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UCRL-52327

GEOHERMAL RESOURCE DEVELOPMENT: LAWS AND REGULATIONS

James C. Wharton

August 25, 1977

Work performed under the auspices of the U.S. Department of
Energy by the UCLLL under contract number W-7405-ENG-48.

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GEOHERMAL RESOURCE DEVELOPMENT: LAWS AND REGULATIONS

ABSTRACT

The development of geothermal resources in California is becoming of increasing interest because of the large amounts of these resources in the state. The Geysers area in Northern California has several producing electrical power plants while Imperial County in Southern California has known reserves of geothermal resources. In response to this interest in development, the legislature and regulatory bodies have taken actions to increase geothermal power production. This report dis-

cusses and sets forth the important federal and California laws on the subject. Pertinent federal and state provisions are compared, and inconsistencies are discussed. An important concept that needs clarification is the manner of designating an area as a "known geothermal resource area". The question of designating geothermal resource as a mineral is not completely resolved, although there is authority tending toward the finding that it is a mineral.

INTRODUCTION

Geothermal resource development has important consequences for the nation and for the State of California. In California, several geothermal power plants are operating in The Geysers area, and many other areas in the state are possible sites of geothermal resources. In particular, Imperial County contains very hot, underground saline waters, some of which are certainly suitable for power generation. An interesting point about geothermal resources is that, in

addition to generation of electrical power, the resource may provide space heating, additional demineralized water supplies, and needed minerals for commercial purposes.

Interest in developing geothermal resources has grown rapidly leading to increased legislative and administrative activity on both the state and federal level. Federal legislation has encompassed both leasing of geothermal resources on public lands and research and development of

geothermal resources. The Geothermal Steam Act of 1970¹ deals with leasing. Pursuant to that act, the Bureau of Land Management has promulgated regulations that govern leasing and drilling.² The Geothermal Energy Research, Development, and Demonstration Act of 1974³ established the

Geothermal Energy Coordination and Management Project as well as the Energy Research and Development Agency (ERDA). California has passed several laws pertinent to geothermal development. The above laws, as well as others, will be discussed in this report.

FEDERAL LAW ON GEOTHERMAL RESOURCES

Federal Geothermal Lease Law

The federal law that existed before 1970 did not provide for the development of geothermal steam. The legislative history⁴ of the Geothermal Steam Act of 1970 indicates that the intention of Congress was to provide statutory authority for the Secretary of the Interior to issue leases for development of geothermal steam and associated geothermal steam resources underlying public lands, in a manner similar to the Secretary's authority to lease land for development of oil and gas desposits under the Mineral Leasing Act of 1920, as amended.⁵ The definitions under the mineral leasing laws were amended to include geothermal resources:

"Mineral leasing laws, shall mean the Act of February 25, 1920, (commonly known as the Mineral

Lands Leasing Act, 30 USC 181); the Act of April 17, 1926, (30 USC 271); the Act of February 7, 1927, (30 USC 281); Geothermal Steam Act of 1970, (30 USC 1101), and all Acts heretofore or hereafter enacted which are amendatory of or supplementary to any of the foregoing Acts; Leasing Act Minerals shall mean all minerals which, upon August 13, 1934, are provided in the mineral leasing laws to be disposed to thereunder and all geothermal steam and associated geothermal resources which, upon the effective date of the Geothermal Steam Act of 1970, are provided in that Act to be disposed of thereunder."⁶

The federal lands subject to geothermal leasing are specified in the geothermal Steam Act. "The Secretary of the Interior may issue

leases for the development and utilization of geothermal steam and associated geothermal resources (1) in lands administered by him, including public, withdrawn, and acquired lands, (2) in any national forest or other lands administered by the Department of Agriculture through the Forest Service, including public, withdrawn, and acquired lands, and (3) in lands which have been conveyed by the United States subject to a reservation of the United States of the geothermal steam and associated geothermal resources therein."⁷

Several important definitions are contained in the act. In particular, geothermal steam, and associated geothermal resources, means: (1) all products of geothermal processes, embracing indigenous steam, hot water, and hot brines; (2) steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations; (3) heat or other associated energy found in geothermal formations; and (4) any byproduct derived from them. Byproduct is defined to include any mineral or minerals found in solution or in association with geothermal steam and that have a value of less than 75% of the value of the geothermal steam or that do not economically warrant extraction and production by themselves. Of greater importance,

because of the method of bidding required in the act, is the definition of known geothermal resource area (KGRA). A KGRA is "an area in which the geology, nearby discoveries, competitive interests, or other indicia would, in the opinion of the Secretary of the Interior, engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose."⁸

The type of bidding required depends on whether or not the land is in a KGRA. "If lands to be leased under the Geothermal Steam Act are within any known geothermal resources area, they must be leased to the highest responsible qualified bidder by competitive bidding under regulations formulated by the Secretary. If the lands to be leased are not within any known geothermal resources area, the qualified person first making application for the lease shall be entitled to a lease of such lands without competitive bidding."⁹ The section also gives conversion rights of leases. In addition, where there is a conflict as to ownership of prior leases, the first person to record the mining claim shall be entitled to first consideration.

The Act contains an acreage limitation. "No person shall be permitted

to convert mineral leases, permits, application therefore, or mining claims for more than 10,240 acres.... No right to conversion to a geothermal lease shall accrue to any person under this section unless such person shows to the reasonable satisfaction of the Secretary that substantial expenditures for the exploration, development, or production of geothermal steam have been made by the applicant who is seeking conversion, on the lands for which a lease is sought or on adjoining, adjacent, or nearby Federal or non-Federal lands."¹⁰

"...with respect to lands within any known geothermal resources area and which are subject to a right to conversion to a geothermal lease, such lands shall be leased by competitive bidding: Provided the competitive geothermal lease shall be issued to the person owning the right to conversion to a geothermal lease if he makes payment of an amount equal to the highest bonafide bid for the competitive geothermal lease, plus the rental for the first year, within thirty days after he receives written notice from the Secretary of the amount of the highest bid."⁹

Certain federal lands are exempted from geothermal leasing. "Geothermal leases.... shall not be issued for lands administered in accordance with... the Act of August 25, 1916... for lands within a national recreation

area... for lands in a fish hatchery administered by the Secretary, wildlife refuge, wildlife range, game range, wildlife management area, waterfowl production area, or for lands acquired or reserved for the production and conservation of fish and wildlife that are threatened with extinction... for tribally or individually owned Indian trust or restricted lands, within or without the boundaries of Indian reservations."¹¹

Persons who may make application for a geothermal lease are limited by the act. "Leases... may be issued only to citizens of the United States, associations of such citizens, corporations organized under the laws of the United States or of any State or the District of Columbia, or governmental units, including, without limitation, municipalities."¹²

No express provision is provided in the code for prospecting permits for geothermal resources. It is expected that, with respect to lands not classified as KGRA, persons will lease such lands for discovery purposes. This follows the plan of the Mineral Leasing Act for the granting of permits and leases on oil and gas lands. Such lands are divided into two classes: lands not within any known geologic structure of a producing oil or gas field and lands that are within a geologic structure of a producing

oil or gas field. Originally, prospecting permits were issued with respect to oil and gas lands, but after an amendment of the Act in 1935, the practice of granting prospecting permits eventually was discontinued.¹³ In any event, a savings provision allows the "Secretary to waive, suspend, or reduce the rental... for any lease or portion thereof in the interests of conservation and to encourage the greatest ultimate recovery of geothermal resources, if he determines that this is necessary to promote development or that the lease cannot be successfully operated under the lease terms...."¹⁴ This provision allows the Secretary to adjust the rental if necessary to promote development of marginal geothermal resources.

Provision is made in the Act for the production of byproducts. "If the production, use, or conversion of geothermal steam is susceptible of producing a valuable byproduct... including commercial demineralized water for beneficial uses in accordance with applicable state water laws, the Secretary of the Interior shall require substantial beneficial production of use... unless, in individual circumstances he modifies or waives this requirement in the interest of conservation of natural resources or for other reasons satisfactory to him."¹⁵

"Geothermal resources in lands the surface of which has passed from federal ownership but in which the minerals have been reserved to the United States shall not be developed or produced except under geothermal leases made pursuant to... Geothermal Steam Act. If the Secretary of the Interior finds that such development is imminent, or that production from a well heretofore drilled on such lands is imminent, he shall so report to the Attorney General, and the Attorney General is authorized and directed to institute an appropriate proceeding in the United States district court of the district in which such lands are located, to quiet the title of the United States in such resources, and if the court determines that the reservation of minerals to the United States in the lands involved included the geothermal resources, to enjoin their production otherwise than under the terms of"¹⁶ the act. In the event judicial determination is to the contrary, that federal mineral reservation does not include geothermal resources, the duties of the Secretary of the Interior under the Geothermal Steam Act shall cease. By enacting this provision, Congress sidestepped deciding the issue legislatively. In addition, this legislation was in the face of the expressed view of the Department of Interior that geothermal

steam is not subject to the mineral reservation of the Stock-Raising Homestead Act of December 29, 1961.¹⁷

The position of the Department of Interior was based on an opinion of Deputy Solicitor Edward Weinberg.¹⁸

In this opinion, the solicitor points out that geothermal steam is developed from subterranean water, the dominant component of which is meteoric water, or of atmospheric origin. Although water, particularly subterranean water, is normally classified as a mineral, it has always been treated differently under the public land laws. Congress has enacted special statutes for water, and there is no statute in which water is treated as a mineral. If Congress had chosen to decide the issue legislatively, from the information at its disposal, the law would have confirmed that geothermal resources were in the hands of the surface owners of land patented under the Stock-Raising Act. At the heart of the problem facing Congress was the reluctance of that body to give up the ownership of geothermal steam resource on more than 35 million acres of land, the surface of which has passed from federal ownership. On the other hand, if Congress had passed into law a provision that ownership of geothermal resources remained with the federal government, undoubtedly this would be tested in court by the landowners themselves.

The argument could be made that there was a taking without just compensation or that Congress was attempting to retroactive effect the ownership of property.

Federal Licenses and Permits

Discharge permit

The Federal Water Pollution Control Act as amended October 18, 1972, prohibits any person from discharging pollutants from a point source into a waterway, unless his discharge is authorized by a permit issued either by the Environmental Protection Agency or by an approved state agency.¹⁹ Thus, a geothermal plant operator would be required to obtain a discharge permit.

Environmental Impact Statement

Prior to initiation of geothermal resource development, an environmental impact statement must be prepared. The Bureau of Land Management is the lead agency under the National Environmental Policy Act for preparation of Environmental Impact Reports if the land has not been classed as being in a KGRA. Where the land is classed as a KGRA, the United States Geological Survey is the lead agency. Other permits from the Division of Industrial Safety and Federal Power Commission may be required. Apparently, the Corps. of Engineers has not yet become

involved with geothermal resource development.

Geothermal Energy Research and Development

In an attempt to insure the development of geothermal resources, Congress passed the Geothermal Energy Research, Development, and Demonstration Act.²⁰ This act recognizes that the generation of electrical energy from geothermal resources is potentially economical and environmentally desirable. In addition, technologies are not presently available for the development of much of the geothermal resource. Federal financial assistance is necessary to encourage the extensive exploration, research, and development in geothermal resources that will bring the technology to the point of commercial applications.

The definition of geothermal resources under the Geothermal Energy Research Act is in terms of products or minerals that have a value of less than 75% of the geothermal resources, but heat itself and associated energy are left out of the definition.²¹ Even though heat itself is omitted from the definition, it is likely that, in passing the act, the general intent of Congress was to be all-inclusive with respect to geothermal resources. Certainly, if the energy comes from indigenous steam, hot water,

and brines or from an introduced medium such as steam, hot water, or other gases, heat would be included. Thus, energy in the form of latent heat in solid rock would come within the definition once a heat-exchange medium was introduced to remove the heat.

One purpose of the Research and Development Act is to "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."²² An additional purpose is to develop a research and development program to resolve those major technical problems that prevent the fullest possible commercial utilization of geothermal resources in the United States. This effort will also include design and construction of demonstration plants.²³

Lastly, the act establishes a loan guaranty program to encourage and assist in the commercial development of practicable means for producing useful energy from geothermal resources by means of environmentally acceptable processes.²⁴ The guaranty is limited to 75% of the aggregate cost of the project for which the loan is made; to \$25,000,000 for a single project; and to \$50,000,000 for any combination of loans for a

single qualified borrower.²⁵ A qualified borrower is "any public or private agency, institution, association, partnership, corporation, political subdivision, or other legal entity which has pre-

sented 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."²⁶

CALIFORNIA STATUTES ON GEOTHERMAL RESOURCES

State Licenses and Permits

The California Public Resources Code contains the statement of policy on thermal, electric power plants. "The location and operation of thermal electric power plants shall enhance public benefits and protect against or minimize adverse effects on the public, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life, and that the public's opportunity to enjoy the material, physical and aesthetic benefits of its resources shall be preserved to the greatest extent feasible."²⁷

The regulatory control over development of geothermal resources is in the Resources Agency,²⁸ one of four super-agencies in the California State government. The Resource Agency is responsible for researching improved methods of power-plant siting. The agency, in addition, is responsible for review of proposed power-plant

sites, for identifying and resolving conflicts, and for communicating in writing the official position and comments of agencies. The agency coordinates its research programs with the electric utilities to insure minimum duplication and maximum interchange of information, with the results of the research program of the state being published and made available as public information.

The powers, makeup, and duties of the agency are contained in the Government Code.²⁹ "The Resources Agency consists of the State Air Resources Board, the Colorado River Board, the State Energy Resources Conservation and Development Commission, The State Water Resources Control Board, each California regional Water Quality Board, the State Lands Commission, the Division of State Lands, and the following departments: Conservation, Fish and Game, Navigation, Ocean Development, Parks and Recreation, Water

Resources."³⁰ Although the Resources Agency is under supervision of a Secretary appointed by the Governor,³¹ the Energy Resources Conservation and Development Commission (hereafter referred to as the Commission) which is within the Resources Agency, does the real work and has the responsibility of compiling "local, regional, state, and federal land use, public safety, environmental, and other standards to be met in designing, siting, and operating facilities"³² to safeguard public health and safety. The Commission consists of five members appointed by the Governor.

The Commission has exclusive power to certify all sites and related facilities. "The issuance of a certificate by the Commission is in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law."³³ However, a Certificate of Public Convenience from the Public Utilities Commission is also needed.³⁴ The Commission must obtain comments from local, regional, state, and federal agencies.³⁵ If the proposed power plant is geothermal, alternate sites are not required.³⁶ This last provision stems from the fact that the power plant cannot efficiently be located at distant locations from the geothermal resource.

In most cases, the limit is approximately one mile from the resource.

A state applicant may be required to obtain development rights before a permit will be granted.³⁷ If there was a prior eminent domain proceeding, this establishes conclusively that there is a public interest³⁸ and that the use will begin in seven years, as required under California law.³⁹ Power plants up to 100 MW may be exempted from Commission requirements of the code.⁴⁰ The code does not apply to power plants under 50 MW.⁴¹ Presumably, a plant under 50 MW would require approvals as required prior to the establishment of the Resources Agency.

The state of California requires a special monitoring system. The facility must be constructed and be in compliance with air and water quality, public health and safety, and other applicable regulations, guidelines, and conditions adopted by the Commission. The Commission must seek the assistance of the State Air Resources Board, the State Water Resources Control Board, the Department of Health, and other state, regional, and local agencies that have an interest in environmental control.⁴² Compatible use provisions are contained in the Land Conservation Act of 1965. Construction of electric facilities are determined to be compatible with any agricultural preserve.⁴³

Investigations on the need and availability of water for cooling of thermal, electric-power plants are required⁴⁴ and such studies must be conducted by the Department of Water Resources. These studies must be made available to the State Energy Resources Conservation and Development Commission. The Department of Water Resources must also conduct studies with respect to waste-water use.

State Geothermal Leases

The issuance of leases for California State lands is generally controlled by statutes given in the California Public Resources Code, section 6902 *et seq.* Geothermal resources "mean the natural heat of the earth, the energy, in whatever form, below the surface of the earth, present in, resulting from, or created by, or which may be extracted from, such natural heat, and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases, and steam, in whatever form, found below the surface of the earth, but excluding oil, hydrocarbon gas or other hydrocarbon substances."⁴⁵

Permits and leases for the extraction and removal of geothermal resources from lands belonging to the state may be issued by the commission.⁴⁶ "State lands shall be defined

as all lands owned by the state, including school lands, proprietary lands, tidelands, submerged lands, swamp lands and overflowed lands, and beds of navigable rivers and lakes, and lands in which geothermal resources have been reserved to the state."⁴⁷

The lease application must be for at least 640 but not more than 2,560 acres and must embrace a reasonably compact area. However, a permit of lease may be issued for a parcel less than 640 acres, if such parcel is isolated from or not contiguous with other parcels of land that are available for permit or lease. No person, association, or corporation shall take, hold, own, or control at one time (whether acquired directly from the commission under this act or otherwise) any direct or indirect interests in state geothermal leases or permits exceeding 25,600 acres.⁴⁸

"If the lands to be leased... are within a known geothermal resources area and no permit thereon has been issued, such lands shall be leased to the highest responsible qualified bidder under such rules and regulations as the commission may prescribe for notice to the public of terms and conditions of the sale, conduct of the sale, receipt of bid, and awarding of the lease, and bidding shall be by competitive bid and on the basis of cash bonus, net profit, or other single biddable factor. ...The

classification of a known geothermal resources area, which shall contain at least one well capable of producing geothermal resources in commercial quantities, shall be made by the commission independently or upon recommendations of the Geothermal Resources Board."⁴⁹ "The commission shall issue a permit to the first qualified applicant therefore under such rules and regulations as it may prescribe for lands which have not been classified as known geothermal resources lands, upon the payment to the commission of one dollar per acre for each acre of lands included in the permit..."⁵⁰ The lease term "shall be for a primary term of 20 years and so long thereafter as geothermal resources are being produced or utilized or are capable of being produced or utilized in commercial quantities from such lands or from lands utilized therewith; provided, that such leases shall not exceed a term of 99 years."⁵¹ A permit or lease may be assigned, transferred, or sublet.

Statutes on Geothermal Wells

The interest of the State of California in drilling for geothermal resources is contained in the California Public Resources Code, section 3700 *et seq.* The state should exercise its power and jurisdiction to require that wells for the dis-

covery and production of geothermal resources be drilled, operated, maintained, and abandoned in such a manner as to safeguard life, health, property, and the public welfare, and to encourage maximum economic recovery.

