a binding commitment which covers more than 50% of the total cost ($700,000) of the entire project. (Of course, the reverse situation would also be true, where you had contracts on equipment for more than 50% of the entire cost of the project but construction had not commenced as of the cutoff date.)

If the equipped building rule doesn't apply, taxpayer should consider whether each piece of machinery or equipment separately qualifies for the credit. In determining the cost of the machinery or equipment, whether or not the equipped building rule applies, the machinery and equipment rule (see (3) below) may prove helpful.

(2) *Plant facility rule.*—The investment credit is available to a taxpayer who, pursuant to a definite plan existing on April 18, 1969, which remains substantially unchanged, constructs, reconstructs or erects a plant facility. The term plant facility means a facility which doesn't include any building (or in which buildings are an insignificant portion) and which is (i) a self-

contained, single operating unit or processing operation, (ii) located on a single site, and (iii) identified on April 18, 1969, in the purchasing and internal financial plans of the taxpayer as a single unitary project. Sec. 49(b)(3)(B). If taxpayer had begun construction of such a facility at its site before April 19, 1969, the credit will apply to all property making up the facility (if otherwise eligible). If construction wasn't begun before the cut-off date, the credit still applies to the plant facility if more than 50% of the cost of the depreciable property making up the facility is attributable either to property, the construction of which was begun before April 19, 1969, or to property acquired before that date. Again, property subject to a binding contract, and property qualifying under the machinery and equipment rule (in (3) below) is included in determining whether the facility meets the 50% requirement.

For rules where a Federal regulatory agency has issued a certificate of convenience and necessity for two or more plant facilities, see Sec. 49(b)(3)(C), ¶ 5977.

(3) *Machinery and equipment rule.*—An entire piece of machinery or equipment qualifies for the investment credit if more than 50% of its parts were held by taxpayer on April 18, 1969, or were acquired later pursuant to a binding contract in effect on that date. The 50% rule is determined on the basis of cost, and the parts and components must not be an "insignificant portion" of total cost. This rule applies both to separate pieces of machinery and to machinery and equipment used in an equipped building or plant facility (see above), as well as to certain leaseback transactions. Sec. 49(b)(4).

(4) *Certain lease-back transactions.*—When a party to a contract for the building or buying of property which was binding on April 18, 1969, transfers his rights in the contract (or property) to another person, but retains, under a lease-back situation, the right to use the property, the transferee of the contract or property rights succeeds to the position of the transferor (the original party to the contract). Sec. 49(b)(5)(A). As a lessor, the transferee may elect, under Sec. 48(d), ¶ 5965, to have the lessee take the investment credit. If the lessor decides to take the credit himself, the lease-back must run at least one year, and the termination of the lease (except if it is for a term of 8 years or more) will be deemed a disposition by the lessor subject to recapture under Sec. 47(a), ¶ 5953.

This provision applies not only to parties to binding contracts but also to persons holding property entitled to the investment credit through the application of special machinery and equipment rule (discussed at (3) above), if the above lease-back rules are followed. There are also special rules for corporations which are members of the same affiliated group. Sec. 49(b)(5)(B), ¶ 5977.

(5) *Certain lease and contract obligations.*—The investment credit is available to parties to leases and contracts which were binding on April 18, 1969 if:

(i) the taxpayer was required to construct (reconstruct or erect) or acquire property specified in such lease or contract, or specified in related documents filed with a Federal regulatory agency before April 19, or property the specifications of which are easily ascertainable from such contract, lease, or document. Such otherwise eligible property qualifies for the investment credit. If a project includes property not covered by a specific agreement, the credit applies to this other property only if binding leases and contracts in effect on April 18, covered real property constituting at least 25% of the project;

(ii) the taxpayer was required to construct (reconstruct or erect) or acquire property specified in an order of a Federal regulatory agency for which application was filed before April 19, 1969, where the property was to be used to transport one or more products under binding contracts. This rule applies where a company had a binding contract to buy or sell fuel and was required to construct a pipeline to transport it. The investment credit applies to the property constructed (e.g., the pipeline) only if one or more parties to the contract or contracts were required, as of April 18, to take or provide more than 50% of the products (e.g., the fuel) to be transported over a substantial portion of the useful life of the property;

(iii) the taxpayer was required to construct or acquire property specified in the contract to be used to produce one or more products, and the other party to the contract was required to take substantially all of the products to be produced over a substantial portion of the expected useful life of the property. In such a case, the investment credit is available for the property. For special rules in the case of a contract with a State or local government, and in the case of a contract for the extraction of minerals, see Sec. 49(b)(6)(C).

(6) *Certain transfers to be disregarded.*—If property or rights under a contract would be treated as pre-termination property in the hands of a transferor or decedent, the fact that any of the following transfers occurred is disregarded in determining the eligibility of property for the credit:

(i) a transfer by reason of death,

(ii) a transfer where the transferee's basis is determined by the basis of the property in the hands of the transferor because of the application of sections 332, 351, 361, 371(a), 374(a), 721, or 731, or

(iii) a Sec. 334(b)(2) distribution to a purchasing corporation, if the liquidated corporation was able to use the investment credit, or

(iv) a sale of substantially all of the assets of the transferor under a pre-April 19 binding contract. Sec. 49(b)(7).

(7) *Property acquired from affiliated corporation.*—When a corporation which is a member of an affiliated group as defined in Sec. 1504(a) acquires property from another member of the same group, the acquirer generally steps into the shoes of the corporation from which the property was acquired. A contract between members of an affiliated group is not treated as a binding contract, unless the corporations have disaffiliated by June 30, 1969, and prior to the completion of the performance of the contract. Sec. 49(b)(8).

(8) *Barges for ocean-going vessels.*—Barges specifically constructed or acquired for use with ocean-going vessels which are designed to carry barges are entitled to the investment credit, along with the necessary machinery and equipment installed on such barges, if the ocean-going vessels are eligible for the credit, and if the conditions of Sec. 49(b)(9), are met.

(9) *Certain new-design products.*—A taxpayer can still use the investment credit if, on April 18, 1969:

(i) he had a binding fixed-price contract to produce a product of a new design which covered more than 50% of the entire production of such design to be delivered by the taxpayer before January 1, 1973, and

(ii) more than 50% of all depreciable property required to be constructed (reconstructed or erected) or acquired to carry out the binding contracts was either constructed by the taxpayer, acquired by him, or was under a binding contract for such construction or acquisition.

However, the credit will remain unavailable, unless the tangible personal property required to carry out the binding contracts is placed in service before January 1, 1972. For special rules relating to jigs, dies, templates, and other similar items, see Sec. 49(b)(10).

Prohibition of certain lease transactions. A taxpayer may not obtain an investment credit by changing his ordinary course of business from sales to lease transactions. Sec. 49(c). If property which is eligible for the credit while in the hands of the lessor, but ineligible for the credit if sold to the lessee, is leased after April 18, 1969 (other than pursuant to a binding contract to lease), the credit is not available either to the lessor or to the lessee, if the property is of the kind which the lessor before April 19, sold to customers. Likewise, the credit remains unavailable to either party, where it was the lessor's custom, before April 19, to lease the property and allow the lessee to use the investment credit under Sec. 48(d).

