

GEOTHERMAL
LOAN
GUARANTY
PROGRAM

PRESENTED BY

BANK OF MONTREAL
(CALIFORNIA)

AND

MERRILL LYNCH, PIERCE, FENNER & SMITH, INC.

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November 17, 1977

Mr. Herbert Rogers, Jr., President
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94111

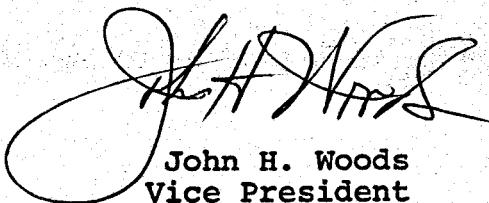
Dear Herb:

With the enactment of the Geothermal Energy Research, Development, and Demonstration Act of 1974, the Federal government is seeking to encourage the commercial development of geothermal energy by the minimization of financial risks through a loan guarantee program. The regulations implementing this loan guarantee program are now effective.

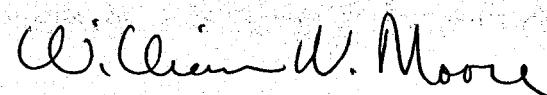
The Bank of Montreal (California) and Merrill Lynch, Pierce, Fenner & Smith have joined forces to offer this financing program to those interested in the production of energy from geothermal sources. We have combined our knowledge of the administration of government programs and our financial capabilities in order to provide you with the necessary experience to expedite the processing of a loan guarantee application and to offer a loan structure that best meets your requirements.

We are looking forward to assisting you in the development of alternative sources of energy.

Sincerely,



John H. Woods
Vice President
Bank of Montreal (California) Merrill Lynch, Pierce, Fenner & Smith
Incorporated



William W. Moore
Vice President
Merrill Lynch, Pierce, Fenner & Smith
Incorporated

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INTRODUCTION

Presently the U.S. imports a large proportion of its petroleum requirements. This dependence on foreign petroleum has had a major impact on our economy. As a result, the Federal government is sponsoring programs to offset this foreign reliance by conservation of oil and gas, conversion of petroleum using facilities to coal and nuclear energy and the development of alternate sources of energy. One of the most acceptable alternate resources is geothermal. It offers an environmentally sound energy resource, can be developed at reasonable cost in comparison to other forms of energy and has a long term production capacity.

On September 3, 1974, the Geothermal Energy Research Development and Demonstration Act was enacted to further the research, development and demonstration of geothermal energy technologies. This Act also established the Geothermal Loan Guaranty Program to assist in the financing of geothermal resource development, both electrical and non-electrical. The highlights of that Guaranty Program are detailed in the following sections of this brochure.

The Congress has demonstrated their desire for the development of geothermal energy, and the Bank of Montreal (California) and Merrill Lynch, Pierce, Fenner & Smith have joined forces to facilitate the growth of the geothermal industry by offering specialized financing under the Geothermal Loan Guaranty Program.

GEOTHERMAL LOAN GUARANTY PROGRAM
HIGHLIGHTS

PURPOSE: Produce, with environmentally acceptable processes, useful energy from geothermal resources.

OBJECTIVES: To encourage and assist the private and public sectors to accelerate development of geothermal resources and to develop normal borrower - lender relationships without the need for continued government assistance.

ELIGIBLE LOANS: Geothermal guaranteed loans can be made for the following purposes:

- 1) Evaluation of the commercial potential of the resources.
- 2) Research and development of extraction and utilization methods.
- 3) Acquisition of rights in the resources.
- 4) Construction and operation of facilities for the production of energy from the resources.

QUALIFIED BORROWER: Any private or public entity that has an interest in geothermal production including:

- 1) Property owners
- 2) Developers
- 3) Utilities
- 4) Equipment suppliers
- 5) Purchasers of electric energy
- 6) Non-electrical developers and users of geothermal resources.

LOAN AMOUNT: \$25 million per project and \$50 million per borrower. The loan can equal 75% of the total project cost. Borrower's equity can be represented by existing project cost or market value, and required new equity can be contributed during the life of the project.

LOAN TERM: Up to 30 years

INTEREST RATE: Negotiable between borrower and lender, subject to approval by ERDA. The rate can be floating or fixed, or a combination of both.

COLLATERAL: Only those assets associated with the project.

OUTSIDE GUARANTEES: None.

LOAN FEES: Negotiable between borrower and lender. ERDA levys an annual user charge computed as a percentage of the loan guaranty amount.

DOCUMENTATION: Loan and security agreements and reports normally associated with a project loan.

OTHER FEATURES: Refer to the regulations under part E of this brochure.

BORROWER'S BENEFITS

The Geothermal Loan Guaranty Program offers many benefits to the borrower, whether it be a development company, a public or private utility, an industrial user of the electric energy, or a developer and user of the geothermal resource for a non-electrical application.

The major benefits are:

- 1) A borrower's annual capital allocation to geothermal development can be expanded three times by utilization of the Loan Guaranty Program as the loan can be 75% of the total cost of a geothermal project. This leveraged financing can enhance the company's profitability and accelerate their geothermal development program.
- 2) The loans are non-recourse and the only risk capital required of the borrower is their 25% capital contribution to the geothermal project.
- 3) Financing can be for terms up to thirty years with interest rates fixed and/or floating rates which average slightly above long term United States Government Securities rates.
- 4) In the event of a default, the only assets that the government would generally look to under the guaranty are those assets associated with the project.
- 5) Admittedly, when dealing directly with government, there

appears to be an abnormally high amount of red tape, but under a government loan guaranty program, this red tape is lessened because of the borrower's direct negotiation with the lender. In case of the Geothermal Loan Guaranty Program through the expertise of the Bank of Montreal (California) and Merrill Lynch, Pierce, Fenner & Smith, a company can keep that red tape to a minimum.

EXHIBIT D

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790.41	Survival of guaranty agreement.
790.42	Security with respect to borrower's assets.
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790.46	Suspension, termination, or cancellation of operations or production on Federal land administered by the Secretary of the Interior.
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AUTHORITY: Sec. 105(a) of the Energy Reorganization Act of 1974, Pub. L. 93-438; Title II of the Geothermal Energy Research, Development, and Demonstration Act of 1974, Pub. L. 93-410; E.O. 11834 dated January 15, 1975.

SOURCE: 41 FR 21433, May 26, 1976, unless otherwise noted.

Subpart A—General Provisions

§ 790.1 Purpose.

The purpose of this regulation is to set forth policies and procedures under which lenders may obtain a Federal guaranty on loans related to the commercial development of practicable means to produce, with environmentally acceptable processes, useful energy from geothermal resources.

§ 790.2 Objectives.

The objectives of the Federal geothermal loan guaranty program are: (a) to encourage and assist the private and public sectors to accelerate development of geothermal resources with environmentally acceptable processes by enabling the Administrator of the Energy Research and Development Administration (ERDA), in the exercise of reasonable judgment, to minimize a lender's financial risk that is associated with the introduction of new geothermal resources and technology; and, (b) to develop normal borrower-lender relationships which will in time encourage the flow of credit so as to assist in the development of geothermal resources without the need for Federal assistance.

§ 790.3 Effective date.

This regulation is effective June 25, 1976.

§ 790.4 Eligible loans and priorities.

(a) The Administrator may enter into agreements to guaranty lenders against the loss of principal and accrued interest on loans made by such lenders to quali-

PART 790—GEOThermal ENERGY RESEARCH, DEVELOPMENT, DEMONSTRATION AND PRODUCTION

Subpart A—General Provisions

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fied borrowers. Any such agreements shall be made subject to the application of priorities and preferential considerations for guarantees as set forth in paragraph (b) of this section and subject to criteria in § 790.6. Such agreements can be entered into only for the purposes of:

(1) Determination and evaluation of the commercial potential of geothermal resources;

(2) Research and development with respect to geothermal extraction and utilization technologies, including but not limited to the mitigation of adverse environmental effects;

(3) Acquisition of rights in geothermal resources; or.

(4) Development, construction, and operation of equipment or facilities for the demonstration or commercial production of energy (e.g., electric power, industrial or agricultural processes, or space heating) from geothermal resources.

(b) In complying with the objectives of the Federal geothermal loan guaranty program, the Administrator will give first priority consideration to those applications for projects having a plan of operations which show promise of quickly resulting in the development of useful energy from geothermal resources. Second priority consideration will be given to those applications for projects designed to demonstrate or utilize new technological advances or engage in the production of advanced technology components. Third priority will be given to projects that will demonstrate or exploit the commercial potential of new geothermal resource areas. The Administrator will give lower consideration to applications involving projects that initially propose geological and geophysical exploration, or the acquisition of land or leases. Within each category of priority as described herein, the Administrator will give preferential consideration to those applications in which the lender is providing a portion of the loan for which a guaranty is not requested. Additional preferential consideration within each priority category will be given to those applications involving, (1) projects from which the Federal government will receive royalty payments, and (2) projects to be carried out by small public and private utilities and small independently owned and operated businesses.

(c) A loan application which meets a lender's standard without a Federal guaranty will be regarded by the Admin-

istrator as not eligible for a loan guaranty under this regulation. No loan shall be guaranteed if the income from such loan or the income from obligations issued by the holder of such loan is excluded from gross income for the purposes of Chapter I of the Internal Revenue Code of 1954. In addition, a project which is devoted exclusively to the extraction or production of geothermal by-products as defined in § 790.5(b), or is devoted exclusively to the desalination of geothermal brines will be regarded by the Administrator as not eligible for a Federal loan guaranty under this regulation.

§ 790.5 Definitions.