Geothermal resources area is defined to mean "the same general surface area which is underlaid, or reasonably appears to be underlaid, by geothermal resources."⁵²

"The State Oil and Gas Supervisor shall supervise the drilling, operation, maintenance and abandonment of geothermal resources, wells as to encourage the greatest ultimate economic recovery of geothermal resource, to prevent damage to life, health, property, and natural resources, and to prevent damage to, and waste from, the underground geothermal deposits, and to prevent damage to underground and surface waters suitable for irrigation or domestic purposes..."⁵³

The supervisor shall also supervise the drilling, operation, maintenance, and abandonment of wells so as to permit the owners or operators of such wells to utilize all methods and practices known to the industry for the purposes of increasing the ultimate recovery of geothermal resources..."⁵⁴

"The owner or operator of any well shall notify the supervisor of the sale, assignment, transfer, conveyance, or exchange by the owner or operator of such well, and the land owned or

leased, upon which the well is located, within five days after such sale...."⁵⁵ Before the owner commences drilling of a well he must file a written notice with the supervisor.⁵⁶ An owner may submit to the supervisor a written program to drill a shallow well for geothermal observation purposes. In order to qualify, a program must not contain more than 25 wells and the maximum total depth of each of these wells must not exceed 250 feet. A geologic interpretation of the area under investigation, including any known or inferred temperature data must be included. The supervisor may require that a proposal for such well or wells be submitted in compliance with all the provisions of section 3724.

Every person who engages in the drilling must file with the supervisor an indemnity bond in the sum of five thousand dollars for each well drilled.⁵⁷ The owner of any well must keep a careful and accurate log, core record, and history of the drilling of the well.⁵⁸ "The log shall show the character and depth of the formation passed through or encountered in the drilling of the well, and amount, size and weight of casing used, and particularly the location, depth and temperature of waterbearing strata, together with the temperature, chemical composition, and other chemical and physical characteristics of fluid

encountered from time to time... ."⁵⁹ The history of drilling must show "the location and amount of sidetracked casing, tools, or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives, the results of production and other tests during drilling operations, and completion data."⁶⁰

"Any person engaged in operating any wells wherein high pressures are known to exist, and any person drilling for geothermal resources in any district where the pressures are unknown must equip the well with casings of sufficient strength... to prevent blowouts, explosions, and fires."⁶¹ The well must be properly cased with watertight and adequate housing. The owner must "endeavor to prevent damage to life, health, property, and natural resources, to shut out detrimental substances from strata containing water suitable for irrigation or domestic purposes... ."⁶²

A Geothermal Resources Board is created in the Department of Conservation. The board recommends areas to be classified as geothermal resources areas.⁶³

Regulation of Geothermal Resources

The regulations are particularly concerned with blowout prevention, developmental wells, maintenance of

drilling logs, and protection of the environment.⁶⁴ The general policy in drilling wells is to protect or minimize damages to the environment, usable ground waters, geothermal resources, life, health and property. The regulations prescribe the notice requirements of the owner or operator of a geothermal resource. The fees and bonds are given. In addition the well spacing, casing requirements, construction of conductor pipe, mud return temperatures, and blowout-prevention equipment are contained in the regulations.

The log must contain core records, and a history of the drilling of the well. The history must describe in detail, in chronological order, and on a daily basis, all significant operations carried out and equipment used during all phases of drilling, testing, completion, recompletion, and abandonment of the well. A summary report, which must accompany the core record and well history, is designed

to show data pertinent to the condition of a well at the time of completion of work done. Monthly production records must be filed with the supervisor on the 10th day of each month. Also, injection records must be filed with the supervisor.

Specific regulations are additionally applied to the Imperial Valley. Subsidence bench marks are required for all wells. All work must be coordinated with the County Surveyor and must be done under the direct supervision of a Registered Civil Engineer or Licensed Land Surveyor. An adequate series of bench marks shall be set as required by the division and shall be tied to existing survey nets. The field work computations must conform to the National Geodetic Survey standards. (Refer to "Manual of Geodetic Leveling," 1948). The type of bench marks are specified. The surveys must be run annually at the expense of the operator while wells are being produced.

COMPARISON OF CALIFORNIA AND FEDERAL STATUTES

Geothermal Definition

California enacted the geothermal resources law in 1967, which predates the federal act by three years. The definition of geothermal resources is

different in the two acts. Under the California law, geothermal resources means "... the natural heat of the earth, the energy, in whatever form, below the surface of the earth present in, resulting from, or created by, or

which may be extracted from, such natural heat, and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases, and steam, in whatever form, found below the surface of the earth, but excluding oil, hydrocarbon gas or other hydrocarbon substances.⁶⁵ This definition looks to heat as the method of inclusion as a geothermal resource. This heat is equated with the energy derived therefrom, in whatever form. Thus, pressure as well as heat is included in the definition. However, "energy extracted from natural heat" blatantly omits from the definition the heat-exchange medium itself, either the natural medium or that which is injected to remove heat. The federal statute on the other hand expressly mentions the heat-exchange medium as part of the geothermal resource.

Included as part of the geothermal resource in California are all minerals and other products obtained from the heat transfer medium with the exception of oil, hydrocarbon gas, and other hydrocarbon substances. In the federal scheme, minerals are included as geothermal resource only if they have a value of less than 75% of the value of the geothermal steam,⁶⁶ and, similar to the California scheme, oil, hydrocarbon gas, and helium, are excluded. The California definition of geothermal resource as "natural

heat of the earth" would include the natural or ordinary thermal gradient of the earth, while the federal definition is in terms of "geothermal steam," or "heat or other associated energy found in geothermal formations." This federal characterization of geothermal resource presumably refers to any near-surface intrusions or heat but not to the ordinary geat gradient of the earth.

Because of the large amount of government land that has been sold to private individuals with reservation of the mineral rights to the government, the question of whether or not mineral rights includes geothermal resources becomes very important. Neither the California nor the federal definition of geothermal resources expressly addresses the issue of geothermal resources as a mineral or water. If geothermal resources are mineral, they are reserved to the granting entity; if geothermal resources are water, they would, of course, go with the surface land ownership.

From a geologist's point of view, water is a mineral.⁶⁷ The term mineral is applied to substances with the following characteristics: natural occurrence, homogeneity, definite chemical composition or ranges in composition, regular internal structure, and inorganic nature. On the other hand, water is recognized as

different from other minerals and must be treated differently from a legal point of view.⁶⁸ In particular, water has never been treated as a mineral in the public land laws.

Unfortunately, this discussion of the difference between water and other minerals does not settle the problem of characterization of the geothermal resource. In a letter by Edward Weinberg, Deputy Solicitor, the conclusion is reached that "geothermal steam is really water, and it would thus be anomalous to assert that geothermal steam was subject to the mineral reservation of the Stock-Raising Homestead Act...the reservation does not cover geothermal steam."⁶⁹ However, in *Geothermal Kinetics, Inc. v. Union Oil Company of California*⁷⁰ the Superior Court, Sonoma County, California, found that a geothermal system is an energy resource which is produced as a direct product of the molten minerals and gases within the resource. The water which transports the energy to the surface is a conveyor belt, nothing more. Thus, the resource has all of the basic characteristics of those resources which the courts have classified as minerals.

In the Imperial Valley, the geothermal deposits are hot water and not steam and, if the decision in Sonoma County is limited to its facts, litigation on the same issue could

give rise to a contrary result. In addition, the parties in the Sonoma case were both private individuals arguing the meaning of a grant of mineral rights. The issue in the Imperial County, in most cases, will be between the federal government and the private individual over the ownership of geothermal resource when there has been a reservation of minerals to the government. Thus, the argument in favor of the government, based on the interpretative principle of favoring a grant where there is an ambiguity, would not apply.

A federal case on the issue was argued on different grounds. In *United States v. Union Oil Company of California*,⁷¹ the court dealt directly with the title issue in the context of a reservation to the United States of "all coal and other minerals" contained in two patents issued pursuant to the Stock-Raising Homestead Act of 1916.⁷² There, Union Oil Company and other corporate defendants (or their predecessors-in-interest) had acquired leases to produce and sell geothermal steam and power from lands affected by the mineral reservations. Because production of geothermal resources from the affected lands was imminent, the Attorney General of the United States, acting pursuant to the directive contained in Section 21(b) of the Geothermal Steam Act of 1970,⁷³ filed suit in 1972 for a declaration of the

ownership rights of the United States in the geothermal resources underlying those lands.

Apparently equating geothermal resources with water, the court then examined and rejected the Government's contention that geothermal resources are mineral in nature and agreed with the defendants' contention that geothermal resources, like water, belong to the owner of the surface estate. The court observed:

"Since it is clear that Congress expressed no intent on the question of whether 'other minerals' in §9 of the Act included geothermal steam and associated geothermal resources, the Government must press the contention that the main constituent of geothermal energy, namely superheated water (or steam) was a 'mineral' within the contemplation of Congress and the meaning of the mineral reservation in §9. Such a construction will not hold water; the authorities are convincing that water was not considered a mineral when §9 was enacted, nor is water considered a mineral today."⁷⁴

In reaching its decision, the court was influenced by and gave great weight to existing administrative interpretations of the Department of the Interior to the effect that

geothermal steam is not subject to the reservation of the Stock-Raising Homestead Act.⁷⁵

While this case was pending appeal, the holding of the case was recently reversed by the Court of Appeals for the Ninth Circuit in an opinion filed on January 31, 1977.⁷⁶ Based upon review and analysis of the Stock-Raising Homestead Act's legislative history, the court concluded that Congress did not intend to convey title to subsurface resources, particularly energy sources, which do not serve to support the raising of livestock by homesteaders.⁷⁷ The court said:

"A patentee under the Stock-Raising Homestead receives title to all rights in the land not reserved. . . .the mineral reservation is to be read broadly in light of the agricultural purpose of the grant itself, and in light of Congress's equally clear purpose to retain subsurface resources, particularly sources of energy, for separate disposition and development in the public interest. Geothermal resources contribute nothing to the capacity of the surface estate to sustain livestock. They are depletable subsurface reservoirs of energy, akin to deposits of coal and oil, which it was the particular objective of the

reservation clause to retain in public ownership. The purposes of the Act will be served by including geothermal resources in the statute's reservation of "all the coal and other minerals." Since the words employed are broad enough to encompass this result, the Act should be so interpreted."⁷⁸

The Court of Appeals refused to defer to the administrative interpretation that had influenced the district court because (1) the views of the Department of the Interior are of relatively recent origin rather than being contemporaneous with the passage of the Stock-Raising Homestead Act of 1916, (2) the Department has not consistently maintained that interpretation, and (3) the opinions of the Department are "weakly reasoned" in that "[t]hey rest entirely upon the premise that geothermal resources are simply water" and, therefore, fail to distinguish case law concerning "fresh water."⁷⁹

This same issue was before still another court in California when *Pariani v. State of California*⁸⁰ was tried in July of 1976. The case involved land at The Geysers patented by the State of California to private parties subject to reservation of "all oil, gas, oil shale, coal, phosphate, sodium, gold, silver and all other mineral deposits"⁸¹ and amplified by

statute to include "mineral waters."⁸² The State contended that the intent of the mineral severance was to reserve to the state all energy-producing resources such as coal, oil, gas, and geothermal resources and grant to the patentee the ownership of the land for all agricultural and domestic pursuits; alternatively, the state contended the geothermal resources are "gas" or "mineral waters" within the meaning of the reservation. The patentees (or their successors-in-interest) contended that geothermal resources belong to them by virtue of their water rights; they argued that geothermal resources are basically heat or energy and could not have been reserved by the States reservation because neither heat nor energy is a mineral.

The court heard testimony from seven expert witnesses concerning the geology and formation of geothermal resources as well as their utility and function. The court took the case under submission in late 1976.

Known Geothermal Resource Area (KGRA)

Because the costs to the geothermal developer to lease lands in a KGRA are considerably higher than otherwise, the manner in which lands become classified as such is important. Under California statutes, the classification of an area as one known to

contain geothermal resources is made by the commission or upon recommendation of the Geothermal Resources Board.⁸³ (A KGRA is to be distinguished from a mere resource area as defined elsewhere.)⁸⁴ But before an area can be thus classified, it must be shown capable, at least, of producing geothermal resources in commercial quantities from one well. The federal law does not require a producing well for an area to be classified as a KGRA. A KGRA under federal law means an area in which the geology, nearby discoveries, competitive interests, or other indicia would, in the opinion of the Secretary, engender a belief in men who are experienced in the subject matter that the

prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose.⁸⁵ Thus, federal land that is marginal or unproductive or simply not known to contain geothermal resources in fact could be classified as a KGRA, because the area may be classified on inference. The state, on the other hand, requires production of commercial quantities prior to classification as a KGRA. Because of the likelihood of not finding geothermal resources on some federal KGRA lands, the cost of developing federal geothermal resources will be above that for the same type of state lands.

CURRENT TRENDS IN CALIFORNIA LEGISLATION

Bills have been introduced in the California Legislature that concern geothermal power production.⁸⁶ Currently, the authority over leasing of state land is with the State Lands Commission, but an effort is being made to create an Office of Geothermal Resources, under the Resources Conservation and Development Commission. The thrust of this effort is to establish a separate office with a mandate to develop geothermal resources. A systematic effort would be made to map each geothermal field in the state

and to adopt and file, as a public record, a plan for the orderly development of each field. The major element of such a plan is that it would cover both private and state land.

Other efforts are being made to insure the use of the developed power and also insure recovery of development costs. Under proposed provisions, after a site has been prepared to generate at least 5 MW of electrical power, a certificate of readiness would be issued. Then, the owner could apply to the Public

Utilities Commission for an order to require the utility to purchase the electricity generated by the owner's wells and to reimburse the owner for an amount that reflects his unreimbursed costs of geothermal resources development, including costs of capital improvement. The Public Utilities Commission would be required to adjust its rate structure to reflect the cost of carrying electricity from geothermal power. These provisions, requiring the utility to carry the electricity and pass on any increase in costs, certainly would encourage owners to develop geothermal power.

It is proposed that an owner who failed to develop the resource within

specific time limits would be required to divest his interest. Other powers given to the geothermal control agency would include the power to acquire, by purchase or condemnation, any land containing geothermal resources, or any interest in such lands, or any geothermal resources development rights, leases, or other interests. The amount of legislative activity in California clearly shows a concern for the production of power from geothermal resources in the state. The passage of action-forcing amendments to the geothermal statutes discussed above would increase the rate of development of the geothermal resource.

CONCLUSIONS

California is the leader in geothermal resource development with the operating plants in The Geysers area and with the large reservoir of hot, salt brines located in Imperial County. There is a great deal of legislative activity to increase the availability of the resources for development. The issue of whether or not a reservation of minerals includes geothermal resources is moving toward judicial determination. Thus far, the issue has been resolved in favor of a reservation both in California and in federal jurisdictions.

There may be an inhibiting effect on geothermal development as a result of the manner in which lands are designated as KGRA by the federal government. The issue of requiring power companies to carry the geothermal power remains an open question. Because of the interest and activity now going on in the Imperial Valley, the development of geothermal power will continue. The legislature could provide a better climate for its development by the passage of laws that address the remaining problems.

REFERENCES AND FOOTNOTES

1. 30 U.S.C. sec. 1001-1025; also refer to Appendix A, "Federal Law on Geothermal Resources."
2. See 38 Fed. Reg. 35068-35136.
3. 30 U.S.C. §1101.
4. House Report (Interior and Insular Affairs Committee) No. 91-1544, Sept. 30 1970.
5. 30 U.S.C. §181 et seq.
6. 30 U.S.C. §530.
7. 30 U.S.C. §1002.
8. 30 U.S.C. §1001.
9. 30 U.S.C. §1003.
10. 30 U.S.C. §§1003(d) & 3(e).
11. 30 U.S.C. §1014 (c).
12. 30 U.S.C. §1015.
13. 49 Stat. 674, amended §§13, 14 and 17 of the Mineral Leasing Act, 30 U.S.C. §§221, 223 and 226.
14. 30 U.S.C. §1012.
15. 30 U.S.C. §1008.
16. 30 U.S.C. §1020.
17. Letter from Harrison Loesch to Wayne N. Aspinall, in U.S. Code Cong. & Admin. New, 5121 (1970).
18. Letter from Edward Weinberg, Deputy Solicitor to Walter P. Capaccioli, in U.S. Code Cong. & Admin. News, 5127 (1970).
19. Environmental Protection Agency, "General Instruction, Short Forms, Standard Forms, and a Discharge Monitoring Report for Applications for Permit Discharges under the National Pollution Discharge Elimination System," February 28, 1973.
20. 30 U.S.C. §1101 *et seq.*
21. 30 U.S.C. §1102.
22. 30 U.S.C. §1103.
23. 30 U.S.C. §1125 (a) (2)
24. 30 U.S.C. §1141.
25. *Id.*
26. 30 U.S.C. 1141 (f).
27. Cal. Pub. Res. Code §800.

28. Cal. Pub. Res. Code §801.
29. Cal. Gov. Code §12000 et seq.
30. Cal. Gov. Code §12805.
31. Cal. Gov. Code §12850.
32. Cal. Pub. Res. Code §25216.3 (a).
33. Cal. Pub. Res. Code §25500; also refer to Appendix B, "California Law on Power Plant Siting."
34. Cal. Pub. Util. Code §1001.
35. Cal. Pub. Res. Code §25506.
36. Cal. Pub. Res. Code §25540.
37. Cal. Pub. Res. Code §25528.
38. Cal. Code CCP §1240.030.
39. Cal. Code CCP §1240.220.
40. Cal. Pub. Res. Code §25541.
41. Cal. Pub. Res. Code §25120.
42. Cal. Pub. Res. Code §25532.
43. Cal. Gov. Code §51238.
44. Cal. Water Code §§237 and 460.
45. Cal. Pub. Res. Code §6903; also refer to Appendix C, "California Law on Geothermal Resources."
46. Cal. Pub. Res. Code §6904.
47. Id.
48. Cal. Pub. Res. Code §6908.
49. Cal. Pub. Res. Code §6912 (a) and (b).
50. Cal. Pub. Res. Code §6909.
51. Cal. Pub. Res. Code §6918.
52. Cal. Pub. Res. Code §3702.
53. Cal. Pub. Res. Code §3714.
54. Cal. Pub. Res. Code §3715.
55. Cal. Pub. Res. Code §3722.
56. Cal. Pub. Res. Code §3724.
57. Cal. Pub. Res. Code §3725.
58. Cal. Pub. Res. Code §3730.
59. Cal. Pub. Res. Code §3731.
60. Cal. Pub. Res. Code §3733.
61. Cal. Pub. Res. Code §3739.
62. Cal. Pub. Res. Code §3740.

63. Cal. Pub. Res. Code §3742.
64. 14 Cal. Adm. Code §1400 *et seq.*
65. Cal. Pub. Res. Code §6903.
66. 30 U.S.C. §1001(d).
67. 15 Encyclopedia Britannica, Minerology 501 (1965); Water, 93 C.J.S. 580; *Mines and Minerals* 2(b) (7), 58 C.J.S. 24; *Hathorn v. Natural Carbonic Gas Co.*, 87 N.E. 504, 508 (N.Y. 1909).
68. *Erickson v. Crookston Water Power & Light Co.*, 111 N.W. 391, 393 (Minn. 1907); *Fleming Foundation v. Texaco*, 337 S.W. 2d 846, 850 (Tex. 1960); *Mark Oil Co. v. Lawrence*, 389 P. 2d 955, 961 (Okla. 1964); see change of the count in *Estate of Geneva O'Brien v. United States*, 8 Oil and Reporter 845, 846 (U.S.D.C., N.D. Tex. 1957).
69. *Supra* at 18.
70. *Geothermal Kinetics, Inc., v. Union Oil Company of California*, Superior Court, California, Sonoma County, No. 75314 (May 28, 1976); also, see *Geothermal Energy Magazine*, Vol. 4, (July 1976).
71. *United States v. Union Oil Co. of California*, 369 F. Supp. 1289, 4 ELR 20559.
72. 43 USCA §§291-382 (1964).
73. 30 U.S.C. § 1020(b) (1971).
74. 369 F. Supp. 1289 (N. D. Cal. 1973), rev'd —F.2d— (9th Cir. 1977).
75. *Id.* at 1298-99.
76. *United States of America v. Union Oil Company of California*, No. 74-1574 (9th Cir., filed Jan. 31, 1977).
77. *Id.* Slip Opinion at 11.
78. *Id.*
79. *Id.*
80. *Superior Court of the City and County of San Francisco* No. 657-291.
81. Cal. Pub. Res. Code §6401.
82. Cal. Pub. Res. Code §6407.
83. Cal. Pub. Res. Code §6912 (b).
84. Cal. Pub. Res. Code §3702.
85. 30 U.S.C. §1001.
86. Assembly Bill No. 1496 and Senate Bill No. 517 (1975).