Other rules. In situations where the investment credit remains available, the '69 Tax Reform Act made certain changes in its operation for taxable years beginning after December 31, 1968, and ending after April 18, 1969. Further limitations on the use of carryovers and carrybacks are discussed at ¶ 5924. Changes as to investment credit recapture are at ¶ 5927.

The following material at ¶ 5921.5 et seq. covers rules applicable to taxpayers to whom the investment credit remains available under the above discussion.

PRE-TERMINATION RULES

[¶ 5921.5] Basic rules.—The investment credit was repealed, with certain exceptions, by the '69 Tax Reform Act. The discussion in this and the following paragraphs presents applicable rules where the credit may still be used as discussed at ¶ 5921.

The investment credit is a credit against tax equal to a percentage of the investment. Broadly speaking, 7% of "qualified investment" in new, and to a limited extent in used, depreciable property (but not buildings) may be *subtracted* from tax liability. Thus if tax before credit is $10,000 and the credit figured as below is $2,000, the tax payable is $8,000. Secs. 38; 46, ¶ 5902; 5939.

The credit offsets tax liability dollar-for-dollar up to the first $25,000 of tax. For the amount of tax above $25,000, the credit is a 50% offset (25% for taxable years ending on or before 3-9-67—see ¶ 5923), but the amount not usable because of this limitation in the current year may be carried back to the 3 preceding years (but not before 1962) and carried over to the succeeding 5 years (7 years if fifth taxable year following the unused credit year ends after 12-31-66).

Since the Revenue Act of 1964 repealed Sec. 48(g), credit does not reduce basis and thus doesn't limit total depreciation allowance. This applies generally to property put in service *after* December 31, 1963, even though the taxable year began earlier.

As to property put in service before 1964, reduction must still be made. Reg. § 1.48-7(a), (b), ¶ 5975. But it can be written back as of the first taxable year *beginning* after 1963. Reg. § 1.48-7(d). This means future depreciation deductions will be increased. Taxpayer cannot, however, obtain a refund for prior reductions in depreciation because of the basis write-down.

Prior to this change, reduction of basis had to be made even though

the limitation based on tax prevented full current use of the credit. If the carryover period expired without absorbing the whole credit, a deduction equal to the unused credit was allowed to compensate for the over-reduction in basis. If the credit was adjusted under the recapture rule an upward adjustment of basis was made. Since no reduction in basis is required for tax years beginning after 12-31-63, the deduction for the unused credit is no longer available and Sec. 181 was repealed.

Recapture of credit is discussed at ¶ 5927. For special classes of taxpayers and partnerships, see ¶ 5930.

The credit applies to all taxable years *ending* after December 31, 1961, but only as to qualified investment acquired, constructed, or reconstructed after that date. The use of the credit was temporarily suspended for the period beginning on 10-10-66 and ending on 3-9-67. Generally, there was no investment credit for new or used machinery or equipment (in excess of $20,000 of investment) acquired by taxpayer during the suspension period or acquired, pursuant to an order placed during such period, before 5-24-67, unless certain exceptions applied. Detailed discussion of suspension rules is at ¶ 5998.

Property qualifies for the credit in the year it is *put into service* by the taxpayer even though under his depreciation method depreciation does not start until the following year. Reg. § 1.46-3(d)(1), ¶ 5945. But an exception is provided in Reg. § 1.46-3(d)(4)(ii) where the basis of the property does not reflect its full cost. Property held for rent is placed in service in the year possession is transferred to the lessee. Reg. § 1.46-3 (d)(3). The investment is not prorated according to the period of use in the initial year; in short, all of the investment is taken into account, if at all, that year even though the property is not put into service until the last day of the taxable year.

Additional references:

Temporary suspension of investment credit ..... ¶ 5998
Decisions and rulings ..... ¶ 5987—5989
Items taken into account in certain corporate acquisitions ¶ 18,301
Period of limitation with respect to investment credit carrybacks ..... ¶ 36,491; 36,597
Effect of investment credit carryback on the computation of interest on tax ..... ¶ 37,016; 37,046
Depreciation guidelines and rules ..... ¶ 15,195
Additional first year depreciation ..... ¶ 16,233

CONTENTS OF THIS SUBDIVISION Paragraph [¶]

[¶ 5922] Useful-life test and percentage taken into account.—Only property having a useful life of at least 4 years to the taxpayer at the time of acquisition qualifies. If useful life is at least 4 years, the tentative credit is 7% times the basis or cost—to the extent taken into account—of qualified property acquired during the year. The part of the basis or cost taken into account varies with the useful life of the property as follows:

(1) If useful life is 8 years or more, 100%—that is 7% of basis or cost is allowed;

(2) If useful life is 6 or 7 years, 66⅔%—that is 4⅔% of basis or cost is allowed.

(3) If useful life is 4 or 5 years, 33⅓%—that is 2⅓% of basis or cost is allowed. Sec. 46(c)(2), ¶ 5939.

(4) If useful life is less than 4 years, no credit.

Example:

Asset	*Useful life*	*Cost*	*Qualified investment*
Truck	4	$12,000	$ 4,000(⅓)
Office machine	7	18,000	18,000(⅔)
Plant equipment	10	20,000	20,000
			$38,000
			.07
Credit			$ 2,660

To put it another way:

Asset	*Cost and Percent*	*Credit*
Truck	$12,000 × 2⅓% =	$ 280
Office machine	$18,000 × 4⅔% =	840
Plant equipment	$20,000 × 7% =	1,400
Credit		$2,520

For property used mainly in the utility business of most regulated public utilities, the amount taken into account is ⅔ of the above percentages. In other words, 3% for 8-year property; 2% for 6- or 7-year property; and 1% for 4- or 5-year property. Sec. 46(c)(3).

Note that an estimated useful life must be assigned to *each* separate asset. This is true even if the taxpayer is using a multiple-asset account or is grouping assets into the new Guideline classes of the depreciation reform program, ¶ 15,196, *et seq.* The useful life to be used is either the guideline class life under Sec. 4, Part II of Rev. Proc. 62-21 at ¶ 15,208.4 or the estimated actual useful life. Reg. § 1.46-3(c)(1), ¶ 5945. See *Triangle Publications, Inc.*, at ¶ 5989(55).

> TAX SAVING. Whenever you're in doubt as to the estimation of the useful life of a business asset, you should claim the longest possible life to get the maximum investment credit.