For purposes of this regulation:

(a) "Geothermal resources" means (1) all products of geothermal processes, embracing indigenous steam, geopressured fluids, hot water, and brines, (2) steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations, and (3) any byproduct derived from them;

(b) "Byproduct" means any mineral or minerals or gases which are found in solution or in association with geothermal or geopressured resources and which have a value of less than 75 percent of the value of the geothermal steam and associated geothermal resources or are not, because of quantity, quality, or technical difficulties in extraction and production, of sufficient value to warrant extraction and production by themselves;

(c) "Administrator" means the Administrator of the U.S. Energy Research and Development Administration (ERDA) or a representative authorized by the Administrator;

(d) "Manager" means the Manager of ERDA's San Francisco Operations Office, 1333 Broadway, Oakland, California 94616, or a representative authorized by the Manager;

(e) "Lender" means any legal entity formed for the purpose of or engaged in the business of lending money and having the capability of servicing the loan. Examples of lenders include, but are not limited to, commercial banks, savings and loan institutions, insurance companies, factoring companies, investment banking organizations, institutional investors, partnerships, venture capital investment companies, trusts, individuals, or entities designated as trustees acting on behalf of bondholders or other lenders;

(f) "Qualified borrower" (hereinafter referred to as the borrower) means any public or private agency, institution, joint venture, limited partnership, association, cooperative, partnership, corporation, individual, political subdivision, or other legal entity having authority to enter into a loan agreement. Examples of borrowers include, but are not limited to, leaseholders, landowners, public and private electric utilities, reservoir developers, drillers, suppliers, component and equipment manufacturers, research and development firms, engineers, patent holders, and licensees;

(g) A "loan" is an obligation involving a borrower and a lender, evidenced in writing, making available to the borrower money at a specified rate of interest for a limited period of time. The loan instrument may not be capable of conversion into an equity relationship with the borrower;

(h) "Project" means an undertaking by the borrower which when completed will result in an identifiable product, system, major component or study for which a market potentially exists. Examples of a project include, but are not limited to, test and production well drilling, power plant construction, equipment manufacturing, research and development, construction of transmission lines from a geothermal power plant, and other ventures to utilize geothermal heat to serve as an energy source for nonelectric applications, such as crop drying and greenhousing;

(i) A "small public or private electric utility, including its affiliates", is, as provided in 13 CFR 121.3-10(d)(11), a business concern primarily engaged in the generation, transmission and/or distribution of electric energy for sale whose total electric output for its preceding fiscal year did not exceed four million megawatt-hours; and.

(j) A "small business, including its affiliates", is, as provided in 13 CFR 121.3-11(a), a concern which is independently owned and operated, is not dominant in its field of operation, does not have assets exceeding \$9 million, does not have net worth in excess of \$4 million, and does not have an average net income, after Federal income taxes, for the preceding two years in excess of \$400,000 (average net income to be computed without benefit of any carryover loss).

§ 790.6 Loan guaranty criteria.

In addition to meeting the requirements for eligibility set forth in § 790.4

(a) a guaranty may be made only if the following conditions are met as determined by the Administrator upon the written recommendation by the Manager:

(a) The application is signed by an authorized official of the lender and the borrower;

(b) The loan is to be made to a qualified borrower;

(c) Except as provided in § 790.43, the guaranty as to principal shall apply only to so much of the principal amount of the loan as does not exceed 75 percent of the estimated aggregate cost of the project with respect to which the loan is made. However, there is no prohibition against the guaranty being equal to 100% of the loan to be made by the lender;

(d) The lender has set forth reasons why the loan would not be made to the borrower without a Federal loan guaranty;

(e) There is satisfactory evidence demonstrating that the lender is competent to administer loan terms and conditions, and is competent to administer terms and conditions in the guaranty agreement that are applicable to the lender;

(f) When the maximum permissible guaranty is requested as provided in paragraph (c) of this section, the lender has set forth those reasons it is unwilling to undertake a loan having less than the maximum permissible guaranty so as to permit the Manager to evaluate whether the preferential consideration provided in § 790.4(b) is applicable;

(g) The loan bears interest at a rate not to exceed an annual percent on the principal obligation outstanding as the Administrator determines, in consultation with the Secretary of the Treasury, to be reasonable, taking into account the range of interest rates and lending practices, prevailing in the private sector for similar loans and risks by the United States. However, it is expected that the borrower and lender will negotiate a mutually acceptable interest rate that recognizes the benefits to the lender from a Federal guaranty;

(h) The terms of such loan require full repayment over a period of no more than thirty years, or no longer than the expected average useful life of any major

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physical asset to be financed by such loan, whichever is less, as determined by the Administrator.

(i) The amount of the loan together with other funds available to the borrower will be sufficient to carry out the project;

(j) There is reasonable assurance of payment of interest and repayment of the guaranteed portion of the loan by the qualified borrower, such as evidence that there exists or will exist a market for the project's product or results that is sufficient to enable the borrower to repay the loan;

(k) The amount of a guaranty for any loan for a project does not exceed \$25,000,000;

(l) The total dollar amount of guarantees made under this regulation for any combination of outstanding loans to any single qualified borrower does not exceed \$50,000,000;

(m) The project is to be performed in the United States, its territories or possessions, or on property owned or leased by the United States outside the United States, its territories or possessions;

(n) The project is technically feasible and uses environmentally acceptable processes;

(o) There is sufficient evidence, such as is provided in a plan of operations, that the borrower will initiate and complete the project in a timely and efficient manner;

(p) There is a sufficiency of encouraging geophysical, geological, hydrological and geochemical data;

(q) The borrower agrees to make available on a timely basis any technical or economic information as specified in the guaranty agreement, and, subject to provisions in § 790.33 and § 790.20(b)(iii), further agrees to the use of such information for public dissemination purposes;

(r) There is satisfactory evidence of the borrower's interest in geothermal resources;

(s) There is satisfactory evidence that the borrower is capable of completing the project in an acceptable manner;

(t) The project, whether conducted on Federal, State-owned, or private land, will be carried out with full regard to the use of environmentally acceptable processes in such a manner as to mitigate adverse environmental impact to the maximum extent practicable;

(u) The environmental risks of the project have been evaluated in accordance with § 790.23;

(v) The terms and conditions set forth in the loan agreement are acceptable to the Administrator; and,

(w) The borrower and any non-guaranteed lender agree in writing that: (1) The terms and conditions set forth in a non-guaranteed loan agreement relating to the project shall be acceptable to the Administrator, and (2) the non-guaranteed loan shall be subordinate to the guaranteed loan.

§ 790.7 Interest assistance.

With respect to any loan guaranteed pursuant to this regulation, the Manager may enter into an interest assistance contract with the borrower to pay, and to pay the lender for and on behalf of the borrower the interest charges which become due and payable on the unpaid balance of any such loan if the Manager finds:

(a) That the borrower is unable to meet interest charges, and that it is in the public interest to permit the borrower to continue to pursue the purposes of the project, and that the probable net cost to the Federal government in paying such interest will be less than that which would result in the event of a default;

(b) The amount of such interest charges which the Manager is authorized to pay is no greater than the amount of interest which the borrower is obligated to pay under the loan agreement; and

(c) The borrower agrees to repayment of interest charges paid by the Federal government including the payment of interest on such charges at an annual rate to be set by the Manager in consultation with the Department of the Treasury and stated in the interest assistance contract, and to the payment of any deferred user charge provided in § 790.31(b).

§ 790.8 Default payment.

In the event of any default by a borrower in making a payment in accordance with the loan agreement with respect to any loan guaranteed pursuant to this regulation, and except as provided in § 790.7, the Administrator will, as provided in § 790.37, authorize the Manager to make payment of principal and accrued interest in accordance with the guaranty. Thereupon, the Attorney

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General of the United States shall take such action as may be appropriate to recover the amounts of such payments (including any payment of interest under § 790.7) from such assets of the defaulting borrower as are associated with the project, (including patent and proprietary rights resulting from the project as provided in § 790.44) or from any other surety or security bond by or included in the terms of the guaranty. Any recovery achieved by the Attorney General which exceeds the amount paid to the lender in accordance with the guaranty agreement or interest assistance contract shall be returned to the borrower, unless the guaranty agreement provides otherwise.

§ 790.9 Period of guarantees and interest assistance.

No loan guaranty agreements will be made or interest assistance contracts entered into after September 3, 1984. Guaranty agreements in effect at that time will continue until the term of the loan is completed or until the guaranteed portion of the loan is repaid in full with accrued interest, whichever occurs first. Interest assistance contracts in effect on September 3, 1984, will remain in effect thereafter until the contract term expires or the contract is terminated in accordance with its provisions.

§ 790.10 Information for Governors.

The Administrator will, as appropriate, meet with Governors of directly affected States, regional associations of Governors, or heads of State agencies and commissions responsible for energy or environmental matters for the purpose of:

- (a) Discussing the status of projects guaranteed under this regulation;
- (b) Identifying means to remove or mitigate legal and regulatory barriers to the accelerated use of geothermal resources; or
- (c) Evaluating plans to encourage growth in the geothermal industry.

Subpart B—Applications

§ 790.20 Filing.

(a) An application for a loan guaranty made under this regulation must be signed by the prospective borrower and lender or their authorized representatives and jointly submitted to the Manager who is responsible for processing

the application. Information regarding the filing of applications may be obtained from the Manager.

(b) (1) Prior to receipt of a guaranty application, the Manager is authorized to conduct preliminary discussions with prospective lenders or borrowers wishing to obtain information or advice regarding eligibility for a loan guaranty and compliance with filing instructions, including the submission of supporting information as illustrated in § 790.21.

(2) Subject to requirements of law and this regulation, trade secrets, commercial and financial information, geological, geophysical and geographical information and data (including maps) concerning wells which the borrower makes available to ERDA during the preliminary discussion or at any other time throughout the duration of the project on a privileged or confidential basis, will be so treated by ERDA and will not be publicly disclosed without the prior written approval of the borrower. In order to assist ERDA in carrying out this provision, information deemed by the borrower or lender to fall within one of the foregoing categories shall be identified and appropriately marked by the borrower or the lender.

(c) A guaranty application may be submitted for a project that is divided into stages or milestones which are utilized as the basis for assessing the practicability of proceeding to a subsequent phase. However, in the event of failure to proceed to a subsequent phase, the Government's liability, under the guaranty agreement, will extend only to the amounts disbursed by the lender and approved by the Manager as provided in § 790.34.

§ 790.21 Supporting information.

(a) The lender and borrower shall provide information in support of the application such as prescribed by the Manager. The following items illustrate the range of information which may be needed, (dependent upon the type, complexity and cost of the project) so as to enable the Manager to prepare a recommendation for the Administrator's determination, as provided in § 790.6.