APPENDIX A

FEDERAL LAW ON GEOTHERMAL RESOURCES

The following pages are taken from U. S. Code Annotated, Title 30, Mineral Lands and Mining, pp. 43-55.

CHAPTER 23—GEOTHERMAL STEAM AND ASSOCIATED GEOTHERMAL RESOURCES [NEW]

<p>Sec.
1001. Definitions.</p> <p>1002. Lands subject to geothermal leasing.</p> <p>1003. Bids; competitive bidding; first application of qualified person without competitive bidding.</p> <p style="padding-left: 2em;">(a) Conversion to geothermal lease.</p> <p style="padding-left: 2em;">(b) Consideration of first person in conflicting land interests.</p> <p style="padding-left: 2em;">(c) Conversion to application for geothermal lease.</p> <p style="padding-left: 2em;">(d) Acreage limitation.</p> <p style="padding-left: 2em;">(e) Regulations; substantial expenditures for exploration, development, or production of geothermal steam requisite for conversion.</p> <p style="padding-left: 2em;">(f) Competitive geothermal lease; time for payment of highest bid and first year rental.</p> <p>1004. Rents and royalties.</p> <p style="padding-left: 2em;">(a) Royalty provision for percentage of amount or value of steam or other form of heat or energy.</p> <p style="padding-left: 2em;">(b) Royalty provision for percentage of value of byproduct; rate for certain mineral byproducts.</p> <p style="padding-left: 2em;">(c) Annual rental; advance payment; amount; termination of lease for nonpayment; deficiency payments; notice and payment of deficiency; reinstatement of lease: reasons and conditions.</p> <p style="padding-left: 2em;">(d) Royalties in lieu of rentals for producing leases; amount; initial payment; value of unsold geothermal steam and byproducts; consideration of exploration and production costs and use value.</p> <p>1005. Duration of leases.</p> <p style="padding-left: 2em;">(a) Primary and continuation terms.</p> <p style="padding-left: 2em;">(b) Renewal.</p> <p style="padding-left: 2em;">(c) Cooperative or unit plan for drilling operations; extension of term; renewal.</p> <p style="padding-left: 2em;">(d) Commercial production or utilization of geothermal steam as including completion of producing wells and bona fide sales for facilities scheduled for future installation.</p>	Sec. (e) Extension of term for by-product production; conversion of geothermal lease to mineral lease; application, time for completion of location of mineral claims, and Federal agency terms and conditions when conversion affects lands withdrawn or acquired for Federal agency. (f) Principles for location of minerals under mining laws when minerals are not associated with geothermal resources. 1006. Acreage of geothermal lease; irregular subdivisions; State limitation; increase. 1007. Readjustment of lease terms and conditions. (a) Initial readjustment; periodic intervals; notice; objections, relinquishment, and termination. (b) Rentals and royalties; initial readjustment; periodic intervals; limitation on increases and on royalties; notice; objections, relinquishment, and termination. (c) Surface use, protection, or restoration of lands withdrawn or acquired for Federal agency; notice; approval of agency. 1008. Byproducts: production or use; water for beneficial uses under State water laws; substantial beneficial production or use; modification or waiver; preexisting rights of lease, claim, or permit holders. 1009. Relinquishment of geothermal rights; effective date; release of lessee or his surety or bond; exceptions. 1010. Suspension of operations and production; extension of lease term for period of suspension; waiver, suspension or reduction of rental or royalty. 1011. Termination of leases; grounds; notice; correction of violations; hearing; correction period after administrative decision. 1012. Waiver, suspension, or reduction of rental or royalty. 1013. Surface land use for production, utilization, and conservation of geothermal resources.

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<p>Sec.
1014. Lands subject to geothermal leasing.</p> <p>(a) Terms and conditions for lands withdrawn or acquired for Department of Interior.</p> <p>(b) Consent and terms and conditions for lands withdrawn or acquired for Department of Agriculture or for lands for power and related purposes.</p> <p>(c) Exemption of certain Federal lands.</p> <p>1015. Citizenship requirement for lessees.</p> <p>1016. Administration; multiple use of lands and resources; coexistence of other leases; reciprocal and reasonable operational interference between geothermal and other leases.</p> <p>1017. Cooperative or unit plan of development or operation of geothermal pool, field, or like area; public interest; determination and certification; regulations; protection of parties in interest; authority respecting rate of prospecting, development, and production; leases excepted from control for purposes of State acreage limitation.</p> <p>1018. Data from Federal agencies concerning conversion charges; confidential information.</p> | <p>Sec.
1019. Disposal of moneys from public and other lands.</p> <p>1020. Publication in Federal Register of known geothermal resource area lands; Federal transfer of surface rights and retention of mineral rights; necessity of geothermal leases for development or production of geothermal resources; report of imminent development or production; quiet title proceedings; venue; injunction; judicial determination of inclusion of geothermal resources within Federal mineral reservation; cessation of duty to report and institute proceedings.</p> <p>1021. Federal exemption from State water laws.</p> <p>1022. Waste, prevention; exclusiveness of provisions for acquisition of geothermal rights.</p> <p>1023. Rules and regulations; scope of provisions.</p> <p>1024. Disposal of land laws: reservation of geothermal resources and restriction on disposal of lands with geothermal resources; conveyances prior to December 24, 1970, unaffected.</p> <p>1025. Federal retention of certain mineral rights; extraction of minerals without substantial interference with geothermal production.</p> |
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§ 1001. Definitions

As used in this chapter, the term—

- (a) "Secretary" means the Secretary of the Interior;
- (b) "geothermal lease" means a lease issued under authority of this chapter;
- (c) "geothermal steam and associated geothermal resources" means (i) all products of geothermal processes, embracing indigenous steam, hot water and hot brines; (ii) steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations; (iii) heat or other associated energy found in geothermal formations; and (iv) any byproduct derived from them;
- (d) "byproduct" means any mineral or minerals (exclusive of oil, hydrocarbon gas, and helium) which are found in solution or in association with geothermal steam and which have a value of less than 75 per centum of the value of the geothermal steam or are not, because of quantity, quality, or technical difficulties in extraction and production, of sufficient value to warrant extraction and production by themselves;
- (e) "known geothermal resources area" means an area in which the geology, nearby discoveries, competitive interests, or other indicia would, in the opinion of the Secretary, engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose.

Pub.L. 91-581, § 2, Dec. 24, 1970, 84 Stat. 1566.

References in Text. "This chapter" referred to in subd. (b), read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Short Title. Section 1 of Pub.L. 91-581 provided: "That this Act [which enacted

this chapter and amended section 530 of this title] may be cited as the 'Geothermal Steam Act of 1970'."

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1002. Lands subject to geothermal leasing

Subject to the provisions of section 1014 of this title, the Secretary of the Interior may issue leases for the development and utilization of

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geothermal steam and associated geothermal resources (1) in lands administered by him, including public, withdrawn, and acquired lands, (2) in any national forest or other lands administered by the Department of Agriculture through the Forest Service, including public, withdrawn, and acquired lands, and (3) in lands which have been conveyed by the United States subject to a reservation to the United States of the geothermal steam and associated geothermal resources therein.

Pub.L. 91-581, § 3, Dec. 24, 1970, 84 Stat. 1566.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1003. Bids; competitive bidding; first application for qualified person without competitive bidding

If lands to be leased under this chapter are within any known geothermal resources area, they shall be leased to the highest responsible qualified bidder by competitive bidding under regulations formulated by the Secretary. If the lands to be leased are not within any known geothermal resources area, the qualified person first making application for the lease shall be entitled to a lease of such lands without competitive bidding. Notwithstanding the foregoing, at any time within one hundred and eighty days following December 24, 1970.

Conversion to geothermal lease

(a) with respect to all lands which were on September 7, 1965, subject to valid leases or permits issued under the Mineral Leasing Act of February 25, 1920, as amended (section 181 et seq. of this title), or under the Mineral Leasing Act of Acquired Lands, as amended (sections 351, 358 of this title), or to existing mining claims located on or prior to September 7, 1965, the lessees or permittees or claimants or their successors in interest who are qualified to hold geothermal leases shall have the right to convert such leases or permits or claims to geothermal leases covering the same lands;

Consideration of first person in conflicting land interests

(b) where there are conflicting claims, leases, or permits therefor embracing the same land, the person who first was issued a lease or permit, or who first recorded the mining claim shall be entitled to first consideration;

Conversion to application for geothermal lease

(c) with respect to all lands which were on September 7, 1965, the subject of applications for leases or permits under the above Acts, the applicants may convert their applications to applications for geothermal leases having priorities dating from the time of filing of such applications under such Acts;

Acreage limitation

(d) no person shall be permitted to convert mineral leases, permits, applications therefor, or mining claims for more than 10,240 acres; and

Regulations; substantial expenditures for exploration, development, or production of geothermal steam requisite for conversion

(e) the conversion of leases, permits, and mining claims and applications for leases and permits shall be accomplished in accordance with regulations prescribed by the Secretary. No right to conversion to a geothermal lease shall accrue to any person under this section unless such person shows to the reasonable satisfaction of the Secretary that substantial expenditures for the exploration, development, or production of geothermal steam have been made by the applicant who is seeking conversion, on the lands for which a lease is sought or on adjoining, adjacent, or nearby Federal or non-Federal lands.

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Competitive geothermal lease; time for payment of highest bid and first year rental

(f) with respect to lands within any known geothermal resources area and which are subject to a right to conversion to a geothermal lease, such lands shall be leased by competitive bidding: *Provided*, That, the competitive geothermal lease shall be issued to the person owning the right to conversion to a geothermal lease if he makes payment of an amount equal to the highest bona fide bid for the competitive geothermal lease, plus the rental for the first year, within thirty days after he receives written notice from the Secretary of the amount of the highest bid.

Pub.L. 91-581, § 4, Dec. 24, 1970, 84 Stat. 1566.

References in Text. "This chapter" referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1004. Rents and royalties

Geothermal leases shall provide for—

Royalty provision for percentage of amount or value of steam or other form of heat or energy

(a) a royalty of not less than 10 per centum or more than 15 per centum of the amount or value of steam, or any other form of heat or energy derived from production under the lease and sold or utilized by the lessee or reasonably susceptible to sale or utilization by the lessee;

Royalty provision for percentage of value of byproduct; rate for certain mineral byproducts

(b) a royalty of not more than 5 per centum of the value of any byproduct derived from production under the lease and sold or utilized or reasonably susceptible of sale or utilization by the lessee, except that as to any byproduct which is a mineral named in section 1 of the Mineral Leasing Act of February 25, 1920, as amended (section 181 of this title), the rate of royalty for such mineral shall be the same as that provided in that Act and the maximum rate of royalty for such mineral shall not exceed the maximum royalty applicable under that Act;

Annual rental; advance payment; amount; termination of lease for nonpayment; deficiency payments; notice and payment of deficiency; reinstatement of lease; reasons and conditions

(c) payment in advance of an annual rental of not less than \$1 per acre or fraction thereof for each year of the lease. If there is no well on the leased lands capable of producing geothermal resources in commercial quantities, the failure to pay rental on or before the anniversary date shall terminate the lease by operation of law: *Provided, however*, That whenever the Secretary discovers that the rental payment due under a lease is paid timely but the amount of the payment is deficient because of an error or other reason and the deficiency is nominal, as determined by the Secretary pursuant to regulations prescribed by him, he shall notify the lessee of the deficiency and such lease shall not automatically terminate unless the lessee fails to pay the deficiency within the period prescribed in the notice: *Provided, further*, That, where any lease has been terminated automatically by operation of law under this section for failure to pay rental timely and it is shown to the satisfaction of the Secretary of the Interior that the failure to pay timely the lease rental was justifiable or not due to a lack of reasonable diligence, he in his judgment may reinstate the lease if—

(1) a petition for reinstatement, together with the required rental, is filed with the Secretary of the Interior; and

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(2) no valid lease has been issued affecting any of the lands in the terminated lease prior to the filing of the petition for reinstatement; and

Royalties in lieu of rentals for producing leases; amount; initial payment; value of unsold geothermal steam and byproducts; consideration of exploration and production costs and use value

(d) a minimum royalty of \$2 per acre or fraction thereof in lieu of rental payable at the expiration of each lease year for each producing lease, commencing with the lease year beginning on or after the commencement of production in commercial quantities. For the purpose of determining royalties hereunder the value of any geothermal steam and byproduct used by the lessee and not sold and reasonably susceptible of sale shall be determined by the Secretary, who shall take into consideration the cost of exploration and production and the economic value of the resource in terms of its ultimate utilization. Pub.L. 91-581, § 5, Dec. 24, 1970, 84 Stat. 1567.

References in Text. "That Act" referred to in subsec. (b), means the Mineral Leasing Act of Feb. 25, 1920, as amended, which is classified to section 181 et seq. of this title. **Legislative History.** For legislative history and purpose of Pub.L. 91-581, see 1970 U.S. Code Cong. and Adm. News, p. 5113.

§ 1005. Duration of leases—Primary and continuation terms

(a) Geothermal leases shall be for a primary term of ten years. If geothermal steam is produced or utilized in commercial quantities within this term, such lease shall continue for so long thereafter as geothermal steam is produced or utilized in commercial quantities, but such continuation shall not exceed an additional forty years.

Renewal

(b) If, at the end of such forty years, steam is produced or utilized in commercial quantities and the lands are not needed for other purposes, the lessee shall have a preferential right to a renewal of such lease for a second forty-year term in accordance with such terms and conditions as the Secretary deems appropriate.

Cooperative or unit plan for drilling operations; extension of term; renewal

(c) Any lease for land on which, or for which under an approved cooperative or unit plan of development or operation, actual drilling operations were commenced prior to the end of its primary term and are being diligently prosecuted at that time shall be extended for five years and so long thereafter, but not more than thirty-five years, as geothermal steam is produced or utilized in commercial quantities. If, at the end of such extended term, steam is being produced or utilized in commercial quantities and the lands are not needed for other purposes, the lessee shall have a preferential right to a renewal of such lease for a second term in accordance with such terms and conditions as the Secretary deems appropriate.

Commercial production or utilization of geothermal steam as including completion of producing wells and bona fide sales for facilities scheduled for future installation

(d) For purposes of subsection (a) of this section, production or utilization of geothermal steam in commercial quantities shall be deemed to include the completion of one or more wells producing or capable of producing geothermal steam in commercial quantities and a bona fide sale of such geothermal steam for delivery to or utilization by a facility or facilities not yet installed but scheduled for installation not later than fifteen years from the date of commencement of the primary term of the lease.

Extension of term for byproduct production; conversion of geothermal lease to mineral lease; application, time for completion of location of mineral claims, and Federal agency terms and conditions when conversion affects lands withdrawn or acquired for Federal agency

(e) Leases which have extended by reasons of production, or which have produced geothermal steam, and have been determined by the

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Secretary to be incapable of further commercial production and utilization of geothermal steam may be further extended for a period of not more than five years from the date of such determination but only for so long as one or more valuable byproducts are produced in commercial quantities. If such byproducts are leasable under the Mineral Leasing Act of February 25, 1920, as amended (section 181 et seq. of this title), or under the Mineral Leasing Act for Acquired Lands (sections 351-358 of this title), and the leasehold is primarily valuable for the production thereof, the lessee shall be entitled to convert his geothermal lease to a mineral lease under, and subject to all the terms and conditions of, such appropriate Act upon application at any time before expiration of the lease extension by reason of byproduct production. The lessee shall be entitled to locate under the mining laws all minerals which are not leasable and which would constitute a byproduct if commercial production or utilization of geothermal steam continued. The lessee in order to acquire the rights herein granted him shall complete the location of mineral claims within ninety days after the termination of the lease for geothermal steam. Any such converted lease or the surface of any mining claim located for geothermal byproducts mineral affecting lands withdrawn or acquired in aid of a function of a Federal department or agency, including the Department of the Interior, shall be subject to such additional terms and conditions as may be prescribed by such department or agency with respect to the additional operations or effects resulting from such conversion upon adequate utilization of the lands for the purpose for which they are administered.

Principles for location of minerals under mining laws when minerals are not associated with geothermal resources

(f) Minerals locatable under the mining laws of the United States in lands subject to a geothermal lease issued under the provisions of this chapter which are not associated with the geothermal steam and associated geothermal resources of such lands as defined in section 1001(c) of this title shall be locatable under said mining laws in accordance with the principles of the Multiple Mineral Development Act (found in section 521 et seq. of this title).

Pub.L. 91-581, § 6, Dec. 24, 1970, 84 Stat. 1568.

References in Text. "This chapter", referred to in subsec. (f), read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1006. Acreage of geothermal lease; irregular subdivisions; State limitation; increase

A geothermal lease shall embrace a reasonably compact area of not more than two thousand five hundred and sixty acres, except where a departure therefrom is occasioned by an irregular subdivision or subdivisions. No person, association, or corporation, except as otherwise provided in this chapter, shall take, hold, own, or control at one time, whether acquired directly from the Secretary under this chapter or otherwise, any direct or indirect interest in Federal geothermal leases in any one State exceeding twenty thousand four hundred and eighty acres, including leases acquired under the provisions of section 1003 of this title.

At any time after fifteen years from December 24, 1970, the Secretary, after public hearings, may increase this maximum holding in any one State by regulation, not to exceed fifty-one thousand two hundred acres. Pub.L. 91-581, § 7, Dec. 24, 1970, 84 Stat. 1569.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

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§ 1007. Readjustment of lease terms and conditions—Initial readjustment; periodic intervals; notice; objections, relinquishment, and termination

(a) The Secretary may readjust the terms and conditions, except as otherwise provided herein, of any geothermal lease issued under this chapter at not less than ten-year intervals beginning ten years after the date the geothermal steam is produced, as determined by the Secretary. Each geothermal lease issued under this chapter shall provide for such readjustment. The Secretary shall give notice of any proposed readjustment of terms and conditions, and, unless the lessee files with the Secretary objection to the proposed terms or relinquishes the lease within thirty days after receipt of such notice, the lessee shall conclusively be deemed to have agreed with such terms and conditions. If the lessee files objections, and no agreement can be reached between the Secretary and the lessee within a period of not less than sixty days, the lease may be terminated by either party.