[¶ 5923] Limit on credit based on amount of tax.—The credit may not exceed the tax liability. For taxable years ending after 3-9-67 if the tax is more than $25,000, the credit is $25,000 plus 50% of tax liability over $25,000. For taxable years ending on or before 3-9-67, the credit was limited to $25,000 plus 25% of the tax liability over $25,000. The limitation is prorated, on a daily basis for tax years spanning 3-9-67. The limitation

must also be reduced (but not below zero) by an amount equal to the credit that would have been earned on suspension period property; the reduction is made only for taxable year in which such property is placed in service. Sec. 46(a)(2); Reg. § 1.46-1(b), ¶ 5943.

Any unused credit may be carried back and over subject to the rules below. "Tax" for this purpose is the tax after credits other than withholding and the investment credit, but does not include the tax on unreasonably accumulated earnings, on personal holding companies or the tax resulting from the recovery of foreign expropriation losses. For tax years ending after 1969, the minimum tax on tax preferences of Sec. 56 also isn't included.

The $25,000 figures applies on a joint return; on the separate return of a married person the figure is reduced to $12,500, unless his spouse has no credit. The $25,000 is apportioned among members of an affiliated group (specially defined) whether or not they file a consolidated return. (For taxable years ending on or after 12-31-70, the amount is apportioned among component members of a controlled group.) The $25,000 may be apportioned among the members in any manner the common parent may select, if such parent and each member of the group consent. Reg. § 1.46-1(f). Each partner takes the $25,000 figure into account separately. So do beneficiaries of estates and trusts and stockholders in Subchapter S corporations. ¶ 5930.

Effect of prior tax surcharge on limitation on credit. ¶ 6101.

[¶ 5924] Carryback or carryover of unused credits.—Generally, unused credits may be carried back for 3 years and carried forward for 7 years. However, for taxable years beginning after December 31, 1968, and ending after April 18, 1969, the '69 Tax Reform Act added a further 20% limitation to the use of the carryover as well as an exception to this limitation. See further discussion below.

An otherwise allowable credit that may not be used because of the limitation based on tax is a carryback for 3 years and carryover for 7 years if fifth taxable year following the unused credit year ends after 12-31-66 (for 5 years if such fifth taxable year ends before 1-1-67). Sec. 46(b)(1); Reg. § 1.46-2(a)(1)-(3), ¶ 5944. (There is no carryback to a year ended before January 1, 1962; a carryback to a year beginning in 1961 and ending in 1962 is prorated.) It may be used in the year to which carried to the extent that the limit based on tax in that year exceeds the credit based on investment that year. If there is more than one carry to a particular year, the earliest is applied first.

For carryback to any taxable year ending on or before 12-31-65 with regard to property used predominantly in a U.S. possession, see Reg. § 1.46-2(a)(4).

A taxpayer who has an unused credit for a year which resulted from a net operating loss carryback to that year is permitted to carry the unused credit to the three preceding taxable years. This rule applies to investment credit carrybacks attributable to carryback of net operating losses sustained in taxable years ending after 7-31-67. The unused credit may also be carried forward as is permitted with respect to unused credits generally. P.L. 90-225, 12-27-67. For prior years, the unused credit that resulted from a net operating loss carryback could be carried forward only, not back. See Reg. § 1.46-2(c).

For quick refunds or credits resulting from carrybacks, see ¶ 36,191 et seq.

Carrybacks and carryovers of unused credit must also be reduced by any credit recaptured under Sec. 47. Reg. § 1.47-1(b), ¶ 5955. See also ¶ 5927.

For taxable years beginning after December 31, 1968 and ending after April 18, 1969, the above rules still apply, subject to the following changes. The total amount of investment credit carryovers and carrybacks which may be added to amount allowable as a credit for any such taxable year can't exceed 20% of the higher of (a) the aggregate of investment credit carryovers and carrybacks to the taxable year, or (b) the aggregate credit carryovers and carrybacks to any preceding taxable year that began after 12-31-68, and ended after 4-18-69. Sec. 46(b)(5), ¶ 5939; Reg. § 1.46-2(b)(2), ¶ 5944. However, if a taxpayer has unused investment credits which he couldn't carry over *solely* because of the new 20% limitation, then he may carry over these unused credits for an additional 3 years. When these credits are carried over for 3 years because of this new rule, the 20% limitation (as well as the general 50% of tax liability rule) will apply. Sec. 46(b)(6); Reg. § 1.46-2(a)(5). Examples (3) and (4) in Reg. § 1.46-2(g) illustrate these rules.

[¶ 5925] Qualified investment in new and used property.—Qualified investment may be in new or used property. Sec. 48(b) and (c), ¶ 5965. New property is that the first use of which commences with the taxpayer, or property constructed or reconstructed by him. Used property, of course, is other property. In both cases, only property acquired after 1961 qualifies. The distinction between new and used property is the same as the now-familiar distinction applied in determining whether property qualifies for accelerated depreciation under the 1954 Code rules.

As to new property, the applicable percentage is applied to taxpayer's *basis* for the property determined according to the general tax rules on basis, ¶ 31,141 et seq. Installation and freight costs are added to basis for purpose of credit. Reg. § 1.46-3(c), ¶ 5945. Say taxpayer swaps an old machine with an adjusted basis of $8,000 for a *new*, similar machine and pays $1,000 cash to boot. The trade-in is tax-free and the basis of the new machine is $9,000 (basis of old plus boot); and that is the amount taken into account in applying the percentages. (Taxpayer, as explained below, may have to adjust prior credits because of his disposition of the traded-in machine.) A special rule, described below, applies to property replacing property lost by casualty or theft.

Used property qualifies only if acquired by purchase. "Purchase" does not include acquisitions: (a) from a related person (defined in IRC Sections 267 and 707(b), as modified), (b) by a corporation from an affiliated corporation (specially defined), (c) from a decedent, and (d) of property whose basis is carried over from the person from whom acquired (gifts, for example). Nor does used property qualify if, after acquisition by taxpayer, it is used by the person who used such property before such acqui-

sition, or by a person related to the person who used the property before such acquisition under Sec. 179(d)(2)(A) and (B). Thus property purchased in a sale-leaseback or property purchased by a tenant (who used the property) from his landlord does not qualify. Property is not considered used by the acquirer before acquisition if pre-acquisition use was only casual. Reg. § 1.48-3(a)(2), (3), ¶ 5971. See also decisions at ¶ 5988(S).

As to used property, the applicable percentage is applied to taxpayer's *cost*. In a tax-free trade-in, cost is limited to boot given. Where the property replaces similar property and the transaction is not tax-free, cost is reduced by the adjusted basis of the property replaced. These rules do not apply, that is, the full "cost" of the replacement property is taken into account, (1) if the disposition of the old property resulted in a recapture of prior credits, or (2) unless you buy or contract to buy the replacement property within 60 days before or after selling the old property. Reg. § 1.48-5(b).

Example (1): Taxpayer swaps a machine with an adjusted basis and value of $8,000 for a *used* similar machine, paying $1,000 cash to boot. Because the swap is tax-free, the amount taken into account in applying the percentages is $1,000. But if taxpayer has to adjust the credit taken on the acquisition of the traded-in machine, the amount taken into account is $8,000.