(1) Full description of the scope, nature, extent and location of the proposed project;

(2) A written affirmation by the lender supporting the necessity for a Federal loan guaranty;

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- (3) Evidence of the borrower's previous and current interest in exploiting the potential of geothermal resources;
- (4) Evidence supporting the borrower's ability to complete the project;
- (5) Interest rate to be charged by the lender;
- (6) Period and amount of the loan and the percent of the project cost to be guaranteed;
- (7) A detailed budget-type breakdown of both the estimated aggregate cost of the project and the amount to be borrowed;
- (8) Evidence showing that the amount of the loan together with equity or other financing will be sufficient to carry out the project;
- (9) The borrower's plan to pay interest charges and repay the loan, including assumptions regarding marketability of the project's results or product;
- (10) The aggregate amount of guaranty commitments and/or guaranteed loans outstanding made to the borrower under the provisions of this regulation;
- (11) Where relevant to the purpose of the loan guaranty, a copy of the borrower's title or lease agreement to the property, supported by title opinion or other locally acceptable evidence of the borrower's interest, on which the project is to be carried out;
- (12) Subject to § 790.20 (b) (ii), technical information and reports, geophysical data, well logs and core data, financial statements, milestone schedules, and maps and charts;
- (13) Information covering the management experience of each officer or key person in the borrower's organization who is to be associated with the project;
- (14) A description of the borrower's management concept and business plan, or plan of operations, to be employed in carrying out the project;
- (15) A description of the project's technical and economic feasibility;
- (16) A description of the intended sources and amount of capital and its form (equity, loans from principals, loans from the lender, outside financing, or factoring) together with evidence of a commitment from these sources and a copy of each such agreement, and evidence of the financial ability of each source to honor its commitment;
- (17) A copy of the loan agreement to be executed by the lender and borrower;
- (18) A listing of assets associated or to be associated with the project, including appropriate data as to the useful life of any physical asset, and any other security for the loan and guaranty agreement;
- (19) A description of other Federal financial assistance (e.g., direct loans, guaranteed loans, grants, contracts) available or expected to be made available to the borrower in connection with the project;
- (20) A description of the processes and methods the borrower plans to utilize so as to comply with § 790.23(c);
- (21) Copies of all applications when filed, and approvals when issued by Federal, State and local government agencies, for permits and authorizations to conduct operations associated with the project;
- (22) A description of the borrower's organization and a copy of the business certificate, partnership agreement or corporate charter, by-laws, and appropriate authorizing resolutions;
- (23) The lender's written assessment of all aspects of the borrower's loan application in sufficient detail as would be completed by any prudent lender considering a loan without a guaranty, together with copies of investigations from credit bureaus, references, bank inquiries, and professional organizations;
- (24) Written assurance from guaranteed and, when appropriate to the project, non-guaranteed lenders that the loan amounts as well as terms and conditions imposed by such lenders will not be altered in any significant respect without approval of the Administrator;
- (25) A description of salaries (and other financial remuneration including profit sharing and stock options) to be paid to officers and employees of the borrower that are, or will be, directly associated with the project; and
- (26) Evidence of consultation conducted by the borrower with appropriate agencies of any affected State regarding the proposed project.

(b) In addition to supporting information illustrated in paragraph (a) of this section, the Manager may independently obtain or may require the lender to include with the guaranty application the filing of information regarding the lender as deemed necessary, by the Manager, including but not limited to:

- (1) Description of the lender's organization and a copy of the business certificate, partnership agreement or corporate charter, by-laws, and appropriate authorizing resolutions;

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(2) Copies of investigations obtained from credit bureaus, reference and bank inquiries, and professional associations;

(3) Descriptions covering the management experience of each officer or key person in the lender's organization who is or will be associated with the loan;

(4) A description of the management concept to be employed by the lender in surveillance of the loan; and

(5) When appropriate to the project, evidence of the lender's experience in surveying the financial aspects of complex technological projects.

(c) The Manager shall consider the application and other relevant information and shall be responsible for: (i) determining whether the application is in compliance with this regulation; (ii) assessing and evaluating the financial, technical, environmental, management, and marketing aspects of the project; and, (iii) recommending to the Administrator approval or nonapproval of the application. The Manager shall include with a recommendation for approval a proposed guaranty agreement containing appropriate terms and conditions pertinent to the project. The Manager will provide the borrower and lender with a written statement setting forth the basis for the Administrator's nonapproval of an application.

§ 790.22 Project cost illustrations.

(a) The cost elements set forth in paragraphs (b) and (c) of this section are only for the purpose of illustrating the manner by which the estimated aggregate cost of the project can be determined. It is expected that project costs will be accumulated in accordance with generally accepted accounting principles and practices which are consistently applied.

(b) Except as set forth in paragraph (c) of this section, reasonable and customary costs paid by the borrower that are directly connected to the project are generally permitted in computing the estimated aggregate project cost. These costs include, but are not limited to the following:

(1) Employees' salaries and wages, consultant fees and other outside assistance;

(2) Land purchase or lease payments, including reasonable real estate commissions;

(3) Engineering fees, surveys, plats, title insurance, recording fees and legal

fees incurred in connection with land acquisition;

(4) Site improvements, site restoration and abandonment costs, access roads and fencing;

(5) Drilling of exploration wells, shallow heat-flow wells, and test, production and reinjection wells;

(6) Buildings, transmission lines, power plant equipment, and machinery;

(7) Taxes to be paid to Federal, State and local government agencies and other taxing authorities;

(8) Insurance and bonds of all types;

(9) Engineering, geological, architectural and legal fees paid in connection with drilling, machinery selection, design, acquisition and installation;

(10) Research and development necessary to complete the project;

(11) Professional services and fees necessary to obtain licenses and permits and to prepare environmental reports and data;

(12) Interest costs charged by the lender;

(13) Interest payments to other lenders;

(14) Costs incurred by the borrower prior to approval of the guaranty agreement that are directly in connection with the project;

(15) Technical and socio-economic information dissemination costs;

(16) Costs to provide safety and environmental protection equipment, facilities and services;

(17) Travel and transportation costs;

(18) Bond financing costs and trustee fees;

(19) Fees for royalties and licenses;

(20) Costs associated with acquiring geophysical and other technical data;

(21) Financial and legal services costs;

(22) Costs to comply with terms and conditions specified in the guaranty agreement or required by regulations and issuances by Federal, State and local government agencies; and,

(23) A contingency reserve.

(c) Costs which are not considered as project costs and are excluded from the guaranteed portion of the loan are illustrated below:

(1) Company organizational expenses;

(2) Parent corporation general and administrative expenses and other parent corporation assessments;

(3) Dividends and profit sharing to stockholders, employees and officers;

(4) Goodwill, franchises, or trade or brand name costs;

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(5) Except as provided in 790.31, fees and commissions charged to the borrower for obtaining loans and Federal assistance;

(6) Loan commitment fees charged by lenders and finders' fees;

(7) Expenses not paid or incurred by the borrower;

(8) Normal operating expenses incurred after an initial period of start-up; and,

(9) Costs that are excessive or are not directly required to carry out the project.

(d) Independently, or at the direction of the Administrator, the Manager may cause to be performed a review of any or all cost elements included by the borrower in the estimated aggregate project cost. The borrower shall make available records and other data necessary to permit the Manager to carry out such review. In carrying out this responsibility, the Manager may utilize employees of Federal agencies or may direct the borrower to submit to a review performed by an independent public accountant or other competent authority.

(e) When costs incurred prior to the approval of the guaranty agreement, as provided in paragraph (b)(14) of this section, are included in the estimated aggregate project cost, the borrower will make available to auditors selected by the Manager financial and other records necessary to complete an audit of such costs if requested by the Manager.

§ 790.23 Environmental considerations.

(a) For a proposed project being actively considered for a loan guaranty for which an environmental statement or negative determination has been prepared by a responsible Federal official, the environmental statement or negative determination and supporting assessment will be utilized by the Manager and the Administrator in considering the environmental consequences of the project.

(b) With respect to each project being considered actively for a loan guaranty for which paragraph (a) of this section is not applicable, the Manager, in accordance with 10 CFR Part 711, shall assess the potential effect of all phases of the project on the human environment, including but not limited to fish and other aquatic resources, wildlife habitat and populations, aesthetics, recreation, air and water quality, land use, and other resources in the area. This assessment will additionally consider, when appropriate to the project, the potential im-

pact on the environment from the construction of power plants and transmission lines which may later be required but are not included in the project.

(1) To aid in the above assessment the Manager may request the views and recommendations of Federal, State, and local government agencies, environmental and industrial organizations, and others; and, when appropriate, may hold public hearings after giving due notice.

(2) If, as a result of the above assessment, the Manager determines that the proposed project will have a potentially significant effect on the quality of the human environment, final action on the guaranty application shall be held in abeyance until an environmental statement in accordance with section 102 (2)(c) of the National Environmental Policy Act of 1969 has been prepared and issued by the responsible Federal official.

(3) If the Manager determines that the proposed project will not have a potentially significant effect on the quality of the human environment, a negative determination shall be prepared by the Manager and submitted, together with the assessment, to the Administrator prior to final action on the guaranty application. The negative determination together with documentation supporting that determination shall be kept on file by the Manager. Environmental assessments and negative determinations prepared in compliance with this regulation shall be placed in ERDA Public Document Rooms.

(c) Each loan guaranty agreement shall include the following general terms and conditions for the protection of the environment:

(1) the borrower shall comply with all applicable Federal, State and local requirements with respect to the control of air, land, water, and noise pollution. In the absence of requirements, the Manager, after consultation with appropriate Federal, State, and local government agencies, may recommend requirements for the Administrator's consideration and the borrower shall comply with such requirements as are approved by the Administrator.

(2) The borrower, in addition to any other action required by Federal, State or local requirements, or requirements established by the Administrator, or conditions set forth in leases issued by an agency of the Federal government, shall take the following specific actions: (For purposes of this paragraph the ap-

propriate agency official means the Manager for projects conducted on private or State-owned land, and the Head of a Federal agency for projects conducted on any land administered by any agency of the Federal government.)

(i) Conduct operations in such a manner as to minimize disturbance to vegetation, drainage channels and stream-banks, and employ such soil and resource conservation and protection measures as are deemed necessary by the appropriate agency official;

(ii) Remove or dispose of all waste generated in connection with the project in a manner acceptable to the appropriate agency official;

(iii) Take all reasonable precautions necessary to minimize to the maximum extent practicable land subsidence or seismic activity which could result from the project, including the taking of measures to monitor operations for land subsidence and seismic activity and, when requested by the appropriate agency official, make available records of all monitoring activities;

(iv) Take aesthetics into account in the planning, design, and construction of facilities;

(v) Employ such measures as are deemed necessary by the appropriate agency official to protect fish and wildlife and their habitat;

(vi) Conduct activities on known or suspected archeological; paleontological, or historical sites in accordance with specific instructions issued by the appropriate agency official;

(vii) Provide, in a timely manner, for the reasonable restoration of all disturbed lands, including the plugging of abandoned wells; and promptly employ corrective measures whenever adverse environmental effects exceed those expected; and,

(viii) Employ such other measures as are deemed necessary by the appropriate agency official to protect the quality of the human environment.