Rentals and royalties; initial readjustment; periodic intervals; limitation on increases and on royalties; notice; objections, relinquishment, and termination

(b) The Secretary may readjust the rentals and royalties of any geothermal lease issued under this chapter at not less than twenty-year intervals beginning thirty-five years after the date geothermal steam is produced, as determined by the Secretary. In the event of any such readjustment neither the rental nor royalty may be increased by more than 50 per centum over the rental or royalty paid during the preceding period, and in no event shall the royalty payable exceed 22½ per centum. Each geothermal lease issued under this chapter shall provide for such readjustment. The Secretary shall give notice of any proposed readjustment of rentals and royalties, and, unless the lessee files with the Secretary objection to the proposed rentals and royalties or relinquishes the lease within thirty days after receipt of such notice, the lessee shall conclusively be deemed to have agreed with such terms and conditions. If the lessee files objections, and no agreement can be reached between the Secretary and the lessee within a period of not less than sixty days, the lease may be terminated by either party.

Surface use, protection, or restoration of lands withdrawn or acquired for Federal agency; notice; approval of agency

(c) Any readjustment of the terms and conditions as to use, protection, or restoration of the surface of any lease of lands withdrawn or acquired in aid of a function of a Federal department or agency other than the Department of the Interior may be made only upon notice to, and with the approval of, such department or agency.

Pub.L. 91-581, § 8, Dec. 24, 1970, 84 Stat. 1569.

References in Text. "This chapter", referred to in subsecs. (a) and (b), read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1008. Byproducts; production or use; water for beneficial uses under State water laws; substantial beneficial production or use; modification or waiver; preexisting rights of lease, claim, or permit holders

If the production, use, or conversion of geothermal steam is susceptible of producing a valuable byproduct or byproducts, including commercially demineralized water for beneficial uses in accordance with applicable State water laws, the Secretary shall require substantial beneficial production or use thereof unless, in individual circumstances he modifies or waives this requirement in the interest of conservation of natural resources or for other reasons satisfactory to him. However, the production or use of such byproducts shall be subject to the rights of the holders of preexisting

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leases, claims, or permits covering the same land or the same minerals, if any.

Pub.L. 91-581, § 9, Dec. 24, 1970, 84 Stat. 1570.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1009. Relinquishment of geothermal rights; effective date; release of lessee or his surety or bond; exceptions

The holder of any geothermal lease at any time may make and file in the appropriate land office a written relinquishment of all rights under such lease or of any legal subdivision of the area covered by such lease. Such relinquishment shall be effective as of the date of its filing. Thereupon the lessee shall be released of all obligations thereafter accruing under said lease with respect to the lands relinquished, but no such relinquishment shall release such lessee, or his surety or bond, from any liability for breach of any obligation of the lease, other than an obligation to drill, accrued at the date of the relinquishment, or from the continued obligation, in accordance with the applicable lease terms and regulations, (1) to make payment of all accrued rentals and royalties, (2) to place all wells on the relinquished lands in condition for suspension or abandonment, and (3) to protect or restore substantially the surface and surface resources.

Pub.L. 91-581, § 10, Dec. 24, 1970, 84 Stat. 1570.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1010. Suspension of operations and production; extension of lease term for period of suspension; waiver, suspension or reduction of rental or royalty

The Secretary, upon application by the lessee, may authorize the lessee to suspend operations and production on a producing lease and he may, on his own motion, in the interest of conservation suspend operations on any lease but in either case he may extend the lease term for the period of any suspension, and he may waive, suspend, or reduce the rental or royalty required in such lease.

Pub.L. 91-581, § 11, Dec. 24, 1970, 84 Stat. 1570.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1011. Termination of leases; grounds; notice; correction of violations; hearing; correction period after administrative decision

Leases may be terminated by the Secretary for any violation of the regulations or lease terms after thirty days notice provided that such violation is not corrected within the notice period, or in the event the violation is such that it cannot be corrected within the notice period then provided that lessee has not commenced in good faith within said notice period to correct such violation and thereafter to proceed diligently to correct such violation. Lessee shall be entitled to a hearing on the matter of such claimed violation or proposed termination of lease if request for a hearing is made to the Secretary within the thirty-day period after notice. The period for correction of violation or commencement to correct such violation of regulations or of lease terms, as aforesaid, shall be extended to thirty days after the Secretary's decision after such hearing if the Secretary shall find that a violation exists.

Pub.L. 91-581, § 12, Dec. 24, 1970, 84 Stat. 1570.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1012. Waiver, suspension, or reduction of rental or royalty

The Secretary may waive, suspend, or reduce the rental or royalty for any lease or portion thereof in the interests of conservation and to encourage the greatest ultimate recovery of geothermal resources, if he

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determines that this is necessary to promote development or that the lease cannot be successfully operated under the lease terms.

Pub.L. 91-581, § 13, Dec. 24, 1970, 84 Stat. 1570.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1013. Surface land use for production, utilization, and conservation of geothermal resources

Subject to the other provisions of this chapter, a lessee shall be entitled to use so much of the surface of the land covered by his geothermal lease as may be found by the Secretary to be necessary for the production, utilization, and conservation of geothermal resources.

Pub.L. 91-581, § 14, Dec. 24, 1970, 84 Stat. 1571.

References in Text. "This chapter" referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1014. Lands subject to geothermal leasing—Terms and conditions for lands withdrawn or acquired for Department of Interior

(a) Geothermal leases for lands withdrawn or acquired in aid of functions of the Department of the Interior may be issued only under such terms and conditions as the Secretary may prescribe to insure adequate utilization of the lands for the purposes for which they were withdrawn or acquired.

Consent and terms and conditions for lands withdrawn or acquired for Department of Agriculture or for lands for power and related purposes

(b) Geothermal leases for lands withdrawn or acquired in aid of functions of the Department of Agriculture may be issued only with the consent of, and subject to such terms and conditions as may be prescribed by, the head of that Department to insure adequate utilization of the lands for the purposes for which they were withdrawn or acquired. Geothermal leases for lands to which section 818 of Title 16 is applicable, may be issued only with the consent of, and subject to, such terms and conditions as the Federal Power Commission may prescribe to insure adequate utilization of such lands for power and related purposes.

Exemption of certain Federal lands

(c) Geothermal leases under this chapter shall not be issued for lands administered in accordance with (1) the Act of August 25, 1916 (39 Stat. 535), as amended or supplemented, (2) for lands within a national recreation area, (3) for lands in a fish hatchery administered by the Secretary, wildlife refuge, wildlife range, game range, wildlife management area, waterfowl production area, or for lands acquired or reserved for the protection and conservation of fish and wildlife that are threatened with extinction, (4) for tribally or individually owned Indian trust or restricted lands, within or without the boundaries of Indian reservations.

Pub.L. 91-581, § 15, Dec. 24, 1970, 84 Stat. 1571.

References in Text. "This chapter" referred to in subsec. (c), read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Act of August 25, 1916 (39 Stat. 535), referred to in subsec. (c), is classified to sections 1, 2, 3, 4, 22, and 43 of Title 16, Conservation.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1015. Citizenship requirement for lessees

Leases under this chapter may be issued only to citizens of the United States, associations of such citizens, corporations organized under the laws of the United States or of any State or the District of Columbia, or governmental units, including, without limitation, municipalities.

Pub.L. 91-581, § 16, Dec. 24, 1970, 84 Stat. 1571.

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References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1016. Administration; multiple use of lands and resources; coexistence of other leases; reciprocal and reasonable operational interference between geothermal and other leases

Administration of this chapter shall be under the principles of multiple use of lands and resources, and geothermal leases shall, insofar as feasible, allow for coexistence of other leases of the same lands for deposits of minerals under the laws applicable to them, for the location and production of claims under the mining laws, and for other uses of the areas covered by them. Operations under such other leases or for such other uses, however, shall not unreasonably interfere with or endanger operations under any lease issued pursuant to this chapter, nor shall operations under leases so issued unreasonably interfere with or endanger operations under any lease, license, claim, or permit issued pursuant to the provisions of any other Act.

Pub.L. 91-581, § 17, Dec. 24, 1970, 84 Stat. 1571.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1017. Cooperative or unit plan of development or operation of geothermal pool, field, or like area; public interest; determination and certification; regulations; protection of parties in interest; authority respecting rate of prospecting, development, and production; leases excepted from control for purposes of State acreage limitation

For the purpose of properly conserving the natural resources of any geothermal pool, field, or like area, or any part thereof, lessees thereof and their representatives may unite with each other, or jointly or separately with others, in collectively adopting and operating under a cooperative or unit plan of development or operation of such pool, field, or like area, or any part thereof, whenever this is determined and certified by the Secretary to be necessary or advisable in the public interest. The Secretary may in his discretion and with the consent of the holders of leases involved, establish, alter, change, revoke, and make such regulations with reference to such leases in connection with the institution and operation of any such cooperative or unit plan as he may deem necessary or proper to secure reasonable protection of the public interest. He may include in geothermal leases a provision requiring the lessee to operate under such a reasonable cooperative or unit plan, and he may prescribe such a plan under which such lessee shall operate, which shall adequately protect the rights of all parties in interest, including the United States. Any such plan may, in the discretion of the Secretary, provide for vesting in the Secretary or any other person, committee, or Federal or State agency designated therein, authority to alter or modify from time to time the rate of prospecting and development and the quantity and rate of production under such plan. All leases operated under any such plan approved or prescribed by the Secretary shall be excepted in determining holdings or control for the purposes of section 1006 of this title.

When separate tracts cannot be independently developed and operated in conformity with an established well-spacing or development program, any lease, or a portion thereof, may be pooled with other lands, whether or not owned by the United States, under a communization or drilling agreement providing for an apportionment of production or royalties among the separate tracts of land comprising the drilling or spacing unit when deter-

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mined by the Secretary to be in the public interest, and operations or production pursuant to such an agreement shall be deemed to be operations or production as to each lease committed thereto.

The Secretary is hereby authorized, on such conditions as he may prescribe, to approve operating, drilling, or development contracts made by one or more lessees of geothermal leases, with one or more persons, associations, or corporations whenever, in his discretion, the conservation of natural products or the public convenience or necessity may require or the interests of the United States may be best served thereby. All leases operated under such approved operating, drilling, or development contracts, and interests thereunder, shall be excepted in determining holdings or control under section 1006 of this title.

Pub.L. 91-581, § 18, Dec. 24, 1970, 84 Stat. 1571.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1018. Data from Federal agencies concerning conversion charges: confidential information

Upon request of the Secretary, other Federal departments and agencies shall furnish him with any relevant data then in their possession or knowledge concerning or having bearing upon fair and adequate charges to be made for geothermal steam produced or to be produced for conversion to electric power or other purposes. Data given to any department or agency as confidential under law shall not be furnished in any fashion which identifies or tends to identify the business entity whose activities are the subject of such data or the person or persons who furnished such information.

Pub.L. 91-581, § 19, Dec. 24, 1970, 84 Stat. 1572.

Legislative History. For legislative 1970 U.S.Code Cong. and Adm.News, p. history and purpose of Pub.L. 91-581, see 5113.

§ 1019. Disposal of moneys from public and other lands

All moneys received under this chapter from public lands under the jurisdiction of the Secretary shall be disposed of in the same manner as moneys received from the sale of public lands. Moneys received under this chapter from other lands shall be disposed of in the same manner as other receipts from such lands.

Pub.L. 91-581, § 20, Dec. 24, 1970, 84 Stat. 1572.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1020. Publication in Federal Register of known geothermal resource area lands; Federal transfer of surface rights and retention of mineral rights; necessity of geothermal leases for development or production of geothermal resources; report of imminent development or production; quiet title proceedings; venue; injunction; judicial determination of inclusion of geothermal resources within Federal mineral reservation; cessation of duty to report and institute proceedings

(a) Within one hundred and twenty days after December 24, 1970, the Secretary shall cause to be published in the Federal Register a determination of all lands which were included within any known geothermal resources area on December 24, 1970. He shall likewise publish in the Federal Register from time to time his determination of other known geothermal resources areas specifying in each case the date the lands were included in such area; and

(b) Geothermal resources in lands the surface of which has passed from Federal ownership but in which the minerals have been reserved to the United States shall not be developed or produced except under geo-

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thermal leases made pursuant to this chapter. If the Secretary of the Interior finds that such development is imminent, or that production from a well heretofore drilled on such lands is imminent, he shall so report to the Attorney General, and the Attorney General is authorized and directed to institute an appropriate proceeding in the United States district court of the district in which such lands are located, to quiet the title of the United States in such resources, and if the court determines that the reservation of minerals to the United States in the lands involved included the geothermal resources, to enjoin their production otherwise than under the terms of this chapter: *Provided*, That upon an authoritative judicial determination that Federal mineral reservation does not include geothermal steam and associated geothermal resources the duties of the Secretary of the Interior to report and of the Attorney General to institute proceedings, as hereinbefore set forth, shall cease.
Pub.L. 91-581, § 21, Dec. 24, 1970, 84 Stat. 1572.

References in Text. "This chapter", referred to in subsec. (b), read "this Act" as originally enacted, meaning the Geothermal Steam Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1021. Federal exemption from State water laws

Nothing in this chapter shall constitute an express or implied claim or denial on the part of the Federal Government as to its exemption from State water laws.

Pub.L. 91-581, § 22, Dec. 24, 1970, 84 Stat. 1573.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Steam Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1022. Waste, prevention; exclusiveness of provisions for acquisition of geothermal rights

(a) All leases under this chapter shall be subject to the condition that the lessee will, in conducting his exploration, development, and producing operations, use all reasonable precautions to prevent waste of geothermal steam and associated geothermal resources developed in the lands leased.

(b) Rights to develop and utilize geothermal steam and associated geothermal resources underlying lands owned by the United States may be acquired solely in accordance with the provisions of this chapter.

Pub.L. 91-581, § 23, Dec. 24, 1970, 84 Stat. 1573.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Steam Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1023. Rules and regulations; scope of provisions

The Secretary shall prescribe such rules and regulations as he may deem appropriate to carry out the provisions of this chapter. Such regulations may include, without limitation, provisions for (a) the prevention of waste, (b) development and conservation of geothermal and other natural resources, (c) the protection of the public interest, (d) assignment, segregation, extension of terms, relinquishment of leases, development contracts, unitization, pooling, and drilling agreements, (e) compensatory royalty agreements, suspension of operations or production, and suspension or reduction of rentals or royalties, (f) the filing of surety bonds to assure compliance with the terms of the lease and to protect surface use and resources, (g) use of the surface by a lessee of the lands embraced in his lease, (h) the maintenance by the lessee of an active development

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program, and (i) protection of water quality and other environmental qualities.

Pub.L. 91-581, § 24, Dec. 24, 1970, 84 Stat. 1573.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Steam Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1024. Disposal of land laws: reservation of geothermal resources and restriction on disposal of lands with geothermal resources; conveyances prior to December 24, 1970, unaffected

As to any land subject to geothermal leasing under section 1002 of this title, all laws which either (a) provide for the disposal of land by patent or other form of conveyance or by grant or by operation of law subject to a reservation of any mineral or (b) prevent or restrict the disposal of such land because of the mineral character of the land, shall hereafter be deemed to embrace geothermal steam and associated geothermal resources as a substance which either must be reserved or must prevent or restrict the disposal of such land, as the case may be. This section shall not be construed to affect grants, patents, or other forms of conveyances made prior to December 24, 1970.

Pub.L. 91-581, § 25, Dec. 24, 1970, 84 Stat. 1573.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

§ 1025. Federal retention of certain mineral rights; extraction of minerals without substantial interference with geothermal production

The United States reserves the ownership of and the right to extract under such rules and regulations as the Secretary may prescribe oil, hydrocarbon gas, and helium from all geothermal steam and associated geothermal resources produced from lands leased under this chapter in accordance with presently applicable laws: *Provided*, That whenever the right to extract oil, hydrocarbon gas, and helium from geothermal steam and associated geothermal resources produced from such lands is exercised pursuant to this section, it shall be exercised so as to cause no substantial interference with the production of geothermal steam and associated geothermal resources from such lands.

Pub.L. 91-581, § 27, Dec. 24, 1970, 84 Stat. 1574.

References in Text. "This chapter", referred to in the text, read "this Act" as originally enacted, meaning the Geothermal Steam Act of 1970, classified to this chapter and amendatory of section 530 of this title.

Legislative History. For legislative history and purpose of Pub.L. 91-581, see 1970 U.S.Code Cong. and Adm.News, p. 5113.

APPENDIX B

CALIFORNIA LAW ON POWER PLANT SITING

The following pages are taken from California Public Resources Code,
Vol. 56, pp. 268-290.

- Sec.
- 25500. Authority; necessity of certification.
 - 25500.5 Certifications sufficient to accommodate projected demand.
 - 25501. Inapplicability of chapter to certain sites and facilities.
 - 25501.3 Proposed sites and related facilities; requirements.
 - 25501.5 Legislative finding; certain proposed sites and facilities in compliance with § 25501(b).
 - 25501.7 Facility or site; proposed construction; waiver of exclusion; application of chapter.
 - 25502. Thermal powerplant or transmission line; proposed construction; notice of intention.
 - 25502.3 Facility; proposed construction; waiver of exclusion; application of chapter.
 - 25502.5 Alternative sites and related facilities; exemption of certain existing sites; notice.
 - 25503. Alternative sites and related facilities; notice; contents.
 - 25504. Statement by applicant; contents.
 - 25504.5 Proposed for site accommodating excess capacity; notice; contents.
 - 25505. Publication of summary of notice of intention; copies to governmental agencies.
 - 25506. Comments and recommendations; governmental agencies.
 - 25506.5 Comments and recommendations; public utilities commission.
 - 25507. Coastal zones; alternative site and related facility; notice; analysis.
 - 25508. Coastal zone; cooperation with commission; participation in proceedings.
 - 25509. Informational hearings, purposes.
 - 25510. Preliminary report; contents.
 - 25511. Safety and reliability factors; information required; analysis; findings.
 - 25512. Preliminary report; findings and conclusions.
 - 25513. Preliminary report; copies; distribution; responses.
 - 25514. Final report; contents.
 - 25514.3 Public utilities commission; comments and recommendations.
 - 25514.5 Conformity of proposal with 10 year forecast; determination.
 - 25515. Final report; hearings.
 - 25516. Approval of notice; necessity for alternative site and related facility proposals; exception.
 - 25516.1 Finding of relative merit of available alternative sites [New].
 - 25516.5 Approval of notice for initial and expanded ultimate capacity; potential multiple-facility site.
 - 25517. Necessity of certification; restoration if certification denied.
 - 25518. Certification required before issuance of certificate of public convenience and necessity; exception.
 - 25518.5 Concurrent initiation of application for certificate; conditions.
 - 25519. Application for certification of site and related facility; data, studies and investigation; impact report; local agencies; copies.
 - 25520. Application; contents.
 - 25520.5 Additional facility at a potential multiple-facility site; reconsideration of prior determination.
 - 25521. Public hearings.
 - 25522. Written decision; time.
 - 25523. Written decision; contents.
 - 25524. Certification if in conformity with 10 year forecast.
 - 25524.1 Nuclear fuel rod reprocessing and storage; conditions for plant certification and land use; findings; resolution of disaffirmance; vested rights [New].
 - 25524.2 Disposal of high-level nuclear waste; conditions for plan certification and land use; findings; resolution of disaffirmance; vested rights [New].
 - 25524.3 Undergrounding and berm containment of nuclear reactors; conditions for plant certification and land use; evaluation and verification by legislature; vested rights [New].