Assume the swap was not tax-free, and that value of the old machine was $10,000. The amount taken into account in applying the percentages is $3,000 ($11,000 "cost" less $8,000).

Example (2): Taxpayer sells truck 1 on Sept. 10, which he bought in Jan. of the previous year, and which has an adjusted basis of $1,200. On Dec. 1, he buys truck 2 as a replacement for $2,000. The full cost of truck 2, $2,000 may be taken into account in computing qualified investment, since the replacement property was bought more than 60 days after the old property was sold. If truck 2 had been bought on Oct. 15, the cost which may be taken into account is $800 ($2,000 less $1,200).

Circumstances under which Section 38 property is disposed of or otherwise ceases to qualify, thereby giving rise to recapture of credit, are in Reg. § 1.47-2, ¶ 5956. See also ¶ 5927.

Dollar limit on used property.—The total cost of acquisitions of used property in any one year taken into account in applying the percentages may not exceed $50,000. Sec. 48(c)(2); Reg. § 1.48-3(c)(1). If total acquisitions are more, taxpayer may select the items to be taken into account; presumably he will select the longer-lived. Reg. § 1.48-5(c)(4). The $50,000 limit applies on a joint return; on the separate return of a married person the limit is $25,000, unless his spouse acquired no qualifying used property that year. Affiliated corporations (component members of a controlled group, for tax years ending on or after 12-31-70) are limited to one $50,000 amount. As to partnerships, the $50,000 limit applies at both the partnership and partner levels; so too, as to estates and trusts and their beneficiaries, and Subchapter S corporations and their stockholders.

Example: Partnership AB pays $60,000 for used equipment. The partnership may take only $50,000 into account, of which A's share is $25,000. In addition, A as a sole proprietor pays $40,000 for used equipment. While his "investment" is $65,000, the amount he may take into account is limited to $50,000. He may select all of the $25,000 derived through the firm and $25,000 of his individual investment, or all of his individual investment and $10,000 of the derived investment.

Effect of casualty or theft.—To figure the qualified investment in prop-

erty replacing property lost by casualty or theft, start with the basis or cost of the new property. Then reduce by whichever of these amounts is the smaller: (1) any insurance or other recovery, (2) the adjusted basis of the lost property. See Sec. 46(c)(4); Reg. § 1.46-3(h), ¶ 5945.

Example: Property is completely destroyed by fire. Its adjusted basis was $20,000; the insurance recovery is $25,000. Replacement property is acquired at a cost of $23,000. The qualified investment is $3,000, unless taxpayer elects recognition of gain under Sec. 1033(a)(3), in which case the qualified investment will be $8,000. If the insurance recovery had been $19,000, the qualified investment would have been $0,000.

Before making the above reduction, taxpayer must figure whether the recapture rule (see ¶ 5927) disallows more in qualified investment than the casualty rule disallows in basis or cost. If it does, the rules for recapture, as amended by the '69 Tax Reform Act apply.

[¶ 5926] What property qualifies.—Eligible property is called "Section 38 property," and the definition of this term is the nub of the credit provision. Sec. 48(a), ¶ 5965. With exceptions stated below, Section 38 property means:

(1) Depreciable tangible *personal* property. This qualifies whether or not used in manufacturing, production, extraction or the furnishing of utility-like services. Reg. § 1.48-1(c), ¶ 5969. Local law definitions are not controlling; items that local law may classify as fixtures may qualify. Examples are outside gasoline pumps, grocery counters, printing presses, and display racks.

(2) Other tangible property, that is real property-like assets (but never a building and its structural components). Reg. § 1.48-1(e). To qualify under this heading the property must (a) be used in manufacturing, production, extraction or the furnishing of utility-like services, or (b) constitute a research or storage facility of an activity under (a). Examples are blast furnaces, oil and gas pipelines, railroad tracks, fences for cattle, silos, and telephone poles. Bank vault doors, record vault doors, night depository facilities, and walk-up and drive-up teller's windows qualify, but not drive-up teller's booths. Among farm improvements qualifying are storage facilities providing only storage space, not working space. See also rulings at ¶ 5937 et seq.

Excluded in all cases as a building and its structural components are the basic structure and such parts as central air conditioning and heating systems, and plumbing, wiring, and lighting fixtures. But the term "structural components" does not include machinery (such as an air conditioning and humidification system) solely required to meet temperature or humidity requirements essential for the operation of other machinery or the processing of materials or foodstuffs. These qualify even though they may incidentally provide for the comfort of the workers or serve, to a minor degree, areas where temperature control is not essential. Reg. § 1.48-1(e)(2).

Elevators and escalators qualify: (1) if construction or reconstruction is completed after June 30, 1963, or (2) acquisition occurred after June 30, 1963. Sec. 48(a)(1)(C); Reg. § 1.48-1(m).

No intangible property qualifies. Thus a patent or copyright is excluded; so too the cost of a leasehold. But improvements made by a tenant (excluding the building and its components) may qualify.

Livestock does not qualify.

To qualify, the property must be subject to depreciation (i.e. have a basis to taxpayer, see ¶ 5989(28)) or amortization and must have a useful life of at least 4 years. If a property is only partly depreciable (part-business, part-pleasure car), only the depreciable part qualifies.

Even though within the above definition, the following do not qualify:

(1) Property used mainly (more than 50%) outside the U.S. But, generally speaking, this exception does not apply to the rolling stock of railroads, aircraft, vessels, and motor vehicles used in international operations, containers used in international transportation, off-shore drilling equipment. Further, this exception does not apply, for taxable years ending after March 9, '67, to aircraft registered by the Administrator of the Federal Aviation Agency which are operated outside the U.S. under a contract with the U.S. Sec. 48(a)(2)(B)(i); Reg. § 1.48-1(g)(2). For special rules on recapture of credit for aircraft leased for use outside the U.S. after April 18, 1969, see ¶ 5927.

Also, for taxable years ending after 12-31-65, property placed in service after this date which is used in a U.S. possession by a U.S. person or by a corporation organized in a possession qualifies, with certain exceptions as provided in Sec. 48(a)(2)(B)(vii); Reg. § 1.48-1(g)(2)(vii).

(2) Property used by a tax-exempt organization other than a cooperative. But if the organization is subject to the tax on unrelated business income, property used in that activity can qualify. For tax years beginning after 1969, if the qualifying property is "debt-financed" (defined in Sec. 514(c), ¶ 21,237), the cost or basis used for the Sec. 46(c) computation is limited to the percentage of cost or basis used under Sec. 514 to fix the organization's gross income from the property in the year placed in service.

(3) Property used by the United States, a state or its political subdivisions, an international organization, or any agency or instrumentality of the foregoing.

(4) Property used mainly to furnish lodging. There are two exceptions to this exception, that is, the following are eligible: (a) Non-lodging commercial facilities available to persons not using the lodging on the same basis as to persons who do. (Example: Restaurant equipment in an apartment hotel.) (b) Property used by a *transient* motel or hotel in furnishing lodging. Reg. § 1.48-1(h).