(d) For projects conducted on private or State-owned land:

(1) Assuring compliance with the requirements set forth in paragraph (b) of this section shall be the responsibility of the Manager, who may utilize experts from Federal agencies, National Laboratories or private firms, and shall have access to reports prepared by the borrower in compliance with requirements imposed by Federal, State and local government agencies.

(2) The borrower shall submit an annual report to the lender and the Manager giving a full account of actions taken to comply with the requirements set forth in paragraph (c) of this section.

(e) For projects to be conducted on any land administered by an agency of the Federal government:

(1) Assuring compliance with safety and operating procedures and environmental protection requirements shall be the responsibility of the appropriate Federal agency or a representative authorized by the Head of that agency.

(2) The borrower shall provide to the lender and the Manager a copy of each annual environmental compliance report prepared by the borrower in accordance with regulations issued by the appropriate Federal agency.

(f) Nothing in this regulation shall be construed to modify requirements imposed on the borrower or lender by Federal, State and local government agencies in connection with permits, licenses, or other authorization to conduct or finance geothermal activities.

§ 790.24 Mandatory purchase of flood insurance.

The Flood Disaster Protection Act of 1973 (Pub. L. 93-234) may require purchase by the borrower of flood insurance as a condition of receiving a guaranty on loans for acquisition or construction purposes in an identified flood plain area having special flood hazards. Questions emanating from borrowers or lenders regarding compliance with provisions of the Flood Disaster Protection Act and guidelines of the Federal Insurance Administration will be referred to the Manager. When the purchase of flood insurance is required, as finally determined by the Manager, such costs can be included by the borrower in the estimated aggregate project cost.

Subpart C—Servicing and Closing

§ 790.30 Loan servicing by lender.

Loan guaranty agreements approved in accordance with this regulation shall provide that:

(a) The lender shall exercise such care and diligence in the disbursement, servicing, and collection of the loan as would be exercised by a reasonable and prudent lender in dealing with a loan without guaranty;

(b) The loan agreement shall provide the customary period of grace for the making of any payment of principal or

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interest. However, the lender shall not grant to the borrower any further extension of time over and above any period of grace for the making of any payment in whole or in part under the loan agreement without the prior written consent of the Manager;

(c) The lender shall notify the Manager in writing without delay:

(1) That the first disbursement is ready to be made, together with evidence from the borrower that the project has commenced or is about to commence;

(2) Monthly, or at other agreed upon intervals, of the date and amount of each subsequent disbursement under the loan;

(3) Of any non-payment by the borrower of principal or interest as required by the loan agreement, if such non-payment is not cured within the grace period, together with evidence of appropriate notifications made by the lender to the borrower;

(4) Of any failure, known to the lender, by an intended source of capital to honor its commitment;

(5) Of any failure by the borrower, known to the lender, to comply with terms and conditions as set forth in the loan agreement or guaranty agreement; or,

(6) When the lender believes that the borrower may not be able to meet any future scheduled payment of principal or interest.

(d) In the event the lender retains the option to accelerate payment of the borrower's indebtedness, the lender shall not do so without the prior written consent of the Manager.

(e) If the guaranty agreement so provides, the loan agreement will permit the borrower to defer payments of principal until such time that income from the project is sufficient to meet this obligation.

(f) Lenders will submit to the Manager periodic financial statements that report the status and condition of each loan guaranteed under this regulation. The Manager will prescribe the frequency, format and content of such statements. However, a report on each loan guaranty agreement entered into under this regulation shall, as a minimum, be submitted to the Manager annually on the anniversary date of the guaranty agreement. Reports will be furnished to the Manager until such time as the guaranteed portion of the loan or interest assistance is repaid.

§ 790.31 User charge.

(a) A user charge will be collected annually from the lender imposed on the guaranteed portion of the loan and computed at a rate to be set forth in the guaranty agreement. The rate shall be imposed on the anticipated average amount of the guaranteed portion of the loan that is estimated to be outstanding during the year. The user charge may be passed to the borrower by the lender and in such instances may be included in the project cost.

(b) At the time the guaranty agreement is closed, as set forth in § 790.45(d), the lender shall present to the Manager payment of the first year's user charge. Subsequent payments of the charge will be made by the lender on the anniversary date of closing. If interest assistance is in effect, payments of this charge, if passed by the lender to the borrower, will be deferred for the term of the interest assistance contract.

(c) The Administrator annually will evaluate whether the user charge rate being imposed is sufficient to cover anticipated administrative, default and interest assistance costs and, when appropriate, establish a revised rate to be applied to new guaranty agreements.

§ 790.32 Geothermal Resources Development Fund.

(a) As provided in Sec. 204(a) of Pub. L. 93-410, there is established in the Treasury of the United States a Geothermal Resources Development Fund (hereinafter referred to as the Fund), which is available to the Administrator in carrying out the loan guaranty and interest assistance program contemplated by this regulation, including the payment of administrative expenses incurred in connection therewith.

(b) Appropriations to the Fund that are made available through legislation, or repayments made by borrowers in accordance with terms and conditions in interest assistance contracts, or amounts returned to the United States through recoveries by the U.S. Attorney General, as provided in § 790.8, and not disbursed in accordance therewith, shall, except as otherwise provided by law, be available to the Administrator for the payment to lenders of principal and interest on guaranty agreements and interest assistance contracts made in accordance with this regulation. In addition, balances in the Fund may be used for necessary administrative expenses incurred by ERDA or

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other Federal agencies acting pursuant to ERDA direction in carrying out the provisions of this regulation.

(c) In the event of a default, the Manager may enter into contracts as required to preserve the collateral for the loan and to complete unfulfilled environmental requirements. The cost of such contracts may be charged to the Fund.

(d) In the event that interest assistance payments and default payments exhaust balances in the Fund, the Administrator will promptly seek to obtain appropriations as are authorized.

(e) Moneys in the Fund not needed for current operations may, with the approval of the Secretary of the Treasury, be invested in bonds or other obligations of, or guarantees by, the United States.

(f) Not less than ten percent of the amount available for loan guarantees during a fiscal year will be allocated to guarantees on loans to small public and private utilities and small independently owned and operated businesses, as defined in § 790.5. The Administrator, at his discretion, may adjust the allocation reserved for small concerns. To the extent that guarantees on loans to qualified small concerns are not issued within six months following the beginning of each fiscal year, the uncommitted allocation of loan guarantees for small concerns, at the discretion of the Administrator, may become available on an unrestricted basis.

§ 790.33 Project monitoring.

The guaranty agreement shall provide that employees and representatives of ERDA shall, with the Manager's approval, have access to the project site. The lender, to the extent lawful and within its control, and borrower will assure availability of information related to the project as is necessary to permit the Manager to determine technical progress, soundness of financial condition, management stability, compliance with environmental protection requirements, and other matters pertinent to the guaranty.

§ 790.34 Loan disbursements by lender.

Unless otherwise provided in the guaranty agreement, the lender shall not make any disbursement on the loan until:

(a) It has followed notification requirements as set forth in § 790.30(c)(1) and (2) and has received written notice

from the Manager that disbursement is approved; and,

(b) It has received from the borrower satisfactory documentary evidence, as provided in § 790.35, that funds requested will be used to pay the borrower's costs incurred or to be incurred for the project.

§ 790.35 Satisfactory documentary evidence.

The borrower shall furnish to the lender a written statement in support of each request by the borrower for loan disbursements, setting forth in such detail as the lender or Manager may require the purposes for which disbursement is requested and an attestation that such disbursements will be used only for such purposes. Signature on the requesting document shall be made by a person authorized to order the expenditure of the borrower's funds.

§ 790.36 Withdrawal of guaranty.

(a) The Administrator, may, upon the written recommendation of the Manager, terminate the guaranty by written notice to the lender and the borrower if the Manager finds that:

(1) Initiation of activity on the project has not occurred within the period of time set forth in the guaranty agreement. Within sixty days after termination under this circumstance, the Manager shall reimburse to the lender the full amount of the user charge paid by the lender if the charge has not been passed to the borrower;

(2) There is non-compliance on the part of the borrower or the lender with material terms and conditions set forth in either the loan agreement or the guaranty agreement, other than those concerning initiation of activity as referred to in paragraph (a)(1) of this section; or,

(3) There is failure by the borrower to acquire capital from intended sources, as provided in § 790.21(a)(16), and the borrower is unable to acquire alternate sources within a reasonable time as may be approved by the Manager.

(b) If the borrower fails to acquire capital from intended or alternate sources, or fails to comply with material terms and conditions set forth in the loan or guaranty agreement, the Manager shall notify the borrower and the lender that the guaranty may be reduced to the amount that has been disbursed by the lender as of the date of the notice. Disbursements made by the lender after

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such notification is received will not be covered by a guaranty.

(c) If the lender fails to comply with any material term or condition set forth in the guaranty or loan agreement, the guaranty may be terminated. Notice of the Manager's finding that a material term has not been complied with shall be served by the Manager upon the borrower and the lender. Following notification, the borrower will be allowed reasonable time to acquire a substitute lender that is capable of complying with provisions in this regulation. If the borrower obtains a substitute lender satisfactory to the Administrator, a new guaranty agreement will be negotiated. Upon issuance of the new guaranty to the substitute lender, the original lender shall be reimbursed by the borrower for unpaid principal outstanding and accrued interest.

§ 790.37 Default and demand.

(a) If the borrower defaults in making payment of principal or interest within the time period allowed in § 790.30(c) (3) and the lender has complied with the requirements placed on it as set forth in §§ 790.30 and 790.34, the lender may make demand in writing upon the Manager for payment pursuant to the guaranty, subject to the conditions described in paragraphs (b), (c) and (d) of this section.

(b) The Manager shall, pursuant to the provisions of § 790.7, determine whether an interest assistance contract shall be executed. In the event that interest assistance is not warranted, the Manager shall so notify the Administrator and the lender. The lender shall make available without delay such documents and certifications as the Manager may reasonably require evidencing the lender's compliance with notification provisions of the guaranty agreement.

