New Mexico Geothermal Commercialization Program

Semi-Annual Report
January — June 1979

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NEW MEXICO GEOTHERMAL COMMERCIALIZATION PLANNING

SEMI-ANNUAL PROGRESS REPORT

January 1, 1979 - June 30, 1979

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1.0 Introduction

1.1 Purpose of Project

This project was developed as a mission-oriented program aimed at accelerating the commercial utilization of geothermal resources. It provides the Division of Geothermal Energy of the United States Department of Energy and the State of New Mexico with a technical and economic guide for policy direction and actual implementation of development proposals. This is being accomplished through the investigation and promotion of the use of geothermal energy as a viable alternate energy source particularly through direct-heat applications.

1.2 Objectives

In this planning effort of the state geothermal energy commercialization, critical evaluation is made of the potential geothermal energy use and of the promotion of its use.

To evaluate the possibilities for geothermal commercialization, the New Mexico state team, in conjunction with NMEI, is investigating the sub-state regions, and specific sites in the state. This provides the basis for the development of area development plans, site-specific development and commercialization plans, institutional and economic assessments and outreach programs.

1.3 Technical Approach & Team Members

To accomplish the objectives, the state team researchers are estimating the potential for commercial utilization through the assessment of available resources, industry, activity, and the need for technological or institutional initiatives at levels. These efforts provide both a plan of attack and a realistic estimate of the achievable levels of utilization.

State Geothermal Team for Commercialization Planning:

Pat Rodriguez, Team Leader

Director of Energy Resource and Development Division

New Mexico Energy and Minerals Department

Dennis Fedor

Energy Consultant, NMEMD

Coordinator for data collection, planning development and special studies; community and R&D liaison.

George Scudella

Energy Consultant, NMEMD

Outreach coordinator, industrial, governmental and community liaison, research and development coordinator, institutional analyst and demonstration program coordinator

1.4 Benefit of Project to State and DOE

This program will undoubtedly demonstrate the significant geothermal potential in New Mexico. It will identify the action alternatives available to the public sector to stimulate the rapid development of geothermal resources, while at the same time protecting all legitimate interests of the public.

This will provide a greater understanding of the economic institutional and legal factors in geothermal energy development.

A precise and timely planning of geothermal development could mean future employment-level increases, industrial growth, energy independence, balance-of-payment advantages, additional tax revenues, capital investments, and an improved environment. Thus, through the informational input of this project, the federal, state, and local governments will derive fiscal benefits when the hydrothermal resources are effectively developed.

2.0 Summary of State Project Tasks and Work Accomplished

2.1 Prospect Identification

This task was to identify all geothermal resource areas whether manifested as hot spring areas or just as geophysical anomalies. These areas were then evaluated for prospect potential.

Data and information on geothermal prospects (resource areas and sites) is to be collected from secondary sources, and inspected, and assembled for the purpose of identifying potential resources of geothermal energy for utilization between now and the year 2020. Data and information on the following stages of geothermal development should be gathered from available sources: leasing, exploration surveys and drilling, field development, facility construction, energy transmission and/or conversion. A principal source of the geothermal prospect information is to be the University of Utah Research Institute and the DOE state-coupled geothermal resource assessment program. The New Mexico State team is coordinating the information needs for this task with UURI and NMEI in order to avoid duplication of activity and to make maximum use of the products of the state-coupled resource assessment program.

The product of task 1 is a compilation and charting of the estimated geothermal energy potentially available from the prospect areas and sites as a function of time between now and the year 2020; time factors being considered are the current stages of development activity, the stages still to be accomplished, and the various major technological and environmental factors which influence the timing of events. The amounts of geothermal energy available from the prospects are being characterized as proven reserves, potential resources, or inferred resources, in accordance with the UURI definitions. Includes the compilation of regional geological data, district or area geological data and site geological data concerning geothermal energy potential in the state.

In carrying out this project, the following are included in the Geothermal Energy Resource Data Base:

- a. Location, properties and expected magnitude of all known geothermal resource areas (KGRA's) in the region.
- b. Location, properties and expected magnitude of all potential geothermal resource areas (PGRA's) in the region.
- c. Assessment of the state of knowledge concerning the amount and locations of geothermal energy resources in the region.
- d. Land ownership of all KGRA's and PGRA's (Federal, State, County, Private, Other).
- e. Leases presently applied for.
- f. Exploration and assessment activities completed and in progress.
- g. Information available or inferrable concerning industry plans for exploration, assessment, development, or production.