Underline indicates changes or additions by amendment

Sec.

- 25524.5 Certification not in excess of maximum allowable capacity; exception; conditions.
25525. Conformance with standards, ordinances and laws; exception.
25526. Findings necessary for site approval.
25527. Prohibited areas as sites for facilities; exceptions.
25528. Acquisition of development rights by applicant; population densities; condemnation; nuclear facility; governmental land use restrictions.
25529. Public use area; maintenance by applicant or dedication to local agency or state.
25530. Reconsideration of decision or order; motion; petition.
25531. Judicial review; evidence; record.
25532. Monitoring system.
25534. Amendment or revocation of certification; grounds.
25535. Costs for ratemaking purposes.
25536. Use of 10 year forecast for acceptability of proposals; hearings; revisions of forecast.
25537. Approval of application; submission of information to federal agencies.
25538. Reviewal by local agencies; fees, reimbursement.
25539. Rules and regulations.
25540. Geothermal powerplant and related facilities; alternative sites not required; findings; decision; time.
25541. Thermal powerplants; exemption from provisions of chapter; conditions.
25542. Inapplicability of division to certain sites and facilities; power of commission ineffective.

Chapter 6 was added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.

Electrical load management standards, requisite certification of compliance, see § 25403.5.

Library References
Electricity $\Rightarrow$ 1.
C.J.S. Electricity § 1 et seq.

§ 25500. Authority; necessity of certification

In accordance with the provisions of this division, the commission shall have the exclusive power to certify all sites and related facilities in the state, * * * whether a new site and related facility or a change or addition to an existing facility. The issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law, for such use of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law.

After the effective date of this division, no construction of any facility or modification of any existing facility shall be commenced without first obtaining certification for any such site and related facility by the commission, as prescribed in this division.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 6.)

1976 Amendment. Deleted from the first sentence the words "except for any site and related facility proposed to be located in the permit area" following "related facilities in the state."

1. In general

Since the Energy Act provides that the state energy commission evaluate, regulate, and approve thermal power plant

sites and facilities, a county government would not have power to regulate or prohibit construction of such plant if the plant should fall under jurisdiction of the state commission, but the commission must solicit extensive comments and recommendations from county government concerning power plant site and facility proposals. 58 Ops.Atty.Gen. 729, 10-31-75.

§ 25500.5 Certifications sufficient to accommodate projected demand

The commission shall certify sufficient sites and related facilities which are required to provide a supply of electric power sufficient to accommodate the demand projected in the most recent forecast of statewide and service area electric power demands adopted pursuant to subdivision (b) of Section 25309.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

Asterisks * * * indicate deletions by amendment

§ 25501

PUBLIC RESOURCES CODE

§ 25501. Inapplicability of chapter to certain sites and facilities

The provisions of this chapter do not apply to any site and related facility which meets either of the following requirements:

(a) For which the Public Utilities Commission has issued a certificate of public convenience and necessity before the effective date of this division.

(b) For which construction is planned to commence within three years from the effective date of this division.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

1. In general

While there is no specific time limit within which PG&E must commence actual construction of nuclear power plant in Stanislaus County, PG&E must diligently pursue its plans to do so within three years of effective date of the War-

ren-Alquist State Energy Resources Conservation and Development Act, or it could, under appropriate circumstances, be deemed to have impliedly waived exemption as provided in this section through inaction or unreasonable delay. 58 Ops. Atty.Gen. 729, 10-31-75.

§ 25501.3 Proposed sites and related facilities; requirements

A proposed site and related facility shall be deemed to be one for which construction is planned to commence within three years from the effective date of this division within the meaning of subdivision (b) of Section 25501, if all of the following are satisfied:

(a) The planned operating date and the planned capacity are consistent with the forecast of electric loads either set forth in a report submitted under Sections 2 and 3 of General Order 131 of the Public Utilities Commission as of March 31, 1974, or otherwise disclosed in a report of a public agency as of March 31, 1974.

(b) The need to commence construction within three years from the effective date of this division is reasonably related to the planned operating date of such site and related facility.

(c) Substantial funds have been expended or committed for planning, site investigations, site acquisition, or equipment procurement for such site and related facility prior to the effective date of this division.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25501.5 Legislative finding; certain proposed sites and facilities in compliance with § 25501(b)

The Legislature finds and declares that the following proposed sites and facilities with the associated estimated generating capacities meet the requirements of subdivision (b) of Section 25501:

(a) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on March 1, 1974, in response to Sections 2 and 3 of General Order 131 of the Public Utilities Commission, three gas turbine powerplants, each having a generating capacity of 52 megawatts, commonly known as Potrero Unit 4, Potrero Unit 5 and Potrero Unit 6, to be located in the City and County of San Francisco; a gas turbine powerplant having a generating capacity of 52 megawatts, commonly known as Hunters Point Unit 1, to be located in the City and County of San Francisco; a gas turbine powerplant having a generating capacity of 200 megawatts, commonly known as Station C; a geothermal powerplant having a generating capacity of 106 megawatts, commonly known as Geysers Unit 12, to be located in Sonoma County; a geothermal powerplant having a generating capacity of 110 megawatts, commonly known as Geysers Unit 14, to be located in Sonoma County; a geothermal powerplant having a generating capacity of 55 megawatts, commonly known as Geysers Unit 15, to be located in Sonoma County; a geothermal powerplant having a generating capacity of 135 megawatts, commonly known as Geysers Unit 13, to be located in Lake County; a geothermal powerplant having a generating capacity of 110 megawatts, planned for operation in 1978, to be located in Sonoma County or Lake County; a geothermal powerplant having a generating capacity of 110 megawatts, planned for operation in 1979, to be located in Sonoma County or Lake County; a combined-cycle powerplant having a generating capacity of 800 megawatts, commonly known as Thermal 78, to be located in Contra Costa County near the City of Pittsburg; two combined-cycle powerplants, each having a generating capacity of 800 megawatts, commonly known as Thermal 79 and Thermal

81, to be located in Contra Costa County or Solano County; and a nuclear powerplant having a generating capacity of 1,100 megawatts, commonly known as Nuclear A to be located in Region 1, as shown on page 27 of the report of the Pacific Gas and Electric Company submitted March 1, 1974, in response to Sections 2 and 3 of General Order 131 of the Public Utilities Commission, or at the location commonly known as Diablo Canyon in San Luis Obispo County.

(b) As described in the report of the Southern California Edison Company submitted to the Public Utilities Commission on March 8, 1974, in response to Sections 2 and 3 of General Order 131 of the Public Utilities Commission, two combined-cycle powerplants, each with a generating capacity of 236 megawatts, commonly known as Cool Water Unit 3 and Cool Water Unit 4, to be located in San Bernardino County; six combined-cycle powerplants, each having a generating capacity of 236 megawatts, commonly known as Huntington Beach Unit 6, Huntington Beach Unit 7, Huntington Beach Unit 8, Huntington Beach Unit 9, Huntington Beach Unit 10 and Huntington Beach Unit 11, to be located in the City of Huntington Beach; three combined-cycle powerplants, each with a generating capacity of 414 megawatts, commonly known as Lucerne Valley Unit 1, Lucerne Valley Unit 2 and Lucerne Valley Unit 3, to be located in San Bernardino County; and two nuclear powerplants, each having a generating capacity of 760 megawatts, commonly known as the Desert Nuclear Project.

(c) As described in the report of the San Diego Gas and Electric Company submitted to the Public Utilities Commission on March 22, 1974, in response to Sections 2 and 3 of General Order 131 of the Public Utilities Commission, two gas turbine powerplants, each having a generating capacity of 64 megawatts, commonly known as South Bay Gas Turbine Unit 3 and South Bay Gas Turbine Unit 4, to be located in San Diego County; a fossil-fueled powerplant having a generating capacity of 292 megawatts, commonly known as Encina Unit 5, to be located in San Diego County; a combined-cycle powerplant having a generating capacity of 404 megawatts, planned for operation in 1979, to be located in San Diego County; and a nuclear powerplant having a generating capacity of 1,200 megawatts, commonly known as the Desert Nuclear Project, to be located in Riverside County.

(d) As described in the report of the Pacific Gas and Electric Company to the Public Utilities Commission submitted March 1, 1974, in response to Sections 2 and 3 of the General Order 131 of the Public Utilities Commission, a gas turbine powerplant having a generating capacity of 150 megawatts, commonly known as SMUD Gas Turbines, to be located in Sacramento County; and a nuclear powerplant having a generating capacity of 1,100 megawatts, commonly known as Rancho Seco Unit 2, to be located in Sacramento County.

(e) As described in the report of the Department of Water and Power of the City of Los Angeles submitted to the Public Utilities Commission on March 18, 1974, in response to Sections 2 and 3 of General Order 131 of the Public Utilities Commission, a nuclear powerplant having a generating capacity of 1,300 megawatts, commonly known as the San Joaquin Nuclear Project, to be located in Kern County near the City of Wasco.

(f) Four geothermal powerplants, each having a generating capacity of 55 megawatts, presently planned to be constructed by the City of Burbank and to be located in Imperial County.

(g) Four geothermal powerplants, each having a generating capacity of 55 megawatts, presently planned to be constructed by the City of Burbank and located in Inyo County.

(h) Two geothermal powerplants, each having a generating capacity of 110 megawatts, presently planned to be constructed by the Northern California Power Agency and located in Sonoma County.

Nothing in this section shall be construed to indicate that the sites and facilities specified in this section are approved by the Legislature. The inclusion of any site and related facility in this section means that the provisions of this chapter do not apply to any such site or facility, to the extent that Section 25501.7 or 25502.3 is made applicable, and that such site and related facility is subject to any and all other provisions of law.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25501.5

PUBLIC RESOURCES CODE

1. In general. While there is no specific time limit within which PG&E must commence actual construction of nuclear power plant in Stanislaus County, PG&E must diligently pursue its plans to do so within three years of effective date of the War-

ren-Alquist State Energy Resources Conservation and Development Act, or it could, under appropriate circumstances, be deemed to have impliedly waived exemption as provided in Pub.Res.C. § 25501 through inaction or unreasonable delay. 58 Ops.Atty.Gen. 729, 10-31-75.

§ 25501.7 Facility or site; proposed construction; waiver of exclusion; application of chapter

Any person proposing to construct a facility or a site to which Section 25501 applies may waive the exclusion of such site and related facility from the provisions of this chapter by submitting to the commission a notice to that effect on or after July 1, 1976, and any and all of the provisions of this chapter shall apply to the construction of such facility.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25502. Thermal powerplant or transmission line; proposed construction; notice of intention

Each person proposing to construct a thermal powerplant or electric transmission line on a site shall submit to the commission notice of intention to file an application for the certification of such site and related facility or facilities. The notice shall be an attempt primarily to determine the suitability of the proposed sites to accommodate the facilities and to determine the general conformity of the proposed sites and related facilities with standard of the commission and forecasts adopted pursuant to Sections 25216.3 and 25309. The notice shall be in the form prescribed by the commission and shall be supported by such information as the commission may require.

Any site and related facility once found to be acceptable pursuant to Section 25516 is, and shall continue to be, eligible for consideration in an application for certification without further proceedings required for a notice under this chapter.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

25502.3 Facility; proposed construction; waiver of exclusion; application of chapter

Except as provided in Section 25501.7, any person proposing to construct a facility excluded from the provisions of this chapter may waive such exclusion by submitting to the commission a notice of intention to file an application for certification, and any and all of the provisions of this chapter shall apply to the construction of such facility.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25502.5 Alternative sites and related facilities; exemption of certain existing sites; notice

The notice is not required to contain three alternative sites and related facilities for additional generating facilities on land owned by an electric utility before the effective date of this division at existing sites east of the town of Clay Station in Sacramento County, in the location commonly known as Diablo Canyon in San Luis Obispo County, and near the City of Pittsburg in Contra Costa County.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25503. Alternative sites and related facilities; notice; contents

Each notice of intention to file an application shall contain at least three alternative sites and related facilities, at least one of which shall not be located in whole or in part in the coastal zone. In addition, the alternative sites and related electrical facilities may be proposed from an inventory of sites which have previously been approved by the commission in a notice of intent or may be proposed from sites previously examined. If modification of an existing facility is proposed, the commission may require that alternative methods of providing the additional service or making the proposed modification be specified in the notice.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25504. Statement by applicant; contents

The notice of intention shall include a statement by the applicant describing the location of the proposed sites by section or sections, range and township, and county; a summary of the proposed design criteria of the facilities; the type or types of fuels to be used; the methods of construction and operation; the proposed location of facilities and structures on each site; a preliminary statement of the relative economic, technological, and environmental advantages and disadvantages of the alternative site and related facility proposals; a statement of need for the facility and information showing the compatibility of the proposals with the most recent biennial report issued pursuant to Section 25309; and any other information that an electric utility deems desirable to submit to the commission.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25504.5 Proposal for site accommodating excess capacity; notice; contents

An applicant may, in the notice, propose a site to be approved which will accommodate a potential maximum electric generating capacity in excess of the capacity being proposed for the initial approval of the commission. If such a proposal is made, the notice shall include, but not be limited to, in addition to the information specified in Section 25504, all of the following:

(a) The number, type, and energy source of electric generating units which the site is proposed ultimately to accommodate and the maximum generating capacity for each unit.

(b) The projected installation schedule for each unit.

(c) The impact at the site when fully developed, on the environment and public health and safety.

(d) The amount and sources of cooling water needed at the fully developed site.

(e) The location and specifications of auxiliary facilities planned for each state of development including, but not limited to, pipelines, waste storage facilities, fuel storage facilities, switchyards, coolant lines, coolant outfalls, and cooling ponds, lakes, or towers.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25505. Publication of summary of notice of intention; copies to governmental agencies

Upon receipt of a notice, the commission shall cause a summary of the notice to be published in a newspaper of general circulation in each county in which the sites and related facilities, or any part thereof, designated in the notice are proposed to be located. The commission shall also transmit a copy of the notice to the Public Utilities Commission, for sites and related facilities requiring a certificate of public convenience and necessity, and to other federal, state, regional, and local agencies having an interest in matters pertinent to the proposed facilities at any of the alternative sites. A copy of the notice shall also be transmitted to the Attorney General.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25506. Comments and recommendations; governmental agencies

The commission shall request the appropriate local, regional, state, and federal agencies to make comments and recommendations regarding the design, operation, and location of the facilities designated in the notice, in relation to environmental quality, public health and safety, and other factors on which they may have expertise.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

1. In general

Since the Energy Act provides that the state energy commission evaluate, regulate, and approve thermal power plant sites and facilities, a county government would not have power to regulate or prohibit construction of such plant if the

plant should fall under jurisdiction of the state commission, but the commission must solicit extensive comments and recommendations from county government concerning power plant site and facility proposals. 58 Ops.Atty.Gen. 729, 10-31-75.

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§ 25506.5

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§ 25506.5 Comments and recommendations; public utilities commission

The commission shall request the Public Utilities Commission, for sites and related facilities requiring a certificate of public convenience and necessity, to make comments and recommendations regarding the design, operation, and location of the facilities designated in the notice in relation to the economic, financial, rate, system reliability, and service implications of the proposed facilities.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25507. Coastal zones; alternative site and related facility; notice; analysis

If any alternative site and related facility proposed in the notice is proposed to be located, in whole or in part, within the coastal zone and, * * * the commission shall transmit a copy of the notice to the California Coastal * * * Commission. The * * * California Coastal * * * Commission * * * shall analyze the notice and prepare the report and findings prescribed by subdivision (d) of Section 30413 prior to completion of the preliminary report required by Section 25510.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 7.)

§ 25508. Coastal zone; cooperation with commission; participation in proceedings

The commission shall cooperate with, and render advice to, the California Coastal * * * Commission * * * in studying applications for any site and related facility proposed to be located, in whole or in part, within the * * * coastal zone, if requested by the California Coastal * * * Commission. * * * The California Coastal * * * Commission * * * may participate in public hearings on the notice and on the application for site and related facility certification * * * as an interested * * * party in such proceedings.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 8.)

§ 25509. Informational hearings; purposes

The commission shall conduct a public informational hearing or hearings in the county of the proposed sites and related facilities no earlier than 60 nor later than 90 days from receipt of a notice of intention to file an application. The place of such public informational hearing or hearings shall be as close as practicable to the proposed sites. Any person may participate to the extent deemed reasonable and relevant by the presiding member of the commission, in any such hearing. Such hearings on the original three sites and related facilities shall be concluded within 90 days of their commencement. Such hearings shall be conducted in order to accomplish all of the following purposes:

(a) To set forth the electrical demand basis for the proposed site and related facility.

(b) To provide knowledge and understanding of proposed facilities and sites.

(c) To obtain the views and comments of the public and concerned governmental agencies on the environmental, public health and safety, economic, social, and land use impacts of the facility at the proposed sites.

(d) To solicit information regarding reasonable alternative sources of the electric generating capacity or energy to be provided by alternative sites and related facilities, or combinations thereof, which will better carry out the policies and objectives of this division.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

1. In general

Since the Energy Act provides that the state energy commission evaluate, regulate, and approve thermal power plant sites and facilities, a county government would not have power to regulate or prohibit construction of such plant if the

plant should fall under jurisdiction of the state commission, but the commission must solicit extensive comments and recommendations from county government concerning power plant site and facility proposals. 58 Ops.Atty.Gen. 729, 10-31-75.

Underline indicates changes or additions by amendment

§ 25510. Preliminary report; contents

Within 90 days after the conclusion of such hearing or hearings, the commission shall prepare and make public a preliminary report on the notice of intention to file an application. Such report shall contain the comments and recommendations of local authorities as to the construction of any thermal powerplant or electric transmission line on a particular site. The commission may include within the preliminary report any other alternatives proposed by the commission or presented to the commission at a public hearing prior to preparation of the preliminary report. The preliminary report shall be published and made available to the public and to interested local, regional, state, and federal agencies. (Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25511. Safety and reliability factors; information required; analysis; findings

The commission shall review the factors related to safety and reliability of the facilities at each of the alternative sites designated in the notice. In addition to other information requested of the applicant, the commission shall, in determining the appropriateness of sites and related facilities, require detailed information on proposed emergency systems and safety precautions, plans for transport, handling and storage of wastes and fuels, proposed methods to prevent illegal diversion of nuclear fuels, special design features to account for seismic and other potential hazards, proposed methods to control density of population in areas surrounding nuclear powerplants, and such other information as the commission may determine to be relevant to the reliability and safety of the facility at the proposed sites. The commission shall analyze the information provided by the applicant, supplementing it, where necessary, by onsite investigations and other studies. The commission shall determine the adequacy of measures proposed by the applicant to protect public health and safety, and shall include its findings in the preliminary report required by Section 25510. (Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25512. Preliminary report; findings and conclusions

The preliminary report shall be based upon testimony presented during any hearing on the notice, the comments transmitted by the Public Utilities Commission and local, regional, state, and federal agencies and the public to the commission, and the independent studies conducted by the commission's staff. The preliminary report shall include findings and conclusions, within the limitation of the information required in Sections 25502, 25503, 25504, and 25511, with respect to all of the following:

(a) The degree to which each alternative site and related facility proposal designated in the notice or presented at a hearing and considered by the commission is in conformity with both of the following:

(1) The forecast of statewide and service area electric power demands adopted pursuant to Section 25309, except as provided in Section 25514.5.