(c) Upon default by the borrower and notification by the lender, and to the extent that sufficient reserves exist in the Geothermal Resources Development Fund: (i) upon approval of the Administrator, the Manager shall, within sixty days after receipt of such documents, pay to the lender on a proportionate basis or in full, whichever the guaranty agreement provides, the guaranteed amount of unpaid principal and accrued interest outstanding at the date of default; and (ii) during the period beginning from receipt of such documents

and until payment is made by the Manager, interest payable by the United States will accrue on the guaranteed debt at a rate to be determined by the Secretary of the Treasury taking into consideration current average market yields on outstanding short-term Treasury securities.

(d) The lender shall, concurrently with payment in full of all amounts guaranteed by the United States, assign to the United States and transfer and deliver to the Manager the loan documents, together with all collateral documents evidencing any and all security for and guarantees of the loan then held by the lender as set forth in the loan or guaranty agreement.

§ 790.38 Preservation of collateral.

Upon default by the borrower, the holder of collateral associated with the project shall take actions such as the Manager may reasonably require to provide for the care, preservation, and maintenance of such collateral so as to achieve maximum recovery upon liquidation of collateral, security and guarantees for the loan. Except as provided in §§ 790.37 and 790.40, the lender shall not waive or relinquish, without the consent of the Manager, any collateral or guaranty for the loan to which the Government would be subrogated upon payment under the guaranty agreement to the lender.

§ 790.39 Treatment of payments.

When the lender holds a guaranteed and non-guaranteed portion of a loan, payments of principal made by the borrower in accordance with the loan agreement shall be applied by the lender to reduce the guaranteed and non-guaranteed portions of the loan on a proportionate basis.

§ 790.40 Assignment and incontestability.

(a) Except as may be required by law, the lender may assign to another lender rights and obligations under the loan or guaranty agreement only with the prior written consent of the Administrator.

(b) The lender may provide other lenders with participating shares in the loan without the prior consent of the Administrator. Written notice shall be given by the lender to the Manager and the borrower when participating shares are so provided. However, the original lender shall continue to be responsible for and perform the provisions of the guaranty agreement pertaining to the lender.

unless the Administrator approves a substitute lender.

(c) The guaranty agreement shall be conclusive evidence that the guaranty and the underlying loan are in compliance with the provisions of Pub. L. 93-410 and this regulation, and that such loan has been approved and is legal as to principal and interest and other terms. Such a guaranty shall be valid and incontestable by the Government, except for fraud or misrepresentation by the holder of the obligation.

§ 790.41 Survival of guaranty agreement.

The guaranty agreement shall be binding upon the lender, the borrower and the Administrator and upon their successors and assigns and shall survive payment by the United States. No delay or failure of the Administrator or the Manager in the exercise of any right or remedy and no single or partial exercise of any such right or remedy shall preclude any further exercise thereof; and no action taken or omitted by the Administrator or the Manager shall be deemed a waiver of any such right or remedy.

§ 790.42 Security with respect to borrower's assets.

Each loan guaranteed under this regulation will be secured by liens or assignments of rights in assets associated with the project, or such other security specified in the guaranty agreement as may be reasonably required to protect the interests of the United States. Upon default by the borrower, as set forth in § 790.8, the Attorney General will seek recovery from the assets of the borrower that are associated with the project or specified in the guaranty agreement.

§ 790.43 Other Federal assistance.

(a) Nothing in this regulation shall be interpreted to deny or limit the borrower's right to seek and obtain other Federal financial assistance (e.g., contracts, grants, direct loans or guaranteed loans). However, the total amount of Federal financial assistance, including guarantees made under this regulation, obtained by the borrower for the project, shall not exceed 75 percent of the estimated aggregate cost of the project to be undertaken by the borrower.

(b) After closing of the loan guaranty agreement, the borrower will not undertake any work in connection with the project (by contract or grant) for a Fed-

eral agency without the Manager's written finding that performance of the work will not adversely affect the borrower's ability to comply with pertinent terms and conditions in the loan and guaranty agreement.

§ 790.44 Patent and proprietary rights.

(a) Patents and other proprietary rights accruing to the borrower and resulting from the project will remain with the borrower, except as such rights shall be, in the case of default, treated as project assets in accordance with terms and conditions in the guaranty agreement.

(b) The guaranty agreement may provide that patents or other proprietary intellectual property rights utilized in or resulting from the project, which are owned or controlled by the borrower, shall be made available to other domestic parties upon reasonable terms and conditions which protect the confidentiality of information, if such action is determined by the Administrator to be in the public interest. This requirement will not be needed where the principal purpose of the loan to be guaranteed is to utilize generally available technology to determine and evaluate a new geothermal resource base, or the acquisition of rights in geothermal resources.

(c) Where the principal purpose of the loan is for research and development with respect to extraction and utilization technologies, or for the development or demonstration of new and unique facilities or equipment, the requirements for making patents and other proprietary intellectual property available to other domestic parties shall normally be included in the guaranty agreement unless the Administrator determines, upon the recommendation of the Manager, that such implementation would either seriously impair the borrower's ability to conduct the project, seriously impair the borrower's ability to maintain a marketplace posture, or be inconsistent with the borrower's pre-existing contractual obligations. The Administrator's determination on this matter shall include consideration of whether attainment of the objectives of the geothermal loan guaranty program, as set forth in § 790.2, will be adversely affected by this requirement.

§ 790.45 Closing.

The major activities leading to the closing of the guaranty agreement include the following:

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(a) When an application for a loan guaranty has been approved by the Administrator, the Manager will so notify the lender and the borrower and provide them with a copy of the proposed guaranty agreement.

(b) A preclosing conference will be arranged by the Manager, if the lender or borrower requests one, to discuss the terms and conditions contained in the guaranty agreement.

(c) Requests by the lender or borrower for modification of the terms and conditions set forth in the guaranty agreement shall be submitted to the Manager, supported by such documentation and facts as would justify the requests.

(d) Immediately after agreement to terms and conditions, the Manager shall arrange with the lender and the borrower for the preparation and review of necessary documents and agree upon a date for execution of the guaranty agreement and payment of the user charge.

§ 790.46 Suspension, termination or cancellation of operations or production on Federal land administered by the Secretary of the Interior.

(a) The Manager shall inform the Supervisor (as defined in 30 CFR 270.2(c)) when a loan guaranty is approved involving a Federal lease, so as to provide for future coordination of the loan guaranty program and lease administration.

(b) Under regulations issued by the Department of Interior, a leaseholder may, as provided in 43 CFR 3205.3-8 and 30 CFR 270.17, apply for suspension of operations or production, or both, under a producing geothermal lease (or for relief from any drilling or producing requirements of such a lease). When a loan guaranty has been issued under this regulation for a project to be conducted by a qualified borrower who is a lessee under the above cited regulation, the borrower shall submit the suspension application to the Manager, together with a statement setting forth complete information showing the effect of such suspension on the borrower's ability to comply with terms and conditions set forth in the loan agreement. The Manager will notify the borrower in those situations when approval of the application might cause default by the borrower. Except in cases where potential environmental safety or reservoir damage is imminent, the borrower shall obtain the Manager's

approval prior to submitting a suspension application to the Supervisor.

(c) 43 CFR 3204.3 requires that each geothermal lease issued by the Department of the Interior provide for the readjustment of terms and conditions at not less than 10-year intervals beginning 10 years after the date geothermal steam is produced. When a guaranty under this regulation has been issued for a loan on a project to be conducted by a borrower who is a lessee, and the borrower files an objection to any proposed readjustment with the Authorized Officer (as defined in 43 CFR 3000.0-5(f)) a copy of the objection shall be submitted without delay by the borrower to the Manager. The Manager shall forward a copy of the objection to those lenders concerned, and shall consult with the Authorized Officer regarding any final action by the Authorized Officer which might terminate the lease. The Manager shall prepare an assessment on the effect of the proposed readjustment of lease terms and conditions that would substantially limit the borrower's ability to comply with the terms and conditions set forth in the loan agreement. The Manager shall forward his assessment in writing to the Administrator, the Authorized Officer and the Supervisor.

(d) Upon receipt by the lessee of notice of a proposed cancellation of a lease by the Authorized Officer, the lessee with a loan guaranteed under this regulation will provide the Manager and the lender with notice of such proposed action. Upon receipt of such notice the Manager will consult with the Supervisor and Authorized Officer for the purpose of determining whether the public interest can best be served by an acceptable alternative arrangement, such as obtaining assignments for a party qualified to hold geothermal leases who is a qualified borrower and who is willing to assume the original lessee's loan agreement and related undertaking, so that operation and production can continue.

(e) If default is likely to occur as a result of termination or cancellation of a lease, the Manager shall request the Supervisor or the Authorized Officer to rescind the lessee's privilege of removing assets from the premises, as provided in 43 CFR 3244.5.

§ 790.47 Appeals.

All decisions by the Manager relating to disputes arising under a guaranty agreement or loan agreement made un-

der and entered into pursuant to this regulation shall be in writing. The borrower or lender, as applicable, may request the Manager to reconsider any such decision. If not satisfied with the final decision made by the Manager, the borrower or lender, upon receipt of such written decision, may appeal the decision within 30 days, in writing, to the Chairman, Board of Contract Appeals (BCCA), Energy Research and Development Administration, Washington, D.C. 20545. That Board when functioning to resolve such loan guaranty disputes, shall proceed in the same general manner as when it presides over appeals involving contract disputes. The decision of the Board with respect to such appeals shall be the final decision of the Agency.

EXHIBIT E

ment of this Act if the effective date of such law occurs prior to the enactment of this Act), the energy research and development functions vested in the National Aeronautics and Space Administration and the National Science Foundation under this Act and any funds which may have been appropriated pursuant to section 19 of this Act, to the extent necessary or appropriate, may, in accordance with regulations prescribed by the Office of Management and Budget, be transferred to and vested in the Energy Research and Development Administration or such other organization or agency.

AUTHORIZATION OF APPROPRIATIONS

Sec. 19. (a) There is hereby authorized to be appropriated to the National Aeronautics and Space Administration for the fiscal year ending June 30, 1975, \$5,000,000, to remain available until expended, to carry out the functions vested in the Administrator by this Act.

(b) There is hereby authorized to be appropriated to the Department of Housing and Urban Development for the fiscal year ending June 30, 1975, \$5,000,000, to remain available until expended. Any sums so appropriated shall be available (1) to carry out the functions vested in the Secretary of Housing and Urban Development by this Act, and (2) for transfer to the Department of Defense, the National Bureau of Standards, and the General Services Administration to enable them to carry out their respective functions under this Act.