Note that the above rules are stated in terms of use of the property. This means that neither the owner nor the person who rents out property for the prescribed use can count it for credit.

See also rulings and cases at ¶ 5987 et seq.

¶ 5927 Recapture of credit.—The '69 Tax Reform Act continued the recapture rules discussed below with 2 exceptions: there is no recapture for any Sec. 38 property which is stolen or destroyed by casualty after April 18, 1969, and recapture is limited in the case of property replaced after April 18, 1969, if certain statutory conditions are met. For discussion, see (2), below.

A tax adjustment may be necessary if property is disposed of before the end of its estimated useful life or ceases to be section 38 property. Sec. 47, ¶ 5953; Reg. § 1.47-1, ¶ 5955. Disposition includes any kind of disposition (*e.g.*, sale, tax-free or taxable exchange, gift, involuntary conversion), with the exceptions listed below. It also includes a sale by a partner of his interest in the firm, or by a stockholder of his stock in a Subchapter S corporation. Property may cease to be Section 38 property because, for

example, it is switched to foreign use. See below for further details as to disposition or cessation.

The tax for the *current* year is increased by the amount that the credit or carryover would have been decreased had the original credit been computed on the period of actual use instead of estimated use.

Example: You buy machinery for $30,000; useful life is 10 years. Your credit, $2,100. You sell the machinery in the fifth year. That means you would have actually been entitled to a credit for only ⅓ of the cost based on a 5-year useful life. *Result:* Your credit is $700 rather than $2,100; thus your tax for the *year of sale* is increased by $1,400.

Note that, in effect, recapture denies credit as to $20,000 of the cost. For the importance of this concept, see "Effect of casualty or theft", ¶ 5925.

If the property were disposed of after 8 years, no adjustment would be required. However, since the property must be used at least 4 years to be entitled to any credit, the entire credit is subject to recapture if actual useful life to taxpayer is less than 4 years.

A somewhat similar adjustment is made if nonpublic utility property becomes public utility property. But no adjustment in the reverse situation.

As stated, the adjustment is made in the year of disposition or cessation. Thus prior returns are not reopened and no interest is charged.

In general, taxpayer must maintain records from which he can establish, with respect to each item of section 38 property, the following: (a) Date the property is disposed of or otherwise ceases to be section 38 property, (b) estimated useful life which was assigned to the property, (c) month and taxable year in which property was placed in service, and (d) basis or cost, actually or reasonably determined, of property. Reg. § 1.47(c). Failure to maintain such records will result in recapture in the manner indicated in the examples in Reg. § 1.47-1(c)(1)(iii). For treatment of "mass assets," see Reg. § 1.47-1(c)(2), (4) and standard mortality dispersion table, ¶ 5939(75), usable in lieu of tables based on taxpayer's actual experience for computing qualified investment.

Disposition: For recapture of credit purposes, a "disposition" of section 38 property covers many common situations in addition to sales. For example, it may include gifts, trade-ins, corporate distributions in liquidations or as in-kind property dividends, contributions of property to a corporation (including Subchapter S corporations) or to certain partnerships, sale by a corporation in a "tax-free" Sec. 337 liquidation, certain involuntary conversions, sales of stock by a Subchapter S shareholder, sale by a partner of an interest in a partnership, or sale by a beneficiary of an interest in an estate or trust. "Disposition" also includes a sale in a sale-and-leaseback transaction, except as limited by Reg. § 1.47-3(g), and a transfer upon the foreclosure of a security interest, but the term doesn't include a mere transfer of title to a creditor upon creation of a security interest. Retirement of property is also a disposition. Reg. § 1.47-2(a)(1), (d), ¶ 5955.

If taxpayer disposes of section 38 property in same year he put it into service, he generally doesn't claim any credit for year of purchase. However, this is not always the rule. See for example, death transfers and tax-free transfers, below.

Cessation: Recapture of credit also applies when equipment ceases to be section 38 property. Reg. § 1.47-2(a)(2). Examples are where a business asset is switched to personal use in whole or in part or to foreign use, or where the percentage of use of asset between personal and business changes after year the credit was originally taken. Reg. § 1.47-2(e). There is a special rule for aircraft leased for temporary use outside the U.S. See below.

Leased property: For recapture purposes, the mere leasing of section

38 property by a lessor who took its basis into account in computing his qualified investment for the credit year isn't a disposition. But, where a lease is treated as a sale for income tax purposes the transaction is considered a disposition. Leased property ceases to be section 38 property to the lessor if, in any taxable year after credit year, it wouldn't qualify as such in hands of lessor, lessee or any sublessee. Reg. § 1.47-2(b)(1). Rules on whether disposition or cessation has occurred where lessor elects to treat lessee as purchaser are in Reg. § 1.47-2(b)(2).

Special rule for aircraft leased for temporary use outside the U.S.—Sec. 47 (a)(6), ¶ 5953, added by P.L. 91-676, 1-12-71, permits leasing of an aircraft for use abroad for up to 4 years without recapture of a previously allowed investment credit. The new rule, which is effective for taxable years ending after April 18, 1969, as to aircraft used outside the U.S. after that date, applies to any aircraft which was new property eligible for the credit in the year in which it was placed in service. Such aircraft may be leased to a foreign carrier under a "qualifying lease".

A qualifying lease is a lease executed after April 18, 1969, from a U.S. air carrier that qualifies under Federal law and complies with the rules of the Civil Aeronautics Board.

If the aircraft is used abroad more than in the U.S., then foreign use is taken into account only to the extent of the aircraft's use in the U.S. But if foreign use is less than use in the U.S. (i.e., less than half of the actual useful life), then the actual useful life is used.

Example. A jet airplane was first placed in service on March 1, 1960. It qualified for the credit at that time. It was used in the U.S. through August 31, 1970. The carrier leased it as of that date to a foreign carrier under a qualified lease for use abroad through August 31, 1973. At the end of the lease, the carrier plans to sell the aircraft to the foreign carrier.

The entire credit claimed on the plane is subject to recapture. The carrier has used the plane only 3 years—1½ years in the U.S. and 1½ years abroad. Only half the foreign use time is taken into account since the plane had been used in the U.S. for only 1½ years.

Exceptions to recapture of credit: A taxpayer is not subject to the recapture provisions in certain types of transactions. Reg. § 1.47-3, ¶ 5957. These exceptions are:

(1) Death transfers.—There's no recapture when equipment is transferred because of the death of an individual taxpayer. Instead, the property is treated as if it had actually been held for the entire useful life estimated by the deceased to figure the credit.

Example: Sole proprietor bought $20,000 worth of equipment in '64 and took $1,400 credit on it. He died in '67 and the equipment passed to his son. *Result:* None of the credit has to be paid back. Further, the son can sell the equipment right away without running the risk of recapture.