(2) Applicable local, regional, state, and federal standards, ordinances, and laws.

(b) The relative merit of each alternative site and related facility proposal designated in the notice or presented at a public hearing and considered by the commission.

(c) The safety and reliability of the facility or facilities at each of the sites designated in the notice as determined by the commission pursuant to Section 25511.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25513. Preliminary report; copies; distribution; responses

Within 30 days of the publication of the preliminary report, a copy of the report will be distributed to any person requesting the report prior to distribution. Any such person may respond in writing to the preliminary report. Such response shall be submitted to the commission no later than 60 days after distribution of the report.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

Asterisks * * * indicate deletions by amendment

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§ 25514. Final report; contents

No later than 120 days after distribution of the preliminary report, a final report shall be prepared and distributed. The final report shall include, but not be limited to, all of the following:

(a) The findings and conclusions of the commission regarding the conformity of alternative sites and related facilities designated in the notice or presented at the informational hearing or hearings and review by the commission with both of the following:

(1) The 10-year forecast of statewide and service area electric power demands adopted pursuant to subdivision (b) of Section 25309, except as provided in Section 25514.5.

(2) The provisions of any state law or local or regional ordinance or regulation, including any long-range land use plans or guidelines adopted by the state or by any local or regional planning agency, which would be applicable but for the exclusive authority of the commission to certify sites and related facilities; and the standards adopted by the commission pursuant to Section 25216.3.

(b) Any findings and comments submitted by the California Coastal Commission * * * pursuant to Section 25507 and subdivision (d) of Section 30413.

(c) The commission's findings on the acceptability and relative merit of each alternative siting proposal designated in the notice or presented at the hearings and reviewed by the commission. The specific findings of relative merit shall be made pursuant to the provisions of Sections 25502 to 25516, inclusive. In its findings on any alternative siting proposal, the commission may specify modification in the design, construction, location, or other conditions which will meet the standards, policies, and guidelines established by the commission.

(d) Any conditions, modifications, or criteria proposed for any site and related facility proposal resulting from the commission's evaluation pursuant to subdivision (c) of Section 25512.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 9.)

§ 25514.3 Public utilities commission; comments and recommendations

In specifying any modifications, conditions, or criteria pursuant to Section 25514, for sites and related facilities requiring a certificate of public convenience and necessity, the commission shall request the comments and recommendations of the Public Utilities Commission on the economic, financial, rate, system reliability, and service implications of such modifications, conditions, or criteria.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25514.5 Conformity of proposal with 10 year forecast; determination

In considering the acceptability of a site proposed to accommodate ultimately additional power-generating capacity, the commission, in determining, pursuant to Sections 25514 and 25512, the conformity of the facilities proposed in the notice with the 10-year forecast of statewide and service area electric power demands adopted pursuant to subdivision (b) of Section 25309, shall base its determination only on such initial facilities as are proposed for operation within the forthcoming 10-year period. Additional facilities projected to be operating at the site at a time beyond the forthcoming 10-year period shall not be considered in the determination of conformity with the electric power demand forecast.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25515. Final report; hearings

No later than 30 days after the final report is distributed, a hearing or hearings on the final report shall be commenced. Such hearings shall be concluded within 30 days of their commencement.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

Underline indicates changes or additions by amendment

§ 25516. Approval of notice; necessity for alternative site and related facility proposals; exception

The approval of the notice by the commission shall be based upon findings pursuant to Section 25514. The commission's decision shall be issued within 60 days after the conclusion of the hearings on the final report. The notice shall not be approved unless the commission finds at least two alternative site and related facility proposals considered in the commission's final report as acceptable. If the commission does not find at least two sites and related facilities acceptable, additional sites and related facilities may be proposed by the applicant which shall be considered in the same manner as those proposed in the original notice.

If the commission finds that a good faith effort has been made by the person submitting the notice to find an acceptable alternative site and related facility and that there is only one acceptable site and related facility among those submitted, the commission may approve the notice based on the one site and related facility. If a notice is approved based on one site and related facility, the commission may require a new notice to be filed to identify acceptable alternative sites and related facilities for the one site and related facility approved.

If the commission finds that additional electric generating capacity is needed to accommodate the electric power demand forecast pursuant to subdivision (b) of Section 25309 and, after the commission finds that a good faith effort was made by the person submitting the notice to propose an acceptable site and related facility, it falls to find any proposed site and related facility to be acceptable, the commission shall designate, at the request of and at the expense of the person submitting the notice, a feasible site and related facility for providing the needed electric generating capacity.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25516.1 Finding of relative merit of available alternative sites

If a site and related facility found to be acceptable by the commission pursuant to Section 25516 is located in the coastal zone, no application for certification may be filed pursuant to Section 25519, unless the commission has determined pursuant to Section 25514, that such site and related facility have greater relative merit than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable by the commission pursuant to Section 25516.

(Added by Stats.1976, c. 1330, p. —, § 10.)

Library References

Health and Environment ⇨25.5.

§ 25516.5 Approval of notice for initial and expanded ultimate capacity; potential multiple-facility site

On a notice which proposes an expanded ultimate electric generating capacity for a site, the commission may, based upon findings pursuant to Section 25514, either approve the notice only for the initial facility or facilities proposed for operation within the forthcoming 10-year period or may approve the notice for the initial facility or facilities and find the site acceptable for additional generating capacity of the type tentatively proposed. The maximum allowable amount and type of such additional capacity shall be determined by the commission.

If a notice is approved which includes a finding that a particular site is suitable to accommodate a particular additional generating capacity, the site shall be designated a potential multiple-facility site. The commission may, in determining the acceptability of a potential multiple-facility site, specify conditions or criteria necessary to insure that future additional facilities will not exceed the limitations of the site.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25517. Necessity of certification; restoration if certification denied

Except as provided in Sections 25501 and 25501.3, after the effective date of this division, no construction of any thermal powerplant or electric transmission line shall be commenced by any electric utility without first obtaining certification.

Asterisks * * * indicate deletions by amendment

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tion as prescribed in this division. Any onsite improvements not qualifying as construction may be required to be restored as determined by the commission as necessary to protect the environment, if certification is denied.
(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25518. Certification required before issuance of certificate of public convenience and necessity; exception

Except as provided in subdivision (b) of Section 25501, the Public Utilities Commission shall issue no certificate of public convenience and necessity for a site or related electrical facilities unless the utility has obtained a certificate from the commission.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25518.5 Concurrent initiation of application for certificate; conditions

Nothing in this division shall preclude the concurrent initiation of an application for a certificate of public convenience and necessity from the Public Utilities Commission subject to the condition specified in Section 25518.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25519. Application for certification of site and related facility; data, studies and investigation; impact report; local agencies; copies

(a) In order to obtain certification for a site and related facility, an application for certification of such site and related facility shall be filed with the commission. Such application shall be in a form prescribed by the commission and shall be filed with the commission no later than 18 months before any construction is to commence. Such application shall be for a site and related facility which has been found to be acceptable by the commission pursuant to Section 25516, or for an additional facility at a site which has been designated a potential multiple-facility site pursuant to Section 25514.5 and found to be acceptable pursuant to Sections 25516 and 25516.5. An application for an additional facility at a potential multiple-facility site shall be subject to the conditions and review specified in Section 25520.5. An application may not be filed for a site and related facility, if there is no suitable alternative for the site and related facility which was previously found to be acceptable by the commission, unless the commission has approved the notice based on the one site as specified in Section 25516.

(b) The commission, upon its own motion or in response to the request of any party, may require the applicant to submit any information, document, or data, in addition to the attachments required by subdivision (i), which it determines is reasonably necessary to make any decision on the application.

(c) Upon receipt of the application, the commission shall undertake studies and investigations necessary to comply with the environmental impact reporting procedures established pursuant to Section 21100. For purposes of preparation and approval of the environmental impact report on a proposed site and related facility, the commission shall be the lead agency as provided in Section 21165. * * * Except as otherwise provided in Division 13 (commencing with Section 21000), the environmental impact report shall be completed within one year after receipt of the application.

(d) If the site and related facility specified in the application is proposed to be located in the coastal zone, * * * the commission shall transmit a copy of the application to the California Coastal Commission for its review and comments.

(e) Upon receipt of an application, the commission shall forward the application to local governmental agencies having land use and related jurisdiction in the area of the proposed site and related facility. Such local agencies shall review the application and submit comments on, among other things, the design of the facility, architectural and aesthetic features of the facility, access to highways, landscaping and grading, public use of lands in the area of the facility, and other appropriate aspects of the design, construction, or operation of the proposed site and related facility.

(f) Upon receipt of an application, the commission shall cause a summary of the application to be published in a newspaper of general circulation in the county

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in which the site and related facilities, or any part thereof, designated in the application, is proposed to be located. The commission shall transmit a copy of the application to each federal and state agency having jurisdiction or special interest in matters pertinent to the proposed site and related facilities, and to the Attorney General.

(g) The adviser shall require that adequate notice is given to the public and that the procedures specified by this division are complied with.

(h) For any proposed site and related facility requiring a certificate of public convenience and necessity, the commission shall transmit a copy of the application to the Public Utilities Commission and request the comments and recommendations of the Public Utilities Commission on the economic, financial, rate, system reliability, and service implications of the proposed site and related facility. In the event the commission requires modification of the proposed facility, the commission shall consult with the Public Utilities Commission regarding the economic, financial, rate, system reliability, and service implications of such modifications.

(i) The commission shall transmit a copy of the application to any governmental agency not specifically mentioned in this act, but which it finds has any information or interest in the proposed site and related facilities, and shall invite the comments and recommendations of each such agency. The commission shall request any relevant laws, ordinances, or regulations which any such agency has promulgated or administered.

(j) An application for certification of any site and related facilities shall contain a listing of every federal agency from which any approval or authorization concerning the proposed site is required, specifying the approvals or authorizations obtained at the time of the application and the schedule for obtaining any approvals or authorizations pending.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 11.)

1. In general

Since the Energy Act provides that the state energy commission evaluate, regulate, and approve thermal power plant sites and facilities, a county government would not have power to regulate or prohibit construction of such plant if the

plant should fall under jurisdiction of the state commission, but the commission must solicit extensive comments and recommendations from county government concerning power plant site and facility proposals. 58 Ops.Atty.Gen. 729, 10-31-75.

§ 25520. Application; contents

The application shall contain the following and such other information as the commission by regulation may require:

(a) A detailed description of the design, construction, and operation of the proposed facility.

(b) Safety and reliability information, including, in addition to documentation previously provided pursuant to Section 25511, planned provisions for emergency operations and shutdowns.

(c) Available site information, including maps and descriptions of present and proposed development and, as appropriate, geological, aesthetic, ecological, seismic, water supply, population and load center data, and justification for the particular site proposed.

(d) Such other information relating to the design, operation, and siting of the facility as the commission may specify.

(e) A statement of need providing information showing compatibility of the proposed facility with the most recent biennial report issued by the commission pursuant to Section 25309.

(f) A description of the facility, the cost of the facility, the fuel to be used, the source of fuel, fuel cost, plant service life and capacity factor, and generating cost per kilowatt hour.

(g) A description of any electric transmission lines including the estimated cost of the proposed electric transmission line; a map in suitable scale of the proposed routing showing details of the rights-of-way in the vicinity of settled areas, parks, recreational areas, and scenic areas, and existing transmission lines

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within one mile of the proposed route; and justification for the route and a preliminary description of the effect of the proposed electric transmission line on the environment, ecology, and scenic, historic and recreational values.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25520.5 Additional facility at a potential multiple-facility site; reconsideration of prior determination

(a) In reviewing an application for an additional facility at a potential multiple-facility site, the commission shall undertake a reconsideration of its prior determinations in the final report on the notice for the site issued pursuant to Section 25514, based on current conditions and other reasonable and feasible alternatives to the proposed facility.

(b) Within 180 days of the filing of the application for an additional facility at a potential multiple-facility site and after adequate public hearings, the commission shall issue its decision on the acceptability of the proposed facility based on the reconsideration specified in subdivision (a) of this section. A negative determination shall be the final decision of the commission on the application and subject to judicial review pursuant to Section 25531. An affirmative determination shall not be a final decision of the commission on the application.

(c) The decision of the commission on an application for an additional facility at a potential multiple-facility site receiving a favorable determination pursuant to subdivision (b) of this section shall be issued within 24 months after the filing of the application or at such later time as is mutually agreed upon by the commission and the applicant.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25521. Public hearings

No earlier than 90 nor later than 240 days after the date of the filing of an application, the commission shall commence a public hearing or hearings thereon in Sacramento, San Francisco, Los Angeles, or San Diego, whichever city is nearest the proposed site. Additionally, the commission may hold a hearing or hearings in the county in which the proposed site and related facilities are to be located.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25522. Written decision; time

Except as provided in subdivision (c) of Section 25520.5, within 18 months of the filing of an application for certification or at such later time as is mutually agreed by the commission and the applicant, the commission shall issue a written decision as to such application.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25523. Written decision; contents

The commission shall prepare a written decision after a public hearing or hearings on an application, which shall include all of the following:

(a) Specific provisions relating to the manner in which the proposed facility is to be designed, sited, and operated in order to protect environmental quality and assure public health and safety, and in the case of a site to be located in the coastal zone, to meet the objectives of Division 20 (commencing with Section 30000) as may be specified in the report submitted by the California Coastal Commission pursuant to subdivision (d) of Section 30413, unless the commission specifically finds that the adoption of the provisions specified in the report would result in greater adverse effect on the environment or that the provision proposed in the report would not be feasible.

(b) Findings regarding the conformity of the proposed site and related facilities with standards adopted by the commission pursuant to Section 25216.3 and subdivision (d) of Section 25402, with public safety standards and the applicable air and water quality standards, and with other relevant local, regional, state, and federal standards, ordinances, or laws. If the commission finds that there is non-

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compliance with any state, local, or regional ordinance or regulation in the application, it shall consult and meet with the state, local, or regional governmental agency concerned to attempt to correct or eliminate the noncompliance. If the noncompliance cannot be corrected or eliminated, the commission shall inform the state, local, or regional governmental agency if it makes the findings required by Section 25524.

(c) Provision for restoring the site as necessary to protect the environment, if the commission denies approval of the application.

(d) Findings regarding the conformity of the proposed facility with the 10-year forecast of statewide and service area electric power demands adopted pursuant to subdivision (b) of Section 25309.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 12.)

1976 Amendment. Added that part of subd. (a) following "assure public health and safety."

§ 25524. Certification if in conformity with 10 year forecast

The commission shall not certify any facility contained in the application, unless its findings with respect to subdivision (d) of Section 25523 are in the affirmative. (Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25524.1 Nuclear fuel rod reprocessing and storage; conditions for plant certification and land use; findings; resolution of disaffirmance; vested rights

(a) No nuclear fission thermal powerplant requiring the reprocessing of fuel rods, including any to which the provisions of this chapter do not otherwise apply, excepting any having vested right as defined in this section, shall be permitted land use in the state or, where applicable, certified by the commission until both of the following conditions are met:

(1) The commission finds that the United States through its authorized agency has identified and approved, and there exists a technology for the construction and operation of, nuclear fuel rod reprocessing plants.

(2) The commission has reported its findings and the reasons therefor pursuant to paragraph (1) to the Legislature. Such reports of findings shall be assigned to appropriate policy committees for review. The commission may proceed to certify nuclear fission thermal powerplants 100 legislative days after reporting its findings unless within those 100 legislative days either house of the Legislature adopts by a majority vote of its members a resolution disaffirming the findings of the commission made pursuant to paragraph (1).

A resolution of disaffirmance shall set forth the reasons for the action and shall provide to the extent possible, guidance to the commission as to an appropriate method of bringing the commission's findings into conformance with paragraph (1).

If a disaffirming resolution is adopted, the commission shall reexamine its original findings consistent with matters raised in the resolution. On conclusion of its reexamination, the commission shall reduce its findings to writing with the reasons therefor and shall transmit them to the Legislature.

If the findings are that the conditions of paragraph (1) have been met, the commission may proceed to certify nuclear fission thermal powerplants 100 legislative days after reporting its findings to the Legislature unless within those 100 legislative days both houses of the Legislature act by statute to declare the findings null and void and takes appropriate action.

To allow sufficient time for the Legislature to act, the reports of findings of the commission shall be submitted to the Legislature at least six calendar months prior to the adjournment of the Legislature sine die.

(b) The commission shall further find on a case-by-case basis that facilities with adequate capacity to reprocess nuclear fuel rods from a certified nuclear facility or to store such fuel if such storage is approved by an authorized agency of the United States are in actual operation or will be in operation at the time such nuclear facility requires such reprocessing or storage; provided, however, that such

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storage of fuel is in an offsite location to the extent necessary to provide continuous onsite full core reserve storage capacity.

(c) The commission shall continue to receive and process notices of intention and applications for certification pursuant to this division, but shall not issue a decision pursuant to Section 25523 granting a certificate until the requirements of this section have been met. All other permits, licenses, approvals, or authorizations for the entry or use of the land, including orders of court, which may be required may be processed and granted by the governmental entity concerned but construction work to install permanent equipment or structures shall not commence until the requirements of this section have been met.

For purposes of this section, the vested right to construct a nuclear thermal powerplant shall exist if, prior to the date on which this section is chaptered, an electric utility has performed substantial construction on such powerplant and has incurred substantial expense for construction and for necessary materials for such powerplant, including, but not limited to, the following sites and facilities, with the associated estimated generating capacities:

(1) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on December 23, 1966, pursuant to Section 1001 of the Public Utilities Code, one nuclear thermal powerplant, having a generating capacity of 1,060 megawatts, commonly known as Diablo Canyon Unit 1, to be located in San Luis Obispo County.

(2) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on February 16, 1968, pursuant to Section 1001 of the Public Utilities Code, one nuclear thermal powerplant, having a generating capacity of 1,060 megawatts, commonly known as Diablo Canyon Unit 2, to be located in San Luis Obispo County.

(3) As designated in the report of the Southern California Edison Company and the San Diego Gas and Electric Company to the Public Utilities Commission on July 16, 1970, pursuant to Section 1001 of the Public Utilities Code, two nuclear thermal powerplants, having a generating capacity of 1,100 megawatts per unit, commonly known as San Onofre Unit 2 and San Onofre Unit 3, to be located in San Diego County.

(Added by Stats.1976, c. 194, p. —, § 1.)

Section 2 of Stats.1976, c. 194, p. —, provided:

"The provisions of this act shall not become operative if Proposition 15 of the June 1976 election [Nuclear Power Plants —rejected by the people June 8, 1976] is

adopted by the people, whether or not this bill is chaptered before or after such adoption."

Library References

Health and Environment —25.5.