(c) There is hereby authorized to be appropriated for the fiscal years ending June 30, 1976, 1977, 1978, and 1979, \$50,000,000 in the aggregate to carry out the programs established by this Act.

Approved Sept. 3, 1974.

**GEOTHERMAL ENERGY RESEARCH, DEVELOPMENT,
AND DEMONSTRATION ACT OF 1974**

For Legislative History of Act, see p. 5234

PUBLIC LAW 93-410; 88 STAT. 1079

[H. R. 14920]

An Act to further the conduct of research, development, and demonstrations in geothermal energy technologies, to establish a Geothermal Energy Coordination and Management Project, to provide for the carrying out of research and development in geothermal energy technology, to carry out a program of demonstrations in technologies for the utilization of geothermal resources, to establish a loan guaranty program for the financing of geothermal energy development, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That:

SHORT TITLE

Section 1. This Act may be cited as the "Geothermal Energy Research, Development, and Demonstration Act of 1974".

FINDINGS

Sec. 2. The Congress hereby finds that—

- (1) the Nation is currently suffering a critical shortage of environmentally acceptable forms of energy;
- (2) the inadequate organizational structures and levels of funding for energy research have limited the Nation's current and future options for meeting energy needs;
- (3) electric energy is a clean and convenient form of energy at the location of its use and is the only practicable form of energy in some modern applications, but the demand for electric energy in every region of the United States is taxing all of the alternative energy sources presently available and is projected to increase; some of the sources available for electric power generation are already in short supply, and the development and use of other sources presently involve undesirable environmental impacts;
- (4) the Nation's critical energy problems can be solved only if a national commitment is made to dedicate the necessary financial resources, and enlist the cooperation of the private and public sectors, in developing geothermal resources and other nonconventional sources of energy;
- (5) the conventional geothermal resources which are presently being used have limited total potential; but geothermal resources which are different from those presently being used, and which have extremely large energy content, are known to exist;
- (6) some geothermal resources contain energy in forms other than heat; examples are methane and extremely high pressures available upon release as kinetic energy;
- (7) some geothermal resources contain valuable byproducts such as potable water and mineral compounds which should be processed and recovered as national resources;
- (8) technologies are not presently available for the development of most of these geothermal resources, but technologies for the generation of electric energy from geothermal resources are potentially economical and environmentally desirable, and the development of geothermal resources offers possibilities of process energy and other nonelectric applications;
- (9) much of the known geothermal resources exist on the public lands;
- (10) Federal financial assistance is necessary to encourage the extensive exploration, research, and development in geothermal resources which will bring these technologies to the point of commercial application;
- (11) the advancement of technology with the cooperation of private industry for the production of useful forms of energy from geothermal resources is important with respect to the Federal responsibility for the general welfare, to facilitate com-

merce, to encourage productive harmony between man and his environment, and to protect the public interest; and

(12) The Federal Government should encourage and assist private industry through Federal assistance for the development and demonstration of practicable means to produce useful energy from geothermal resources with environmentally acceptable processes.

DEFINITIONS

Sec. 3. For the purposes of this Act—

(1) the term "geothermal resources" means (A) all products of geothermal processes, embracing indigenous steam, hot water, and brines, (B) steam and other gases, hot water and hot brines, resulting from water, gas, or other fluids artificially introduced into geothermal formations, and (C) any byproduct derived from them;

(2) the term "byproduct" means any mineral or minerals which are found in solution or in association with geothermal resources and which have a value of less than 75 percent of the value of the geothermal steam and associated geothermal resources or are not, because of quantity, quality, or technical difficulties in extraction and production, of sufficient value to warrant extraction and production by themselves;

(3) "pilot plant" means an experimental unit of small size used for early evaluation and development of new or improved processes and to obtain technical, engineering, and cost data;

(4) "demonstration plant" means a complete facility which produces electricity, heat energy, or useful byproducts for commercial disposal from geothermal resources and which will make a significant contribution to the knowledge of full-size technology, plant operation, and process economics;

(5) the term "Project" means the Geothermal Energy Coordination and Management Project established by section 101(a);

(6) the term "fund" means the Geothermal Resources Development Fund established by section 204(a); and

(7) the term "Chairman" means the Chairman of the Project.

TITLE I—GEOTHERMAL ENERGY COORDINATION AND MANAGEMENT PROJECT

ESTABLISHMENT

Sec. 101. (a) There is hereby established the Geothermal Energy Coordination and Management Project.

(b)(1) The Project shall be composed of six members as follows:

(A) one appointed by the President;

(B) an Assistant Director of the National Science Foundation;

(C) an Assistant Secretary of the Department of the Interior;

(D) an Associate Administrator of the National Aeronautics and Space Administration;

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(E) the General Manager of the Atomic Energy Commission; and

(F) an Assistant Administrator of the Federal Energy Administration.

(2) The President shall designate one member of the Project to serve as Chairman of the Project.

(3) If the individual appointed under paragraph (1)(A) is an officer or employee of the Federal Government, he shall receive no additional pay on account of his service as a member of the Project. If such individual is not an officer or employee of the Federal Government, he shall be entitled to receive the daily equivalent of the annual rate of basic pay in effect for level IV of the Executive Schedule (5 U.S.C. 5315) for each day (including traveltimes) during which he is engaged in the actual performance of duties vested in the Project.

(c) The Project shall have overall responsibility for the provision of effective management and coordination with respect to a national geothermal energy research, development, and demonstration program. Such program shall include—

(1) the determination and evaluation of the resource base;

(2) research and development with respect to exploration, extraction, and utilization technologies;

(3) the demonstration of appropriate technologies; and

(4) the loan guaranty program under title II.

(d)(1) The Project shall carry out its responsibilities under this section acting through the following Federal agencies:

(A) the Department of the Interior, the responsibilities of which shall include evaluation and assessment of the resource base, including development of exploration technologies;

(B) the National Aeronautics and Space Administration, the responsibilities of which shall include the provision of contract management capability, evaluation and assessment of the resource base, and the development of technologies pursuant to section 102(b);

(C) the Atomic Energy Commission, the responsibilities of which shall include the development of technologies; and

(D) the National Science Foundation, the responsibilities of which shall include basic and applied research.

(2) Upon request of the Project, the head of any such agency is authorized to detail or assign, on a reimbursable basis or otherwise, any of the personnel of such agency to the Project to assist it in carrying out its responsibilities under this Act.

(e) The Project shall have exclusive authority with respect to the establishment or approval of programs or projects initiated under this Act, except that the agency involved in any particular program or project shall be responsible for the operation and administration of such program or project.

PROGRAM DEFINITION

Sec. 102. (a)(1) The Chairman, acting through the Administrator of the National Aeronautics and Space Administration, is authorized and directed to prepare a comprehensive program definition of an integrated effort and commitment for effectively developing geothermal energy resources. Such Administrator, in preparing such comprehensive program definition, is authorized to consult with other Federal agencies and non-Federal entities.

(2) The Chairman shall transmit such comprehensive program definition to the President and to each House of the Congress. Interim reports shall be transmitted not later than November 30, 1974, and not later than January 31, 1975. Such comprehensive program definition shall be transmitted as soon as possible thereafter, but in any case not later than August 31, 1975.

(3) As part of the comprehensive program definition required by paragraph (1), the Chairman, acting through the Geological Survey, shall transmit to the President and to each House of the Congress a schedule and objectives for the inventorying of geothermal resources.

(b) The National Aeronautics and Space Administration is authorized to undertake and carry out those programs assigned to it by the Project.

RESOURCE INVENTORY AND ASSESSMENT PROGRAM

Sec. 103. (a) The Chairman shall initiate a resource inventory and assessment program with the objective of making regional and national appraisals of all types of geothermal resources, including identification of promising target areas for industrial exploration and development. The specific goals shall include—

(1) the improvement of geophysical, geochemical, geological, and hydrological techniques necessary for locating and evaluating geothermal resources;

(2) the development of better methods for predicting the power potential and longevity of geothermal reservoirs;

(3) the determination and assessment of the nature and power potential of the deeper unexplored parts of high temperature geothermal convection systems; and

(4) the survey and assessment of regional and national geothermal resources of all types.

(b) The Chairman, acting through the Geological Survey and other appropriate agencies, shall—

(1) develop and carry out a general plan for the orderly inventorying of all forms of geothermal resources of the Federal lands and, where consistent with property rights and determined by the Chairman to be in the national interest, of non-Federal lands;

(2) conduct regional surveys, based upon such a general plan, using innovative geological, geophysical, geochemical, and stratigraphic drilling techniques, which will lead to a national inventory of geothermal resources in the United States;

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GEOTHERMAL ENERGY RESEARCH P.L. 93-410

- (3) publish and make available maps, reports, and other documents developed from such surveys to encourage and facilitate the commercial development of geothermal resources for beneficial use and consistent with the national interest;
- (4) make such recommendations for legislation as may from time to time appear to be necessary to make Federal leasing policy for geothermal resources consistent with known inventories of various resource types, with the current state of technologies for geothermal energy development, and with current evaluations of the environmental impacts of such development; and
- (5) participate with appropriate Federal agencies and non-Federal entities in research to develop, improve, and test technologies for the discovery and evaluation of all forms of geothermal resources, and conduct research into the principles controlling the location, occurrence, size, temperature, energy content, producibility, and economic lifetimes of geothermal reservoirs.