Recapture doesn't apply to the death transfer of a partner's interest or of the stock of a Subchapter S shareholder. Nor does it apply on transfer of a deceased's interest to the surviving owner in a joint tenancy. However, it does apply to a gift by a taxpayer prior to his death even though the value of the gift is included in his estate (as a gift in contemplation of death, for example).

If, under Reg. § 1.48-4, the lessor of new section 38 property made a valid election to treat lessee as having purchased the property for purposes of

the credit, there is no recapture if, by reason of lessee's death, there is a termination of the lease and transfer of leased property to lessor, or there is an assignment of lease and transfer of leased property to another person. See Reg. § 1.47-3(b), ¶ 5957.

(2) Replacement of property.—(a) Property destroyed by casualty: For section 38 property destroyed by casualty or stolen after April 18, 1969, there is no recapture, whether or not the property is replaced. Sec. 47(a)(4), ¶ 5953; Reg. § 1.47-3(c)(1), ¶ 5957.

The following rules apply to property affected by casualty or theft before April 19, 1969. Generally, the recapture provisions aren't applicable to property disposed of or otherwise ceases to be section 38 property due to its destruction or damage by a casualty, or by theft if it is replaced by section 38 property. Reg. § 1.47-3(c)(2).

To determine whether or not the recapture rules apply, taxpayer proceeds as follows:

(a) He applies the recapture rule to determine how much "qualified investment" would normally be disallowed.

(b) When he buys section 38 equipment to replace the destroyed property, he starts with the basis of the newly acquired property. Then, he reduces this amount by the *lesser* of: (i) the insurance proceeds (or other recovery); or (ii) the adjusted basis of the destroyed property, to determine how much basis reduction there would be.

If the recapture rule results in a greater disallowance of qualified investment than the reduction rule disallows in basis, then recapture comes into play and there's no basis reduction. But, if the reduction rule results in a greater (or equal) disallowance, then the basis reduction governs and there's no recapture. Reg. § 1.46-3(h).

For purposes of the basis reduction rule, property is considered "replacement property" only if the new property is put into service by the due date (including extensions) for filing the year of casualty return. Reg. § 1.46-3(h)(1). Thus, if taxpayer replaces later, he doesn't have to go through the basis reduction rule above, but there might be recapture.

(b) *Certain property replaced after April 18, 1969:* If property eligible for the investment credit is disposed of and, within 6 months of the disposition, is replaced by similar property which would have qualified for the credit had it not been repealed by section 49, then the amount of recapture on the disposition of the old property is in effect reduced by the amount of credit which would have been available to the property which replaced it. Hence, the amount of recapture can be reduced to zero, but not below it. Sec. 47(a)(5); Reg. § 1.47-3(h)(1). Under certain conditions, property disposed of may be replaced with property leased from another. Reg. § 1.47-3(h)(2).

(3) Reselection of used property: There's a $50,000 limit on the cost of used section 38 property taxpayer can take into account in figuring his credit for any one year. Any excess cost can't be carried over. In fact, it's usually wasted. But if the cost of used property exceeded $50,000 and the property actually selected is disposed of before the end of its useful life, recapture of credit can be avoided by reselecting excess used property for the earlier year to take its place. Reg. § 1.47-3(d).

To bypass recapture by reselection of excess used property, taxpayer must attach to his tax return a statement giving his name, address and taxpayer account-number. This statement must also indicate as to both the originally selected used property, and the newly selected used property, the month and year placed in service, cost and estimated useful life. Reg. § 1.47-3(d)(3).

(4) Corporate tax-free transfers under Sec. 381(a): Recapture isn't required if the transfer of section 38 property is from one corporation to another in a tax-free reorganization or liquidation if the acquiring corporation succeeds to the tax attributes of the transferor corporation under Sec. 381(a), ¶ 18,502. This includes the carryover-basis liquidation of an 80% subsidiary under Sec. 334(b)(1), ¶ 17,680. The acquiring corporation will stand in the shoes of the transferor corporation as to carryovers of unused credits and potential adjustments because of early dispositions or cessations. Reg. § 1.47-3(e).

(5) Mere change in the form of conducting business: Recapture isn't required because of a mere change in the form of conducting the trade or business if (1) section 38 property remains in the same business; (2) taxpayer retains a "substantial interest" in the business; (3) substantially all the property (whether or not section 38) is transferred in the change of form; and (4) basis of section 38 property is carried over (in whole or in part). Reg. § 1.47-3(f)(1). Thus, no adjustment is required if a sole proprietor transfers section 38 property to a partnership in exchange for an interest or to a corporation for stock. In these cases, however, the acquirer by making early disposition of the property causes recomputation of transferor's credit. Similarly, a recomputation could be required on sale of transferor's interest or his failure to retain a substantial interest in the firm. Reg. § 1.47-3(f)(5).

Taxpayer is considered to have retained a substantial interest only if, after the change, his interest is (1) substantial in relation to the total interest of all the owners; or (2) is equal to or greater than his interest prior to the change. Thus, where a 5% partner retains at least a 5% interest after incorporation, he's considered to have retained a substantial interest in the business. Reg. § 1.47-3(f)(2).

(6) Sale-and-leaseback transactions: Recapture isn't required where section 38 property is disposed of and as part of the same transaction is leased back to the vendor, even though gain or loss is recognized to the vendor-lessee and the property ceases to be subject to depreciation in his hands. See Reg. § 1.47-3(g).

As to special taxpayers and partnerships, see (i) below.

If, as a result of an early disposition in a taxable year beginning before January 1, 1964, of property placed in service before that date, the tax is increased under Sec. 47(a)(1) or (2), or an adjustment in an unused credit carryover or carryback is made under Sec. 47(a)(3), the basis of the property is increased. Reg. § 1.48-7(c), ¶ 5975.

Procedure for reporting credit recapture.—Individuals, estates, trusts, or corporations should compute the amount of recapture on Form 4255, Tax from Recomputing a Prior Year Investment Credit. This form, which should be attached to the tax return, is to be used if the maximum amount of credit allowable has been allowed at the time of the disposition of the Sec. 38 property, and if the credit is recaptured either in full or in part. If there is an unused investment credit attributable to the disposed asset, the taxpayer, instead of using Form 4255, should compute the recapture tax on a separate schedule which should be attached to the return.

[¶ 5928] Public utility property.—In the case of utilities eligible for the 7% credit such as transportation companies, no U.S. regulatory agency may require a rate reduction ("flow through") because of taxes saved by the credit. In the case of utilities subject to the 3% credit, a U.S. agency may reduce the rate, but only by spreading the tax saving over the useful life

of the asset. This change is not a Code amendment. Section 203(e) of the Revenue Act of 1964, Amending Acts, IRC Vol. See also Reg. § 1.46-3(g), ¶ 5945.

[¶ 5929] Lessees treated as purchasers.—Under Sec. 48(d), a lessor may elect to treat his lessee as the purchaser (acquirer) of qualified property. Reg. § 1.48-4, ¶ 5972.