§ 25524.2 Disposal of high-level nuclear waste; conditions for plant certification and land use; findings; resolution of disaffirmance; vested rights

No nuclear fission thermal powerplant, including any to which the provisions of this chapter do not otherwise apply, but excepting those exempted herein, shall be permitted land use in the state, or where applicable, be certified by the commission until both conditions (a) and (b) have been met:

(a) The commission finds that there has been developed and that the United States through its authorized agency has approved and there exists a demonstrated technology or means for the disposal of high-level nuclear waste.

(b) The commission has reported its findings and the reasons therefor pursuant to paragraph (a) to the Legislature. Such reports of findings shall be assigned to appropriate policy committees for review. The commission may proceed to certify nuclear fission thermal powerplants 100 legislative days after reporting its findings unless within those 100 legislative days either house of the Legislature adopts by a majority vote of its members a resolution disaffirming the findings of the commission made pursuant to paragraph (a).

A resolution of disaffirmance shall set forth the reasons for the action and shall provide to the extent possible, guidance to the commission as to an appropriate method of bringing the commission's findings into conformance with paragraph (a).

If a disaffirming resolution is adopted, the commission shall reexamine its original findings consistent with matters raised in the resolution. On conclusion of its reexamination, the commission shall reduce its findings to writing with the reasons therefor and shall transmit them to the Legislature.

If the findings are that the conditions of paragraph (a) have been met, the commission may proceed to certify nuclear fission thermal powerplants 100 legislative days after reporting its findings to the Legislature unless within those 100 legislative days both houses of the Legislature act by statute to declare the findings null and void and take appropriate action.

To allow sufficient time for the Legislature to act, the reports of findings of the commission shall be submitted to the Legislature at least six calendar months prior to the adjournment of the Legislature sine die.

(c) As used in this section, "technology or means for the disposal of high-level nuclear waste" means a method for the permanent and terminal disposition of high-level nuclear waste. It shall not necessarily require that facilities for the application of such technology and/or means be available at the time the commission makes its findings. Such disposition shall not necessarily preclude the possibility of an approved process for retrieval of such waste.

(d) The commission shall continue to receive and process notices of intention and applications for certification pursuant to this division but shall not issue a decision pursuant to Section 25523 granting a certificate until the requirements of this section have been met. All other permits, licenses, approvals or authorizations for the entry or use of the land, including orders of court, which may be required may be processed and granted by the governmental entity concerned but construction work to install permanent equipment or structures shall not commence until the requirements of this section have been met.

(e) Any nuclear fission powerplant is exempted from the provisions of this section if prior to the date on which this section is chaptered an electric utility has performed substantial construction on such powerplant and has incurred substantial expense for construction and for necessary materials for such powerplant, including, but not limited to, the following sites and facilities, with the associated estimated generating capacities:

(1) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on December 23, 1966, pursuant to Section 1001 of the Public Utilities Code, one nuclear thermal powerplant, having a generating capacity of 1,060 megawatts, commonly known as Diablo Canyon Unit 1, to be located in San Luis Obispo County.

(2) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on February 16, 1968, pursuant to Section 1001 of the Public Utilities Code, one nuclear thermal powerplant, having a generating capacity of 1,060 megawatts, commonly known as Diablo Canyon Unit 2, to be located in San Luis Obispo County.

(3) As designated in the report of the Southern California Edison Company and the San Diego Gas and Electric Company to the Public Utilities Commission on July 16, 1970, pursuant to Section 1001 of the Public Utilities Code, two nuclear thermal powerplants, having a generating capacity of 1,100 megawatts per unit, commonly known as San Onofre Unit 2 and San Onofre Unit 3, to be located in San Diego County.

(Added by Stats.1976, c. 196, p. —, § 1.)

Section 2 of Stats.1976, c. 196, p. —, provided:

"The provisions of this act shall not become operative if Proposition 13 of the June 1976 election [Nuclear Power Plants

—rejected by the people June 8, 1976] is adopted by the people, whether or not this bill is chaptered before or after such adoption."

§ 25524.3 Undergrounding and berm containment of nuclear reactors; conditions for plant certification and land use; evaluation and verification by legislature; vested rights

No nuclear fission thermal powerplant, including any to which the provisions of this chapter do not otherwise apply, but excepting any having vested rights as defined in this section, shall be permitted land use in the state, or, where applicable, be certified by the commission until the following conditions have been met:

(a) The commission has undertaken and completed a study of the necessity for, and effectiveness and economic feasibility of, undergrounding and berm containment of nuclear reactors, and, upon completion of the study, the commission, after public hearings, has determined whether to require by rules and regulations that nuclear reactors be either undergrounded or berm contained. The commission shall

complete such study and submit it to the Legislature, with conclusions and recommendations, within one year from the effective date of this section.

(b) In the event that the commission determines that undergrounding and berm containment are necessary, effective, or economically feasible to meet the requirements of Sections 25511 and 25520, relating to enhancing the public health and safety at a site and related facility, rules and regulations implementing such findings shall be suspended for a period of one year so as to provide the Legislature with the necessary time to evaluate and verify the results of the study.

(c) In the event that the commission determines that undergrounding and berm containment are not necessary, effective, or economically feasible to meet the requirements of Sections 25511 and 25520, relating to enhancing the public health and safety at a site, no nuclear fission thermal powerplant shall be approved for one year thereafter, so as to provide the Legislature with the necessary time to evaluate the study for possible statutory implementation.

The commission shall continue to receive and process notices of intention and applications for certification pursuant to this division, but shall not issue a decision pursuant to Section 25523 granting a certificate until the requirements of this section have been met. All other permits, licenses, approvals or authorizations for the entry or use of the land, including orders of court, which may be required may be processed and granted by the governmental entity concerned but construction work to install permanent equipment or structures shall not commence until the requirements of this section have been met.

For purposes of this section, the vested right to construct a nuclear thermal powerplant shall exist if, prior to the date on which this section is chaptered, an electric utility has performed substantial construction on such powerplant and has incurred substantial expense for construction and for necessary materials for such powerplant, including, but not limited to, the following sites and facilities, with the associated estimated generating capacities:

(1) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on December 23, 1966, pursuant to Section 1001 of the Public Utilities Code, one nuclear thermal powerplant, having a generating capacity of 1,060 megawatts, commonly known as Diablo Canyon Unit 1, to be located in San Luis Obispo County.

(2) As designated in the report of the Pacific Gas and Electric Company submitted to the Public Utilities Commission on February 16, 1968, pursuant to Section 1001 of the Public Utilities Code, one nuclear thermal powerplant, having a generating capacity of 1,060 megawatts, commonly known as Diablo Canyon Unit 2, to be located in San Luis Obispo County.

(3) As designated in the report of the Southern California Edison Company and the San Diego Gas and Electric Company to the Public Utilities Commission on July 16, 1970, pursuant to Section 1001 of the Public Utilities Code, two nuclear thermal powerplants, having a generating capacity of 1,100 megawatts per unit, commonly known as San Onofre Unit 2 and San Onofre Unit 3, to be located in San Diego County.

Notwithstanding any provisions of this section to the contrary, the provisions of this section shall not apply to any nuclear fission thermal powerplant site and related facility for which a notice of intent has been filed pursuant to Section 25502 with, and accepted by, the commission within three years of the effective date of this act.

(Added by Stats.1976, c. 195, p. —, § 1.)

Section 2 of Stats.1976, c. 195, p. —, provided:

"The provisions of this act shall not become operative if Proposition 15 of the June 1976 election [Nuclear Power Plants —rejected by the people June 8, 1976] is

adopted by the people, whether or not this bill is chaptered before or after such adoption."

Library References

Health and Environment @25.5.

§ 25524.5 Certification not in excess of maximum allowable capacity; exception; conditions

The commission shall not certify any facility which adds generating capacity to a potential multiple-facility site in excess of the maximum allowable capacity

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established by the commission pursuant to Section 25516.5, unless the commission finds that exceeding the maximum allowable capacity will not increase adverse environmental impacts or create technological, seismic, or other difficulties beyond those already found acceptable in the commission's findings on the notice for that site pursuant to Sections 25516 and 25516.5.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25525. Conformance with standards, ordinances and laws; exception

The commission shall not certify any facility contained in the application when it finds, pursuant to subdivision (b) of Section 25523, that the facility does not conform with any applicable state, local, or regional standards, ordinances, or laws, unless the commission determines that such facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving such public convenience and necessity. In no event shall the commission make any finding in conflict with applicable federal law or regulation. The basis for such findings shall be reduced to writing and submitted as part of the record pursuant to Section 25523.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

1. In general

Neither the Williamson Act (regarding preservation of agricultural, recreational, and open space land, Gov.C. § 51200 et seq.) nor the Energy Act intends that existence of an open space preservation contract

should necessarily prohibit construction of nuclear power plant on land under contract, where there is no other land on which it is reasonably feasible to locate proposed plant. 58 Ops.Atty.Gen. 729, 10-31-75.

§ 25526. Findings necessary for site approval

The commission * * * shall not approve as a site for a facility any location designated by the California Coastal Commission pursuant to subdivision (b) of Section 30413, unless the California Coastal Commission first finds that such use is not inconsistent with the primary uses of such land and that there will be no substantial adverse environmental effects and the approval of any public agency having ownership or control of such land is obtained.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1976, c. 1330, p. —, § 13.)

1976 Amendment. Rewrote the section which previously read:

"The commission may certify any facility contained in the application which is proposed to be located, in whole or in part, within the permit area unless a permit from the California Coastal Zone Conservation Commission is required, in which case such permit shall be obtained before the cer-

tificate may be granted. Approval of a permit by any regional coastal zone conservation commission, or the California Coastal Zone Conservation Commission on appeal, shall not affect the authority of the commission to deny certification for any facility contained in the application, as provided in this division."

§ 25527. Prohibited areas as sites for facilities; exceptions

The following areas of the state shall not be approved as a site for a facility, unless the commission finds that such use is not inconsistent with the primary uses of such lands and that there will be no substantial adverse environmental effects and the approval of any public agency having ownership or control of such lands is obtained:

(a) State, regional, county and city parks; wilderness, scenic or natural reserves; areas for wildlife protection, recreation, historic preservation; or natural preservation areas in existence on the effective date of this division.

(b) Estuaries in an essentially natural and undeveloped state.

In considering applications for certification, the commission shall give the greatest consideration to the need for protecting areas of critical environmental concern, including, but not limited to, unique and irreplaceable scientific, scenic, and educational wildlife habitats; unique historical, archaeological, and cultural sites; lands of hazardous concern; and areas under consideration by the state or the United States for wilderness, or wildlife and game reserves.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

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§ 25528. Acquisition of development rights by applicant; population densities; eminent domain; nuclear facility; governmental land use restrictions

(a) The commission shall require, as a condition of certification of any site and related facility, that the applicant acquire, by grant or contract, the right to prohibit development of privately owned lands in the area of the proposed site which will result in population densities in excess of the maximum population densities which the commission determines, as to the factors considered by the commission pursuant to Section 25511, are necessary to protect public health and safety. * *

If the applicant is authorized to exercise the right of eminent domain under Article 7 (commencing with Section 610) of Chapter 3 of Part 1 of Division 1 of the Public Utilities Code, the applicant may exercise the right of eminent domain to acquire such development rights as the commission requires be acquired.

(b) In the case of an application for a nuclear facility, the area and population density necessary to insure the public's health and safety designated by the commission shall be that as determined from time to time by the United States Atomic Energy Commission; if the commission finds that such determination is sufficiently definitive for valid land use planning requirements.

(c) The commission shall waive the requirements of the acquisition of development rights by an applicant to the extent that the commission finds that existing governmental land use restrictions are of a type necessary and sufficient to guarantee the maintenance of population levels and land use development over the lifetime of the facility which will insure the public health and safety requirements set pursuant to this section.

(d) No change in governmental land use restrictions in such areas designated in subdivision (c) of this section by any government agency shall be effective until approved by the commission. Such approval shall certify that the change in land use restrictions is not in conflict with requirements provided for by this section.

(e) It is not the intent of the Legislature by the enactment of this section to take private property for public use without payment of just compensation in violation of the United States Constitution or the Constitution of California.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1975, c. 1240, p. —, § 62, operative July 1, 1976.)

Law Revision Commission Comment 1975 Amendment

Section 25528 is amended to make reference to the provisions of the Public Utilities Code that authorize condemnation of property for utility purposes. The portion of Section 25528 making conclusive in an

eminent domain proceeding the commission's determination that the development rights be acquired is continued in subdivision (d)(1) of Section 25531.

Operative date of Stats.1975, c. 1240, see note under C.C.P. § 170.
1975 Amendment. Deleted second sentence in subd. (a) and added second paragraph thereto.

Library References
Eminent domain law. 13 Cal.L.Rev. Comm. Reports 1001 (1975).

§ 25529. Public use area; maintenance by applicant or dedication to local agency or state

When a facility is proposed to be located in the coastal zone or any other area with recreational, scenic, or historic value, the commission shall require, as a condition of certification of any facility contained in the application, that an area be established for public use, as determined by the commission. Lands within such area shall be acquired and maintained by the applicant and shall be available for public access and use, subject to restrictions required for security and public safety. The applicant may dedicate such public use zone to any local agency agreeing to operate or maintain it for the benefit of the public. If no local agency agrees to operate or maintain the public use zone for the benefit of the public, the applicant may dedicate such zone to the state. The commission shall also require that any facility to be located along the coast or shoreline of any major body of water be set back from the shoreline to permit reasonable public use and to protect scenic and aesthetic values.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

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§ 25530. Reconsideration of decision or order; motion; petition

The commission may order a reconsideration of all or part of a decision or order on its own motion or on petition of any party.

Any such petition shall be filed within 30 days after adoption by the commission of a decision or order. The commission shall not order a reconsideration on its own motion more than 30 days after it has adopted a decision or order. The commission shall order or deny reconsideration on a petition therefor within 30 days after the petition is filed.

A decision or order may be reconsidered by the commission on the basis of all pertinent portions of the record together with such argument as the commission may permit, or the commission may hold a further hearing, after notice to all interested persons. A decision or order of the commission on reconsideration shall have the same force and effect as an original order or decision.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25531. Judicial review; evidence; record; scope; eminent domain proceedings

(a) The decisions of the commission on any application of any electric utility for certification of a site and related facility shall be subject to judicial review in the same manner as the decisions of the Public Utilities Commission on the application for a Certificate of Public Convenience and Necessity for the same site and related facility.

(b) No new or additional evidence may be introduced upon review and the cause shall be heard on the record of the commission as certified to by it. The review shall not be extended further than to determine whether the commission has regularly pursued its authority, including a determination of whether the order or decision under review violates any right of the petitioner under the United States Constitution or the California Constitution. The findings and conclusions of the commission on questions of fact shall be final and shall not be subject to review, except as provided in this article. Such questions of fact shall include ultimate facts and the findings and conclusions of the commission. A report prepared by, or an approval of, the commission pursuant to Section 25510, 25514, 25516, or 25516.5, or subdivision (b) of Section 25520.5, shall not constitute a decision of the commission subject to judicial review.

(c) Subject to the right of judicial review of decisions of the commission, no court in this state shall have jurisdiction to hear or determine any case or controversy concerning any matter which was, or could have been, determined in a proceeding before the commission, or to stop or delay the construction or operation of any thermal powerplant except to enforce compliance with the provisions of a decision of the commission.

(d) Notwithstanding Section 1250.370 of the Code of Civil Procedure:

(1) If the commission requires pursuant to subdivision (a) of Section 25528, as a condition of certification of any site and related facility, that the applicant acquire development rights, such requirement conclusively establishes the matters referred to in Sections 1240.030 and 1240.220 of the Code of Civil Procedure in any eminent domain proceeding brought by the applicant to acquire such development rights.

(2) If the commission certifies any site and related facility, such certification conclusively establishes the matter referred to in Sections 1240.030 and 1240.220 of the Code of Civil Procedure in any eminent domain proceeding brought to acquire such site and related facility.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975. Amended by Stats. 1975, c. 1240, p. —, § 63, operative July 1, 1976.)

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Law Revision Commission Comment 1975 Amendment

Subdivision (d)(1) is added to Section 25531 to continue the substance of a provision formerly found in Section 25528. Subdivision (d)(2) deals with the effect of the certification of the commission as to a site when an eminent domain proceeding is brought to acquire the site.

Under subdivision (d), the commission's decision is conclusive on the matters referred to in Code of Civil Procedure Sections 1240.030 (need for project, proper location of project, need for property sought to be acquired) and 1240.220 (property will be devoted to public use within reasonable time). It should be noted that in some cases a public utility may seek to acquire property for utility purposes prior to certification by the State Energy Resources Conservation and Development Commis-

sion. Section 25531 does not preclude this. Long-term planning may require, for example, acquisition of the right of way for an electric transmission line well in advance of need. See, e. g., *Pacific Gas & Elec. Co. v. Parachini*, 29 Cal.App.3d 159, 105 Cal.Rptr. 477 (1972). Compare *San Diego Gas & Elec. Co. v. Lux Land Co.*, 194 Cal.App.2d 472, 480-481, 14 Cal.Rptr. 899, 904-905 (1941). In such case, the burden of proof is on the condemnor to establish the matters listed in Section 1240.030. See also Section 1240.230 (burden of proof where taking is for future use). In cases where a certification from the commission is not required, the condemnor also has the burden of proof to establish the matters listed in Section 1240.030 and, where applicable, Section 1240.230.

Operative date of Stats.1975, c. 1240, see note under C.C.P. § 170.
1975 Amendment. Added subd. (d).

Library References
Eminent domain law. 13 Cal.L.Rev.
Comm. Reports 1001 (1975).

§ 25532. Monitoring system

The commission shall establish a monitoring system to assure that any facility certified under this division is constructed and is operating in compliance with air and water quality, public health and safety, and other applicable regulations, guidelines, and conditions adopted or established by the commission or specified in the written decision on the application. In designing and operating the monitoring system, the commission shall seek the cooperation and assistance of the State Air Resources Board, the State Water Resources Control Board, the Department of Health, and other state, regional, and local agencies which have an interest in environmental control.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25534. Amendment or revocation of certification; grounds

The commission may after hearings amend the conditions of, or revoke the certification for, any facility for any of the following reasons:

(a) For any material false statement set forth in the application, presented in proceedings of the commission, or included in supplemental documentation provided by the applicant.

(b) For other than insignificant failure to comply with the terms or conditions of approval of the application as specified by the commission in its written decision.

(c) For violation of any provision of this division or any regulation or order issued by the commission under this division.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25535. Costs for ratemaking purposes

Such cost as the applicant incurs to comply with the decision of the commission shall be allowed for ratemaking purposes.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25536. Use of 10 year forecast for acceptability of proposals; hearings; revisions of forecast

Pending completion of the statewide and service area forecasts of electric power demand specified in Section 25309, the commission shall utilize as an interim forecast for purposes of determining the acceptability of alternative site and related facility proposals as provided in subdivision (a) of Section 25514 and subdivision (d) of Section 25523, the 10-year forecast of loads and resources prepared by the Public Utilities Commission from reports required or submitted as of March 31, 1974, under Sections 2 and 3 of General Order 131 of the Public Utilities Commission. On the first June 1st and the second June 1st following the effective day of this division, the commission shall commence public hearings, at least one of which shall be in the City of Sacramento. Any person may participate in any such hearings. The

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hearings shall be conducted to secure the views and comments of the public, the electric utilities, other state and federal agencies, and city and county governments regarding revision of the interim forecasts based on the considerations specified in Section 25304 and on updated information regarding forecast loads and resources submitted by any electric utility. Such hearings shall be concluded within 30 days from the date of their commencement. Within 60 days of the conclusion of the hearings specified in this section, the commission shall issue a final report specifying the revisions, if any, to the interim forecast. The report shall be based upon the information and views presented at the public hearings and the commission's independent analysis.