RESEARCH AND DEVELOPMENT

Sec. 104. (a) The Chairman, acting through the appropriate Federal agencies and in cooperation with non-Federal entities, shall initiate a research and development program for the purpose of resolving all major technical problems inhibiting the fullest possible commercial utilization of geothermal resources in the United States. The specific goals of such programs shall include—

- (1) the development of effective and efficient drilling methods to operate at high temperatures in formations of geothermal interest;
- (2) the development of reliable predictive methods and control techniques for the production of geothermal resources from reservoirs;
- (3) the exploitation of new concepts for fracturing rock to permit recovery of contained heat reserves;
- (4) the improvement of equipment and technology for the extraction of geothermal resources from reservoirs;
- (5) the development of improved methods for converting geothermal resources and byproducts to useful forms;
- (6) the development of improved methods for controlling emissions and wastes from geothermal utilization facilities, including new monitoring methods to any extent necessary;
- (7) the development and evaluation of waste disposal control technologies and the evaluation of surface and subsurface environmental effects of geothermal development;
- (8) the improvement of the technical capability to predict environmental impacts resulting from the development of geothermal resources, the preparation of environmental impact statements, and the assuring of compliance with applicable standards and criteria;

(9) the identification of social, legal, and economic problems associated with geothermal development (both locally and regionally) for the purpose of developing policy and providing a framework of policy alternatives for the commercial utilization of geothermal resources;

(10) the provision for an adequate supply of scientists to perform required geothermal research and development activities; and

(11) the establishment of a program to encourage States to establish and maintain geothermal resources clearinghouses, which shall serve to (A) provide geothermal resources developers with information with respect to applicable local, State, and Federal laws, rules, and regulations, (B) coordinate the processing of permit applications, impact statements, and other information which geothermal resources developers are required to provide, (C) encourage uniformity with respect to local and State laws, rules, and regulations with respect to geothermal resources development, and (D) encourage establishment of land use plans, which would include zoning for geothermal resources development and which would assure that geothermal resources developers will be able to carry out development programs to the production stage.

(b) The Chairman, acting through the appropriate Federal agencies and in cooperation with non-Federal entities, shall implement a coordinated program of research and development in order to demonstrate the technical means for the extraction and utilization of the resource base, including any byproducts of such base, and in order to accomplish the goals established by subsection (a). Research authorized by this Act having potential applications in matters other than geothermal energy may be pursued to the extent that the findings of such research can be published in a form for utilization by others.

DEMONSTRATION

Sec. 105. (a) The Chairman, acting through the appropriate Federal agencies and in cooperation with non-Federal entities, shall initiate a program to design and construct geothermal demonstration plants. The specific goals of such program shall include—

(1) the development of economical geothermal resources production systems and components which meet environmental standards;

(2) the design of plants to produce electric power and, where appropriate, the large-scale production and utilization of any useful byproducts;

(3) the involvement of engineers, analysts, technicians, and managers from industry field and powerplant development, which shall lead to the early industrial exploitation of advanced geothermal resources;

(4) the provision for an adequate supply of trained geothermal engineers and technicians;

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(5) the provision of experimental test beds for component testing and evaluation by laboratories operated by the Federal Government, industry, or institutions of higher education;

(6) the construction and operation of pilot plants; and

(7) the construction and operation of demonstration plants.

(b) In carrying out his responsibilities under this section, the Chairman, acting through the appropriate Federal agencies, and in cooperation with non-Federal entities, may provide for the establishment of one or more demonstration projects utilizing each geothermal resource base involved, which shall include, as appropriate, all of the exploration, siting, drilling, pilot plant construction and operation, demonstration plant construction and operation, and other facilities and activities which may be necessary for the generation of electric energy and the utilization of geothermal resource byproducts.

(c) The Chairman, acting through the appropriate Federal agencies, is authorized to investigate and enter into agreements for the cooperative development of facilities to demonstrate the production of energy from geothermal resources. The responsible Federal agency may consider—

(1) cooperative agreements with utilities and non-Federal governmental entities for construction of facilities to produce energy for commercial disposition; and

(2) cooperative agreements with other Federal agencies for the construction and operation of facilities to produce energy for direct Federal consumption.

(d) The responsible Federal agency is authorized to investigate the feasibility of, construct, and operate, demonstration projects without entering into cooperative agreements with respect to such projects, if the Chairman finds that—

(1) the nature of the resource, the geographical location, the scale and engineering design of the facilities, the techniques of production, or any other significant factor of the proposal offers opportunities to make important contributions to the general knowledge of geothermal resources, the techniques of its development, or public confidence in the technology; and

(2) there is no opportunity for cooperative agreements with any utility or non-Federal governmental entity willing and able to cooperate in the demonstration project under subsection (c)

(1), and there is no opportunity for cooperative agreements with other Federal agencies under subsection (c)(2).

(e) Before favorably considering proposals under subsection (c), the responsible Federal agency must find that—

(1) the nature of the resource, the geographical location, the scale and engineering design of the facilities, the techniques of production, or any other significant factor of the proposal offers opportunities to make important contributions to the general knowledge of geothermal resources, the techniques of its development, or public confidence in the technology;

(2) the development of the practical benefits as set forth in paragraph (1) are unlikely to be accomplished without such cooperative development; and

(3) where non-Federal participants are involved, the proposal is not eligible for adequate Federal assistance under the loan guaranty provisions of title II of this Act.

(f) If the estimate of the Federal investment with respect to construction and operation costs of any demonstration project proposed to be established under this section exceeds \$10,000,000, no amount may be appropriated for such project except as specifically authorized by legislation hereafter enacted by the Congress.

(g)(1) At the conclusion of the program under this section or as soon thereafter as may be practicable, the responsible Federal agencies shall, by sale, lease, or otherwise, dispose of all Federal property interests which they have acquired pursuant to this section (including mineral rights) in accordance with existing law and the terms of the cooperative agreements involved.

(2) The agency involved shall, under appropriate agreements or other arrangements, provide for the disposition of geothermal resource byproducts of the project administered by such agency.

SCIENTIFIC AND TECHNICAL EDUCATION

Sec. 106. (a) It is the policy of the Congress to encourage the development and maintenance of programs through which there may be provided the necessary trained personnel to perform required geothermal research, development, and demonstration activities under sections 103, 104, and 105.

(b) The National Science Foundation is authorized to support programs of education in the sciences and engineering to carry out the policy of subsection (a). Such support may include fellowships, traineeships, technical training programs, technologist training programs, and summer institute programs.

(c) The National Science Foundation is authorized and directed to coordinate its actions, to the maximum extent practicable, with the Project or any permanent Federal organization or agency having jurisdiction over the energy research and development functions of the United States, in determining the optimal selection of programs of education to carry out the policy of subsection (a).

(d) The National Science Foundation is authorized to encourage, to the maximum extent practicable international participation and cooperation in the development and maintenance of programs of education to carrying out the policy of subsection (a).

TITLE II—LOAN GUARANTIES

ESTABLISHMENT OF LOAN GUARANTY PROGRAM

Sec. 201. (a) It is the policy of the Congress to encourage and assist in the commercial development of practicable means to produce useful energy from geothermal resources with environmentally acceptable processes. Accordingly, it is the policy of the Congress to facilitate such commercial development by authorizing the Chair-

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man of the Project to designate an appropriate Federal agency to guarantee loans for such purposes.

(b) In order to encourage the commercial production of energy from geothermal resources, the head of the designated agency is authorized to, in consultation with the Secretary of the Treasury, guarantee, and to enter into commitments to guarantee, lenders against loss of principal or interest on loans made by such lenders to qualified borrowers for the purposes of—

- (1) the determination and evaluation of the resource base;
- (2) research and development with respect to extraction and utilization technologies;
- (3) acquiring rights in geothermal resources; or
- (4) development, construction, and operation of facilities for the demonstration or commercial production of energy from geothermal resources.

(c) Any guaranty under this title shall apply only to so much of the principal amount of any loan as does not exceed 75 percent of the aggregate cost of the project with respect to which the loan is made.

(d) Loan guaranties under this title shall be on such terms and conditions as the head of the designated agency determines, except that a guaranty shall be made under this title only if—

(1) the loan bears interest at a rate not to exceed such annual per centum on the principal obligation outstanding as the head of the designated agency determines to be reasonable, taking into account the range of interest rates prevailing in the private sector for similar loans and risks by the United States;

(2) the terms of such loan require full repayment over a period not to exceed thirty years, or the useful life of any physical asset to be financed by such loan, whichever is less (as determined by the head of the designated agency);

(3) in the judgment of the head of the designated agency, the amount of the loan (when combined with amounts available to the qualified borrower from other sources) will be sufficient to carry out the project; and

(4) in the judgment of the head of the designated agency, there is reasonable assurance of repayment of the loan by the qualified borrower of the guaranteed indebtedness.

(e) The amount of the guaranty for any loan for a project shall not exceed \$25,000,000, and the amount of the guaranty for any combination of loans for any single qualified borrower shall not exceed \$50,000,000.

(f) As used in this title, the term "qualified borrower" means any public or private agency, institution, association, partnership, corporation, political subdivision, or other legal entity which (as determined by the head of the designated agency) has presented satisfactory evidence of an interest in geothermal resources and is capable of performing research or completing the development and production of energy in an acceptable manner.

PAYMENT OF INTEREST

Sec. 202. (a) With respect to any loan guaranteed pursuant to this title, the head of the designated agency is authorized to enter into a contract to pay, and to pay, the lender for and on behalf of the borrower the interest charges which become due and payable on the unpaid balance of any such loan if the head of the designated agency finds—

(1) that the borrower is unable to meet interest charges, and that it is in the public interest to permit the borrower to continue to pursue the purposes of his project, and that the probable net cost to the Federal Government in paying such interest will be less than that which would result in the event of a default; and

(2) the amount of such interest charges which the head of the designated agency is authorized to pay shall be no greater than the amount of interest which the borrower is obligated to pay under the loan agreement.

(b) In the event of any default by a qualified borrower on a guaranteed loan, the head of the designated agency is authorized to make payment in accordance with the guaranty, and the Attorney General shall take such action as may be appropriate to recover the amounts of such payments (including any payment of interest under subsection (a)) from such assets of the defaulting borrower as are associated with the project, or from any other surety included in the terms of the guaranty.

PERIOD OF GUARANTIES AND INTEREST ASSISTANCE

Sec. 203. No loan guaranties shall be made, or interest assistance contract entered into, pursuant to this title, after the expiration of the ten-calendar-year period following the date of enactment of this Act.

GEOTHERMAL RESOURCES DEVELOPMENT FUND

Sec. 204. (a) There is established in the Treasury of the United States a Geothermal Resources Development Fund, which shall be available to the head of the designated agency for carrying out the loan guaranty and interest assistance program authorized by this title, including the payment of administrative expenses incurred in connection therewith. Moneys in the fund not needed for current operations may, with the approval of the Secretary of the Treasury, be invested in bonds or other obligations of, or guaranteed by, the United States.

(b) There shall be paid into the fund the amounts appropriated pursuant to section 304(c) and such amounts as may be returned to the United States pursuant to section 202(b), and the amounts in the fund shall remain available until expended, except that after the expiration of the ten-year period established by section 203, such amounts in the fund which are not required to secure outstanding guaranty obligations shall be paid into the general fund of the Treasury.