The election applies only to property acquired new, or constructed, by lessor. It does not apply to used property (including property used by lessor), or to reconstructed property. Reg. § 1.48-4(a)(2).

The lessor who makes this election waives the credit for himself; the *lessee* gets the credit for the year he puts the property into service and uses lessor's life for purposes of computing depreciation, regardless of the lease term. Reg. § 1.48-4(d). A lessee can pass through his credit to a sublessee if both he (lessee) and the original lessor properly elect. Reg. § 1.48-4(e).

For leases executed on or after February 26, 1964, for credit purposes, the lessee's basis is deemed to be the property's fair market value, except as to leases between affiliated corporations where the lessee takes the lessor's basis. (For tax years ending on or after 12-31-70, the lessee takes the lessor's basis when there is a lease between component members of a controlled group.) For leases executed before February 26, 1964, credit is computed on fair market value when lessor is the manufacturer; as to others the computation is on lessor's basis.

Elections may be made on a property-by-property basis, or for any tax year (of lessee) lessor may elect to treat lessee as having purchased all property of which lessee gets possession during such year. The election must be made in the manner specified in Reg. § 1.48-4(f) and (g) on or before due date (including extensions) of lessee's return for lessee's taxable year during which possession of the property is transferred to lessee.

For property placed in service before 1-1-64, lessee's rent deduction had to be reduced to reflect the credit. Total rent deduction (and other deductions under Sec. 162, ¶ 11,005, for amounts paid under the lease) was reduced by the amount of "credit earned" on leased property. "Credit earned" is 7% of qualified investment. For property placed in service after 1963, no reduction in lessee's rent deductions is necessary to reflect the credit.

Rules on the adjustment of the rental deductions are in Reg. § 1.48-4 (k) and (m). (Reg. § 1.48-4(k) superseded Temp. Reg. § 16.2-1(b)(3)). Examples are at Reg. § 1.48-4(l).

If lessor of property placed in service before January 1, 1964 treats lessee as having purchased such property for purposes of the Sec. 38 credit, and if lessee actually buys the property prior to the expiration of its useful life, the basis of the property is increased. Reg. § 1.48-7(e), ¶ 5975.

Reg. § 1.48-4 superseded Temp. Reg. § 16.2-1 adopted by TD 6619, 1962-2 CB 397, TD 6731, 1964-1 CB 11.

[¶ 5930] Special classes of taxpayers and partnerships.—*Sec. 593 organizations:* In determining qualified investment and in applying the $25,000 limitation based on tax, Sec. 593 organizations (that is, mutual savings banks, cooperative banks, and domestic building and loan associations), regulated investment companies, real estate investment trusts and Sec. 1381(a) cooperatives take into account only a pro rata share. For Sec. 593 organizations, the pro rata share is 50%. Reg. § 1.46-4, ¶ 5945. For the others, it is the amount proportionate to the income not passed through to stockholders, members or patrons. Reg. § 1.46-4(b),(c).

Estates and trusts: For estates, trusts, and their beneficiaries, the quali-

fied investment is apportioned in accordance with the income taxable to each. Sec. 48(f); Reg. § 1.48-6(a)(1), ¶ 5974. The investment apportioned to a beneficiary is treated by him as if he made it. Reg. § 1.48-6(a)(3). The $25,000 limitation based on tax is not affected at the beneficiary level, but at the trust level is reduced to the percentage of income taxable to the trust. Reg. § 1.48-6(c). If an estate or trust disposes of section 38 property (or if such property otherwise ceases to qualify in the hands of the estate of trust), the recapture of credit rules would apply to the estate or trust, and to each beneficiary treated as a taxpayer with respect to such property. See Reg. § 1.47-5, ¶ 5959.

Subchapter S corporations: Qualified investment made by a Subchapter S corporation is deemed made ratably by the persons who are stockholders on the last day of its taxable year, and is treated by them as if they had made the investment directly. Sec. 48(e); Reg. § 1.48-5(a), ¶ 5973. Recapture rules affecting stockholders of a Subchapter S corporation are in Reg. § 1.47-4, ¶ 5958. For a discussion of these rules, see ¶ 33,373(1)(d).

For proceedings relating to consents of minority shareholders required by Reg. § 1.47-4, see *Rev. Rul. 70-458*, ¶ 5989(40).

Partnerships: The percentage of basis of partnership property (or cost, if used property) assigned to each partner is the percentage used (at the time the property was placed in service) in determining his share of partnership profits—unless the partnership has a special allocation rule covering income, gain, loss, and deduction items related to such property. However, a partnership agreement may provide that basis (or cost) of section 38 property shall not be taken into account by a partner whose interest in the

general profits of the partnership during the taxable year is 5% or less, and who under the agreement will retire from the partnership during the taxable year or within 8 years after end of taxable year. Any basis or cost not taken into account by such partner is taken into account by other partners. Reg. § 1.46-3(f)(2), ¶ 5945.

If a partnership prematurely disposes of partnership section 38 property (or if such property otherwise ceases to qualify in the hands of the partnership), the recapture of credit rules would apply to the partners who originally received the benefit of the credit. An adjustment will also be necessary if before the close of the estimated useful life of such property, a partner's proportionate interest in the general profits of the partnership (or in the particular item of property) is reduced below a specified percentage. This reduction may be caused by a sale of his interest, by change in the partnership agreement, or by the admission of a new partner. See Reg. § 1.47-6, ¶ 5960.

[¶ 5931] How to claim the credit.—An individual, estate, trust, or corporation claiming the investment credit must attach Form 3468 (as revised) to its return. Estates and trusts which apportion the investment between the estate or trust and the beneficiaries should in addition to the form attach a statement showing the allocation of the investment among the beneficiaries. Partnerships and Subchapter S corporations are not required to file Form 3468 because the credit is claimed by the partner or shareholder. But they must attach a statement to their returns showing the allocation of investment to the partners or shareholders by amount, type and life of property. See Instructions, Form 3468. For special classes of taxpayers, see ¶ 5930.

For procedure of reporting recapture income, see ¶ 5927.

In A W [¶ 5930] CODE SEC. 46. AMOUNT OF CREDIT.

(a) Determination of Amount.—

(1) General rule.—The amount of the credit allowed by section 38 for the taxable year shall be equal to 7 percent of the qualified investment (as defined in subsection (c)).

(2) Limitation based on amount of tax.—Notwithstanding paragraph (1), the credit allowed by section 38 for the taxable year shall not exceed—

(A) so much of the liability for tax for the taxable year as does not exceed $25,000, plus

(B) for taxable years ending on or before the last day of the suspension period (as defined in section 48(j)), 25 percent of so much of the liability for tax for the taxable year as exceeds $25,000, or

(C) for taxable years ending after the last day of such suspension period 50 percent of so much of the liability for tax for the taxable year as exceeds $25,000.