(Added by Stats.1974, c. 276, p. 533, § 2, operative Jan. 7, 1975. Amended by Stats. 1975, c. 1155, p. —, § 6.)

§ 25537. Approval of application; submission of information to federal agencies

Upon approval of an application, the commission shall forward to the Atomic Energy Commission, the Environmental Protection Agency, and to other appropriate federal agencies, the results of its studies including the environmental impact report on the facility, the written decision on the facility contained in the application, and the commission's determination of facility safety and reliability as provided in, Section 25511.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25538. Reviewal by local agencies; fees; reimbursement

Upon receiving the commission's request for review under subdivision (e) of Section 25519 and Section 25506, the local agency may request a fee from the commission to reimburse the local agency for the actual and added costs of such review by the local agency. The commission shall reimburse the local agency for such added costs that shall be actually incurred by the local agency in complying with the commission's request. The commission may request a fee from the person proposing the project or may devote a special fund in its budget for the reimbursement of costs incurred by local agencies.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25539. Rules and regulations

In reviewing notices and applications for certification of modifications of existing facilities, the commission shall adopt rules and regulations as necessary to insure that relevant duties pursuant to this division are carried out.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25540. Geothermal powerplant and related facilities; alternative sites not required; findings; decision; time

If a person proposes to construct a geothermal powerplant and related facility or facilities on a site, the commission shall not require three alternative sites and related facilities to be proposed in the notice. In considering the proposed construction of a geothermal powerplant and related facilities on a site, the commission shall issue its findings on the notice as specified in Section 25516 within nine months from the date of filing of such notice, and shall issue its final and ¹ decision on the application as specified in Section 25523 within nine months from the date of filing of the application for certification, or at such later time as is mutually agreed by the commission and the applicant or person submitting the notice.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

¹ So in printers copy.

§ 25541. Thermal powerplants; exemption from provisions of chapter; conditions

The commission may exempt from the provisions of this chapter thermal powerplants with a generating capacity of up to 100 megawatts and modifications to existing generating facilities which do not add capacity in excess of 100 megawatts, if the commission finds both of the following:

(a) No substantial adverse impact on the environment or energy resources will result from the construction or operation of the proposed facility or from the modifications.

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(b) Generating capacity will not be added which is substantially in excess of the forecast of electrical energy demands adopted pursuant to subdivision (b) of Section 25309.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

§ 25542. Inapplicability of division to certain sites and facilities; power of commission ineffective

In the case of any site and related facility or facilities for which the provisions of this division do not apply, the exclusive power given to the commission pursuant to Section 25500 to certify sites and related facilities shall not be in effect.

(Added by Stats.1974, c. 276, p. 501, § 2, operative Jan. 7, 1975.)

APPENDIX C

CALIFORNIA LAW ON GEOTHERMAL RESOURCES

The following pages are taken from California Public Resources Codes,
Vol 56, pp. 68-73.

- Sec.**
- 6902. Short title.
 - 6903. Geothermal resources.
 - 6904. Prospecting permits and leases; issuance; state lands defined.
 - 6905. Persons qualified to receive prospecting permits and leases.
 - 6906. Application of article; rules and regulations.
 - 6907. Production of other geothermal resources.
 - 6908. Application for prospecting permit or lease; compensatory agreements; lands beneath lakes and rivers, etc.
 - 6909. Issuance of permit; fee; denial of permit; grounds.
 - 6910. Benefits under permit; extension of primary time; limitation; amendment and termination of permit.
 - 6911. Classification of land; right to lease; terms of lease.
 - 6912. Lease of non-permitted lands to highest bidder.
 - 6913. Rentals and royalties provided in permit and lease.
 - 6914. Quitclaim or relinquishment of rights under permit or lease.
 - 6915. Right of permittee or lessee to reasonable use of surface.
 - 6916. Waiver, suspension or reduction of rental or royalty; filing annual report with legislature.
 - 6917. Termination of permit or lease.
 - 6918. Primary term of lease.
 - 6919. Conversion of application, prospecting permit or lease.
 - 6920. Commingling of geothermal resources.
 - 6921. Drilling special wells, conversion of producing wells or reactivating abandoned wells.
 - 6922. Lands sold by state with reservation; application for permit or lease, notice to owner and failure to exercise his rights.
 - 6923. Collective adoption and operation of geothermal resources lands.
 - 6924. Surface of state-owned lands under jurisdiction of other department or agency.
 - 6925. Assignment, transfer or sublease of permit.

Article 5.5 added by Stats.1967, c. 1398, p. 3279, § 39.

Library references
Geothermal resources. Report of Senate factfinding Committee on Natural Resources, 1967, p. 7. Supp. Appendix to Journal of Senate, Reg. Sess., 1967.

§ 6902. Short title

This article shall be known and may be cited as the Geothermal Resources Act of 1967.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

Library references
Mines and Minerals § 86.
C.J.S. Mines and Minerals § 229 et seq.

§ 6903. Geothermal resources

For the purposes of this chapter, "geothermal resources" shall mean the natural heat of the earth, the energy, in whatever form, below the surface of the earth present in, resulting from, or created by, or which may be extracted from, such natural heat, and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases, and steam, in whatever form, found below the surface of the earth, but excluding oil, hydrocarbon gas or other hydrocarbon substances.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6904. Prospecting permits and leases; issuance; state lands defined

Prospecting permits and leases for the extraction and removal of geothermal resources from lands belonging to the state may be issued by the commission as provided in this article. For purposes of this article, state lands shall be defined as all lands owned by the state, including school lands, proprietary lands, tidelands, sub-

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merged lands, swamp and overflowed lands, and beds of navigable rivers and lakes, and lands in which geothermal resources have been reserved to the state.
(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6905. Persons qualified to receive prospecting permits and leases

Prospecting permits and leases under this article may be issued only to those who qualify for prospecting permits and leases under Section 6801 of this code.
(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6906. Application of article; rules and regulations

Administration of this article shall be under the principle of multiple use of public lands and resources, and shall allow coexistence of other permits or leases of the same lands for deposits of other minerals under applicable laws, and the existence of permits or leases issued pursuant to the provisions of this article shall not preclude other uses of the areas covered thereby. However, operations under such other permits or leases or such other uses shall not unreasonably interfere with or endanger operations under any permit or lease issued pursuant to this article, nor shall operations under permits or leases issued pursuant to the provisions of this article unreasonably interfere with or endanger operations under any permit or lease issued pursuant to the provisions of any other act. Nor shall this article be construed as superseding the authority which the head of any state department or agency has with respect to the management, protection, and utilization of the state lands and resources under his jurisdiction. The commission may prescribe in its rules and regulations those conditions it deems to be necessary for the protection of other resources.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6907. Production of other geothermal resources

Where it is determined by the commission independently or on advice of the Geothermal Resources Board that the production or use of geothermal resources is also susceptible of economically producing other of the geothermal resources in commercially valuable quantities, and a market therefor exists, production of such other geothermal resources may be required by the commission.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6908. Application for prospecting permit or lease; compensatory agreements; lands beneath lakes and rivers, etc.

An application for a prospecting permit or lease shall not be made for less than 640 acres nor more than 2,560 acres and shall embrace a reasonably compact area; provided, however, that a permit or lease may be issued for a parcel less than 640 acres if such parcel is isolated from or not contiguous with other parcels of land available for permit or lease hereunder. The commission may provide for compensatory agreements on those parcels of state land which it feels should be subjected to such agreements rather than to leasing thereof. No person, association, or corporation shall take, hold, own, or control at one time, whether acquired directly from the commission under this act or otherwise, any direct or indirect interests in state geothermal leases or permits exceeding 25,600 acres. In computing acreage holdings or control, the accountable acreage of a party owning on undivided interest in a lease or permit shall be such party's proportionate part of the total lease or permit acreage. Likewise, the accountable acreage of a party owning an interest in a corporation or association shall be his proportionate part of the corporation's or association's accountable acreage, except that no person shall be charged with his pro rata share of any acreage holdings of any association or corporation unless he is the beneficial owner of more than 10 percent of the stock or other instruments of ownership or control of such association or corporation. Parties owning a royalty or other interest determined by or payable out of a percentage of production from a lease or permit will be charged with a similar per-

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centage of the total acreage. Prospecting permits or leases for lands beneath lakes and rivers, and below the mean high tide level of tide and submerged lands, may be issued for not less than 640 acres nor more than 5,760 acres and shall embrace a reasonably compact area, except that a permit or lease may be issued for a parcel less than 640 acres if such parcel is isolated from or not contiguous with other parcels of land available for permit or lease hereunder. No limitation shall apply to the numbers of permits or leases granted under this act. The unitizing of acreage by two or more lessees pursuant to a cooperative or unit plan of development or operation approved by the commission shall be excepted in determining acreage holdings and any lease or portion so committed shall continue in force so long as committed to the plan beyond the expiration date of its primary term. Any lease eliminated from any approved cooperative plan of development shall continue in effect for the original term of the lease or for two years after its elimination from the plan or the termination thereof, whichever is longer, and so long thereafter as geothermal resources are being produced or utilized in commercial quantities. A purchaser of geothermal resources pursuant to a sales contract approved by the commission shall not be deemed to have a direct or indirect interest in geothermal leases or permits. (Added by Stats.1967, c. 1398, p. 3279, § 38. Amended by Stats.1971, c. 431, p. 836, § 1.)

§ 6909. Issuance of permit; fee; denial of permit; grounds

Subject to the provisions of Section 6906, the commission shall issue a permit to the first qualified applicant therefor under such rules and regulations as it may prescribe for lands which have not been classified as known geothermal resources lands, upon the payment to the commission of one dollar (\$1) per acre for each acre of lands included in the permit, in accordance with subdivision (c) of Section 6913 of this code. An application for a permit shall be denied if, prior to the issuance of the permit, the lands are classified or reclassified as known geothermal resources lands pursuant to subdivision (b) of Section 6912. (Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6910. Benefits under permit; extension of primary permit time; limitation; amendment and termination of permit

A permit shall give to the permittee the exclusive right for a period of three years to prospect for geothermal resources upon lands included within said permit. The commission may, in its discretion, extend the primary term of any permit for a period not exceeding two years; provided that the combination of the primary term and extension of any permit shall not exceed a total of five years. The commission may amend or terminate any permit issued by it within the primary term period or within the extension, if any, with the consent of the permittee. (Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6911. Classification of land; right to lease; terms of lease

Upon the classification of any of the lands included within a permit issued under this article as being known geothermal resources lands, the permittee shall be entitled to a lease for such lands in accordance with Section 6918 of this code. The classification of any such lands shall be made in accordance with subdivision (b) of Section 6912 of this code. The terms of such lease shall include the royalties and other terms contained in Section 6913 on the effective date of the lease. (Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6912. Lease of non-permitted lands to highest bidder

(a) If the lands to be leased under this article are within a known geothermal resources area and no permit thereon has been issued, such lands shall be leased to the highest responsible qualified bidder under such rules and regulations as the commission may prescribe for notice to the public of terms and conditions of the sale, conduct of the sale, receipt of bid, and awarding of the lease, and bidding shall be by competitive bid and on the basis of a cash bonus, net profit, or other single biddable factor.

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(b) The classification of a known geothermal resources area, which shall contain at least one well capable of producing geothermal resources in commercial quantities, shall be made by the commission independently or upon recommendations of the Geothermal Resources Board.

(c) The commission shall have the power in leasing lands hereunder to prescribe a development program. In prescribing such program, the commission shall consider all applicable economic factors, including market conditions and the cost of drilling for, producing, processing and utilizing of geothermal resources.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6913. Rentals and royalties provided in permit and lease

Each permit and lease issued under this article shall provide for the following rentals and royalties with respect to geothermal resources produced, saved and sold from the lands included within said permit or lease:

(a) A royalty of 10 percent of the gross revenue, exclusive of charges, approved by the commission, made or incurred with respect to transmission or other services or processes, received from the sale of steam, brines, from which no minerals have been extracted, and associated gases at the point of delivery to the purchaser thereof.

(b) A royalty of not less than 2 percent nor more than 10 percent of the gross revenue received from the sale of mineral products or chemical compounds recovered from geothermal fluids in the first marketable form as to each such mineral product or chemical compound for the primary term of the lease.

(c) An annual rental payable in advance of one dollar (\$1) per acre or fraction thereof for each year of a permit or lease.

(d) If, after the discovery of geothermal resources in commercial quantities, the total royalties due to the state during any calendar year do not equal or exceed a sum equal to two dollars (\$2) per acre for each acre or fraction thereof then included in the permit or lease, the permittee or the lessee shall, within 60 days after the end of the year, pay such sum as is necessary to equal a minimum royalty of two dollars (\$2) per acre.

(e) The royalties specified herein shall be subject to renegotiation after 20 years from the effective date of the lease and at 10-year intervals thereafter based upon recommendations of the Geothermal Resources Board, and such renegotiations shall not be limited by the maximum royalties specified in subdivisions (a) and (b).

Royalty payments shall be made pursuant to the provisions of subdivisions (a) and (b) for all geothermal resources used by the permittee or lessee and not sold, with the gross revenue therefrom to be determined as though said geothermal resources had been sold to a third person at the then prevailing market price in the same market area and under the same marketing conditions; provided, however, that no royalties shall be payable for steam used by the permittee or lessee in the production of any geothermal mineral products or chemical compounds recovered from geothermal fluids in first marketable form subject to the payment of royalties under subdivisions (a) or (b).

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6914. Quitclaim or relinquishment of rights under permit or lease

The holder of any geothermal resources permit or lease may quitclaim or relinquish his rights under such permit or lease pursuant to the provisions of Section 6804.1 of this code.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6915. Right of permittee or lessee to reasonable use of surface

Subject to the other provisions of this article, the permittee or lessee shall be entitled to use so much of the surface as is reasonably necessary as determined by the commission for the production and conservation of geothermal resources.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

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§ 6916. Waiver, suspension or reduction of rental or royalty; filing annual report with legislature

The commission independently or upon the advice of the Geothermal Resources Board, may waive, suspend, or reduce the rental or minimum royalty for the lands included in any permit or lease, or any portion thereof, and waive, suspend, alter or amend the operating requirements contained in the lease or regulations promulgated hereunder affecting operations of the lease or permit, in the interests of conservation, and to encourage the greatest ultimate recovery of geothermal resources if it determines that such action is necessary or beneficial to promote development or finds that the permit or lease cannot be successfully operated under the permit or lease terms or under the regulations. The commission shall file a report with the Legislature annually on all waivers, suspensions, reductions, alterations or amendments made by the commission pursuant to the provisions of this section together with the reasons therefor.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6917. Termination of permit or lease

A permit or lease may be terminated by the commission only pursuant to the provisions of Section 6805 of this code.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6918. Primary term of lease

Leases under this article shall be for a primary term of 20 years and so long thereafter as geothermal resources are being produced or utilized or are capable of being produced or utilized in commercial quantities from such lands or from lands unitized therewith; provided, that such leases shall not exceed a term of 99 years.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6919. Conversion of application, prospecting permit or lease

Notwithstanding any other provision of this article, at any time within 180 days following the effective date of this article any person who prior to the effective date of this article has made application for or who holds an unexpired prospecting permit or lease issued by the commission prior to said date, upon showing to the satisfaction of the commission that such application, prospecting permit, or lease, as the case may be, was made or issued to develop geothermal resources, may convert it to an application, permit, or lease under this article, having a priority dating from the date of filing or issuance thereof. Conversion of such application, prospecting permit, or lease shall be accomplished in accordance with procedures prescribed by the commission; provided, however, that the competitive bidding provisions of Section 6912 shall not be applicable to conversion of such application, permit, or lease.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6920. Commingling of geothermal resources

Any person engaged in the production of geothermal resources under a lease issued by the commission may commingle geothermal resources from any two or more wells without regard to whether such wells are located on the lands for which such lease was issued or elsewhere, provided, however, that said lessee shall install and maintain meters or other measuring devices satisfactory to the commission to measure the amount of geothermal resources produced from lands for which leases were issued by the commission.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6921. Drilling special wells, conversion of producing wells or reactivating abandoned wells

A permittee or lessee may upon the approval of the commission drill special wells, convert producing wells or reactivate and convert abandoned wells for the sole purpose of reinjecting geothermal resources or the residue thereof.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6922. Lands sold by state with reservation; application for permit or lease; notice to owner and failure to exercise his rights

In case of an application for a permit or lease covering lands which have been sold by the state, subject to a reservation by the state of the geothermal resources thereof, by anyone other than the owner of such lands, the owner shall have six months from the date of service of notice on the owner of such application within which to file his application for a permit or lease. Such notice shall be served by the applicant together with a copy of the application. If the owner exercises his rights hereunder and is a qualified person, his application shall be granted but subject to all the other provisions of this article. If the owner fails to exercise the rights granted by this section, then the owner's rights hereunder shall thereupon cease and terminate and the original applicant shall be permitted to proceed with his application.

In the event that the lands subject to such classification are classified as being within a known geothermal resource area, then, after the commission has determined the highest competitive bid thereon, the owner may within 10 days after notification by the commission submit a bid identical to such highest acceptable bid, in which case the commission shall issue a lease to such surface landowner. If the surface landowner does not file such a bid within such period of time, the commission may proceed with the award of the bid to other than such surface landowner.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6923. Collective adoption and operation of geothermal resources lands

For the purpose of more properly conserving the natural resources of any geothermal resources areas, or any part thereof, the lessees thereof may unite with each other or with others in collectively adopting and operating under a cooperative or unit plan of development or operation of such geothermal resources lands, consistent with the provisions of Section 3756 of this code. The commission may, with the consent of the holders of leases involved, establish, alter, change, and revoke any drilling and production requirements of such leases, permit apportionment of production, and may make such regulations with reference to such leases, with like consent on the part of such lessees, in connection with the institution and operation of any such cooperative or unit plan, as the commission deems necessary or proper to secure the proper protection of the interests of the state.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

§ 6924. Surface of state-owned lands under jurisdiction of other department or agency

Where the surface of state-owned lands sought for use or development of geothermal resources or the waters thereon are under the jurisdiction of a state department or agency other than the commission, the commission may issue permits or leases under this article only with the consent of and subject to such reasonable terms and conditions as may be prescribed by such other department or agency to insure the adequate utilization of the surface of the lands or the waters thereon for the purposes for which they are then being administered or for which they were acquired, provided, however, that such other department or agency shall not prescribe any terms and provisions inconsistent with this article nor any rental or royalty for the use of said lands.

(Added Stats.1967, c. 1398, p. 3279, § 39.)

Permits or leases, execution by state forester, see 14 Cal.Adm.Code 1503.

§ 6925. Assignment, transfer or sublease of permit

A permit or lease under this article may be assigned, transferred, or sublet as provided for in Section 6804 of this code.

(Added Stats.1967, c. 1398, p. 3279, § 39.)