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(c) Business-type financial reports covering the operations of the fund shall be submitted to the Congress by the head of the designated agency annually upon the completion of an appropriate accounting period.

TITLE III—GENERAL PROVISIONS

PROTECTION OF ENVIRONMENT

Sec. 301. In the conduct of its activities, the Project and any participating public or private persons or agencies shall place particular emphasis upon the objective of assuring that the environment and the safety of persons or property are effectively protected; and the program under title I shall include such special research and development as may be necessary for the achievement of that objective.

REPORTING REQUIREMENTS

Sec. 302. (a) The Chairman of the Project shall submit to the President and the Congress full and complete annual reports of the activities of the Project, including such projections and estimates as may be necessary to evaluate the progress of the national geothermal energy research, development, and demonstration program and to provide the basis for as accurate a judgment as is possible concerning the extent to which the objectives of this Act will have been achieved by June 30, 1980.

(b) No later than one year after the termination of each demonstration project under section 105, the Chairman of the Project shall submit to the President and the Congress a final report on the activities of the Project related to each project, including his recommendations with respect to any further legislative, administrative, and other actions which should be taken in support of the objectives of this Act.

TRANSFER OF FUNCTIONS

Sec. 303. (a) Within sixty days after the effective date of the law creating a permanent Federal organization or agency having jurisdiction over the energy research and development functions of the United States (or within sixty days after the date of the enactment of this Act if the effective date of such law occurs prior to the date of the enactment of this Act), all of the research, development, and demonstration functions (including the loan guaranty program) vested in the Project under this Act, along with related records, documents, personnel, obligations, and other items to the extent necessary or appropriate, shall, in accordance with regulations prescribed by the Office of Management and Budget, be transferred to and vested in such organization or agency.

(b) Upon the establishment of a permanent Federal organization or agency having jurisdiction over the energy research and development functions of the United States, and when all research and development (and other) functions of the Project are transferred, the members of the Project may provide advice and counsel to the head

of such organization or agency, in accordance with arrangements made at that time.

AUTHORIZATIONS OF APPROPRIATIONS

Sec. 304. (a) For the fiscal years ending June 30, 1976, and September 30, 1977, 1978, 1979, and 1980, only such sums may be appropriated as the Congress may hereafter authorize by law.

(b) There are authorized to be appropriated to the National Aeronautics and Space Administration not to exceed \$2,500,000 for the fiscal year ending June 30, 1975, for the purpose of preparing the program definition under section 102(a).

(c) In addition to sums authorized to be appropriated by subsection (b), there are authorized to be appropriated to the fund not to exceed \$50,000,000 annually, such sums to carry out the provisions of the loan guaranty program by the Project under title II.

Approved Sept. 3, 1974.

AGRICULTURAL ADJUSTMENT ACT—TOBACCO MARKETING QUOTA

For Legislative History of Act, see p. 5279

PUBLIC LAW 93-411; 88 STAT. 1089

[H. R. 6455]

An Act to amend the tobacco marketing quota provisions of the Agricultural Adjustment Act of 1938.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That:

The Agricultural Adjustment Act of 1938¹³ is amended by inserting after section 319 the following new section:

"Sec. 320. Notwithstanding any other provision of law, beginning with the 1975 crop, any kind of tobacco for which marketing quotas are not in effect that is produced in an area where producers who are engaged in the production of a kind of tobacco traditionally produced in the area have approved marketing quotas under this Act shall be subject to the quota for the kind of tobacco traditionally produced in the area: *Provided, however,* That this section shall not apply in any case in which the Secretary or his designee finds any such nonquota tobacco is readily and distinguishably different from any kind of tobacco produced under quota, because of seed variety, cultural practices, method of curing and other factors affecting its physical characteristics, as determined through the application of the Federal Standards of Inspection and Identification of quota types and the tobacco does not possess any of the distinguishable characteristics of a quota type. If marketing quotas are in effect for more than one kind of tobacco in an area, any nonquota tobacco produced in the area shall be subject to quotas for the kind of tobacco

13. 7 U.S.C.A. § 612c et seq.

BANK OF MONTREAL - (California)
MERRILL LYNCH FINANCING PROGRAM

The Bank of Montreal (California) and Merrill Lynch have joined forces to assist borrowers under the Geothermal Loan Guaranty Program in gaining access to funds quickly and on the most advantageous terms available. They are also prepared to make their own experience and capabilities available to borrowers to advise them on the structure and terms of financing possibilities which are best suited to the borrowers needs and objectives. The Bank's parent, The Bank of Montreal, is the oldest of Canada's nine chartered banks, having been established in 1817 in Montreal. The Bank of Montreal began its international operations when it opened an office in New York in 1859 and in London in 1870. The Bank was banker in Canada for the Canadian government from 1863 until the establishment of the central bank in 1935. With total assets of over \$20 billion, the Bank of Montreal is one of the 3 largest banks in Canada and the 34th largest bank in the Free World. It has over 1,200 branches in Canada and overseas and offices and correspondents throughout the world.

Through its subsidiary, Bank of Montreal (California) located in San Francisco and Los Angeles, it has been involved with the Geothermal Loan Guaranty Program from its inception. The Bank is one of the most active lenders in the Geothermal Program, and has an excellent working relationship with the administrators of the program. Since the loan must be properly serviced in order to insure the maintenance of the guaranty, the Bank's experience and capabilities of servicing government guaranteed loans is an

important factor with respect to the Geothermal Program.

Merrill Lynch is one of the leading securities firms in the world and is active in virtually every aspect of the securities business both domestically and internationally. Merrill is a leading brokerage house, commodity trader, investment banker, underwriter and trader of municipal securities, and dealer in Government Securities. To support its securities activities Merrill has research analysts and an economic consulting group.

Of particular interest to a prospective borrower under the Geothermal Program is the volume of Merrill Lynch's government securities activities. Last year, Merrill Lynch Government Securities (GSI) accounted for nearly 14% of the Federal government's securities trades handled by the nation's 34 reporting dealers. Merrill's average daily government securities volume was \$1.4 billion, with 30 days in which daily trading topped \$2 billion, and peak day of \$3.4 billion. This volume is made possible by an intensive sales and marketing effort encompassing both GSI's own small but highly efficient national sales staff and the worldwide network of Merrill Lynch, Pierce, Fenner & Smith and Merrill Lynch International offices. GSI has trained 222 Merrill Lynch account executives, located in 94 offices, in all phases of the Government Securities market and all the other offices can quickly tap GSI for expert assistance whenever needed.

In addition to Merrill's large scale activities in Government Securities, the firm is also a leading underwriter and market maker in loans guaranteed by government agencies. Merrill began underwriting and market making in late 1974 and by the end of 1976 had underwritten over \$100 million of federally guaranteed loans.

Merrill has had particularly extensive experience with loans guaranteed by the Small Business Administration, the Farmers Home Administration, the Agency for International Development, the Overseas Private Investment Corporation, the National Marine Fisheries Service, the Department of Defense and the Maritime Administration. Merrill maintains a special department to handle the underwriting and market making of government guaranteed loans. This department is complementary to GSI and draws upon GSI expertise in government securities research and market analysis.

The Bank of Montreal (California) is a wholesale commercial bank with experience in financing "project loans" and the processing and servicing of government guaranteed loans. Merrill Lynch is a leading investment banker and underwriter and market maker in government securities and government guaranteed loans. The combination of these two firms working together provides a prospective borrower with the opportunity to obtain financing under the Geothermal Program as expeditiously as possible and to structure a financing package on the most advantageous terms available.

EXHIBIT G

TIME SCHEDULE

The following outline presents the principal events which are expected to occur in the course of obtaining a loan guaranty under the Geothermal Program.

Preliminary

The borrower has prepared a feasibility study for an eligible geothermal project.

Day 1

Representatives of the borrower, Bank of Montreal and Merrill Lynch meet to discuss project, financing requirements, and material to be submitted to ERDA.

Day 22

Deliver summary of project to ERDA's Oakland, California office (SAN). Summary to include the following information:

- 1.) A statement of the project's scope, nature, cost, location and objective;
- 2.) Environmental considerations;
- 3.) Information concerning funding of the project through completion;
- 4.) Description of terms and conditions of the proposed loan agreement;
- 5.) Financial information about the borrower and lender;

Day
22

- (6) Relevant geothermal resource data together with a description of how the resource will be utilized;
- (7) Description of the operations and processes to be employed;
- (8) Management organization;
- (9) Marketing analysis of the project demonstrating a reasonable assurance for payback of the loan; and
- (10) Other such information as the borrower and lender feel should be presented during this conference.

With delivery of information, request appointment to meet with program director in two weeks to review proposal.

Day
36

Pre-application conference at SAN's offices at 1333 Broadway, Oakland, California. A loan guaranty officer will be assigned to the project to work with applicant to aid in answering questions or resolving any difficulties.

Day
36 (continued)

The principal individuals associated with the borrower's project together with an authorized representative of the lender's organization should attend this meeting. The pre-application conference provides both the lender and borrower an opportunity to meet with the specific ERDA team that will be evaluating their application and to resolve any outstanding questions prior to its submittal.

Day
66

Application form completed together with supplemental information concerning project and borrower.

Upon completion of the original geothermal loan guaranty application package, the borrower and lender should:

- 1.) Assemble and submit all application packages according to the following format:
 - a. Transmittal letter.
 - b. Application form.
 - c. Borrower--supporting information (including borrower's checklist).

Day
66 (continued)

- d. Lender--supporting information (including lender's checklist).
- e. Loan agreement.
- f. Other relevant agreements.

2.) Identify and appropriately mark all information deemed confidential or proprietary by the borrower or lender.

3.) Reproduce and assemble 14 additional copies of the completed geothermal loan guaranty application package. Three application forms shall be signed in ink (not reproduced). The remaining copies submitted to ERDA need not be originally signed.

4.) Forward the 15 completed application packages to ERDA addressed as follows:

Energy Research and Development Administration
San Francisco Operations Office
1333 Broadway
Oakland, CA 94612

Attention: Geothermal Loan Guaranty
Program Office

Day
96-126

Informed of ERDA's approval of project.

Day
156

Loan guaranty and loan agreements
executed.

Thereafter to keep the lender and ERDA informed of the progress and financial condition of a project, interim, quarterly, and annual reports will be required. SAN must approve, in advance and in writing, all disbursements connected with the project.