In applying subparagraph (C) to a taxable year beginning on or before the last day of such suspension period and ending after the last day of such suspension period, the percent referred to in such subparagraph shall be the sum of 25 percent plus the percent which bears the same ratio to 25 percent as the number of days in such year after the last day of the suspension period bears to the total number of days in such year. The amount otherwise determined under this paragraph shall be reduced (but not below zero) by the credit which would have been allowable under paragraph (1) for such taxable year with respect to suspension period property but for the application of section 48(h)(1).

(3) Liability for tax.—For purposes of paragraph (2), the liability for tax for the taxable year shall be the tax imposed by this chapter for such year, reduced by the sum of the credits allowable under—

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(A) section 33 (relating to foreign tax credit),

(B) section 35 (relating to partially tax-exempt interest), and

(C) section 37 (relating to retirement income).

For purposes of this paragraph, any tax imposed for the taxable year by *section 56 (relating to minimum tax for tax preferences)*, section 531 (relating to accumulated earnings tax), section 541 (relating to personal holding company tax), or section 1378 (relating to tax on certain capital gains of subchapter S corporations), and any additional tax imposed for the taxable year by section 1351(d)(1) (relating to recoveries of foreign expropriation losses), shall not be considered tax imposed by this chapter for such year.

(4) Married individuals.—In the case of a husband or wife who files a separate return, the amount specified under subparagraphs (A) and (B) of paragraph (2) shall be $12,500 in lieu of $25,000. This paragraph shall not apply if the spouse of the taxpayer has no qualified investment for, and no unused credit carryback or carryover to, the taxable year of such spouse which ends within or with the taxpayer's taxable year.

(5) [1]*Controlled* groups.—In the case of [2]*a controlled* group, the $25,000 amount specified under [3]paragraph (2) shall be reduced for each *component* member of [4]*such* group by apportioning $25,000 among the *component* members of such group in such manner as the Secretary or his delegate shall by regulations prescribe. For purposes of the preceding sentence, the term "*controlled* group" has the meaning assigned to such term by [5]*section 1563(a)*.

(b) Carryback and Carryover of Unused Credits.—

(1) Allowance of credit.—If the amount of the credit determined under subsection (a)(1) for any taxable year exceeds the limitation provided by subsection (a)(2) for such taxable year (hereinafter in this subsection referred to as "unused credit year"), such excess shall be—

(A) an investment credit carryback to each of the 3 taxable years preceding the unused credit year, and

(B) an investment credit carryover to each of the 7 taxable years following the unused credit year,

and shall be added to the amount allowable as a credit by section 38 for such years, except that such excess may be a carryback only to a taxable year ending after December 31, 1961. The entire amount of the unused credit for an unused credit year shall be carried to the earliest of the 10 taxable years to which (by reason of subparagraphs (A) and (B)) such credit may be carried, and then to each of the other 9 taxable years to the extent that, because of the limitation contained in paragraph (2), such unused credit may not be added for a prior taxable year to which such unused credit may be carried.

(2) Limitation.—The amount of the unused credit which may be added under paragraph (1) for any preceding or succeeding taxable year shall not exceed the amount by which the limitation provided by subsection (a)(2) for such taxable year exceeds the sum of—

(A) the credit allowable under subsection (a)(1) for such taxable year, and

[Footnote ¶5338] Matter in *italics* in Sec. 46(a)(3) added by section 301(b)(4), Tax Reform Act of 1969.

Effective date (Sec. 301(c), Tax Reform Act of 1969).—Applies to tax years ending after 1969.

Matter in *italics* in Sec. 46(a)(5), added by section 401(e)(1), Tax Reform Act of 1969, which struck out:

(1) "Affiliated"

(2) "an affiliated"

(3) "subparagraphs (A) and (B) of"

(4) "the"

(5) "section 1504(a), except that all corporations shall be treated as includible corporations (without any exclusion under section 1504(b))"

Effective date (Sec. 401(h)(3), Tax Reform Act of 1969).—Applies to tax years ending on or after December 31, 1970.

Matter in *italics* in Sec. 46(b) added by section 703(b), Tax Reform Act of 1969.

Effective date (Code Sec. 46(b)(6), (6).—Applies to tax years beginning after 1963 and ending after April 18, 1969 as provided in Code Secs. 46(b)(5) and (6).

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(B) the amounts which, by reason of this subsection, are added to the amount allowable for such taxable year and attributable to taxable years preceding the unused credit year.

(3) [Struck out by section 2(a), P.L. 90-225, 12-27-67]

(4) Taxable year beginning before January 1, 1962.—For purposes of determining the amount of an investment credit carryback that may be added under paragraph (1) for a taxable year beginning before January 1, 1962, and ending after December 31, 1961, the amount of the limitation provided by subsection (a)(2) is the amount which bears the same ratio to such limitation as the number of days in such year after December 31, 1961, bears to the total number of days in such year.

(5) Taxable Years Beginning After December 31, 1968, and Ending After April 18, 1969.—The amount which may be added under this subsection for any taxable year beginning after December 31, 1968, and ending after April 18, 1969, shall not exceed 30 percent of the higher of—

(A) the aggregate of the investment credit carrybacks and investment credit carryovers to the taxable year, or

(B) the highest amount computed under subparagraph (A) for any preceding taxable year which began after December 31, 1968, and ended after April 19, 1969.

(6) Additional 3-Year Carryover Period in Certain Cases.—Any portion of an investment credit carryback or carryover to any taxable year beginning after December 31, 1968, and ending after April 18, 1969, which—

(A) may be added under this subsection under the limitation provided by paragraph (2), and

(B) may not be added under the limitation provided by paragraph (5), shall be an investment credit carryover to each of the 3 taxable years following the last taxable year for which such portion may be added under paragraph (1), and shall (subject to the provisions of paragraphs (1), (2), and (5)) be added to the amount allowable as a credit by section 38 for such years.

(c) Qualified Investment.—

(1) In general.—For purposes of this subpart, the term "qualified investment" means, with respect to any taxable year, the aggregate of—

(A) the applicable percentage of the basis of each new section 38 property (as defined in section 48(b)) placed in service by the taxpayer during such taxable year, plus

(B) the applicable percentage of the cost of each used section 38 property (as defined in section 48(c)(1)) placed in service by the taxpayer during such taxable year.

(2) Applicable percentage.—For purposes of paragraph (1), the applicable percentage for any property shall be determined under the following table:

If the useful life is—	The applicable percentage is—
4 years or more but less than 6 years	33⅓
6 years or more but less than 8 years	66⅔
8 years or more	100

For purpose of this paragraph, the useful life of any property shall be determined as of the time property is placed in service by the taxpayer.

(3) Public utility property.—

(A) In the case of section 38 property which is public utility property, the amount of the qualified investment shall be 8/7 of the amount determined under paragraph (1).

(B) For purposes of subparagraph (A), the term "public utility property" means property used predominantly in the trade or business of the furnishing or sale of—