Sources for this data include the U.S. Geological Survey, U.S. Bureau of Reclamation, the Bureau of Land Management, the U.S. Forest Service, the Bureau of Indian Affairs, State Land Offices, Oil and Gas Conservation Commissions, State Hydrologists, Geologists, and Bureaus of Mines, and private developers and resource exploration consultants. Data from private corporations proved to be extremely difficult to obtain.

The expected output from this body of data will be a complete assessment of the location, quality, quantity, ownership, leasing status and development potential of all known and potential geothermal resource areas in the State of New Mexico.

2.2 Application Analysis

Study was made of current and potential applications for geothermal energy such as industrial and agricultural process heat with respect to future energy requirements. Current and projected uses of energy demands within the state is being examined on the basis of the consuming sectors.

A survey and analysis of current and potential applications/uses of geothermal energy, including both electric and direct thermal applications, was conducted by examining historical and projected patterns of energy consumption by industry, agriculture, commerce, private residences, and local governmental units. Industrial sectors were surveyed by the 3 digit SIC codes wherever possible. The surveys are based upon secondary sources of information, such as the state public service commission, U.S. Bureau of Census reports, and DOE documents. New applications for geothermal energy, such as industrial and agricultural process heat, being identified, described, and examined with respect to future energy requirements.

The product of task 2 is a compilation of current and projected uses of energy demands within the State of New Mexico and an identification of those industrial, commercial, governmental, and residential demands which could be supplied by electric or direct thermal applications of geothermal energy.

2.3 Area Development Plans

For commercialization planning, the New Mexico State Team has divided the state into 8 geothermal districts. The geothermal prospect identification of task 1 and the applications analysis of task 2 are being combined in task 3, to provide substate area development plans. The potential geothermal prospects are then matched up with the potential applications of the geothermal energy in each substance area, to provide one or more development

plans for energy on line as a function of time between now and the year 2020. The area development plans are based primarily on technological and energy supply and demand factors; economic, institutional, and environmental factors will be introduced in later tasks.

The area development plans will account for the known character of the geothermal resources, namely, whether proven reserves, potential resources, or inferred resources, and for the alternative uses of those area resources by the public and private sectors over the forthcoming years.

The geothermal resource characteristics are being described, using information available from UURI, USGS, and the state-coupled resource assessment program, in sufficient detail to permit estimates of how much geothermal energy is available for development as a function of time. In addition, the potential industrial, commercial, municipal, and residential applications of geothermal energy for each substate area are being identified, analyzed, and characterized. A cross-matching or correlation of the geothermal prospects and the energy applications will be carried out to establish the most practical and realistic utilizations of geothermal energy between now and the year 2020; qualitative or semi-quantitative examination of technical, economic, environmental, and institutional factors will be performed to achieve a qualitative prioritization of the uses of geothermal energy in the substate areas. Information generated in this activity will be provided to NMEI for the purposes of a collaborative effort in constructing state and regional aggregations of geothermal prospect/utilization scenarios.

2.4 Site-Specific Development Plans

Site-specific development plans will be prepared for each major geothermal prospect, which can potentially experience development and/or some degree of commercialization between now and the year

2020. The site-specific plans will originate with utilization analysis and prioritization of task 3, and will yield the basic information upon which selected time-phase (Heber-type) commercialization project plans for task 5 can be evolved. Semi-quantitative examination of technological, economic, environmental, and institutional factors which influence prospect development utilization will be carried out in order to provide a real-world, real-time character to the site-specific development plans. Direct contact should be established with the active or potential resource developers and with the prospective industrial, commercial, agricultural, and governmental users, to ascertain the magnitude and timing of their actions. Actions required by governmental agencies (local, state, and federal) to achieve or to accelerate the magnitude and rate of the geothermal development and utilization will be identified.

The product of task 4 will be several site-specific development plans for New Mexico, which provide realistic estimates of geothermal energy on line and the function of time for either specific or classes of applications from now until the year 2020. The plans will be detailed in a format specified by or consistent with the RMB&R Regional Hydrothermal Commercialization Plan.

Each site-specific development plan will define the potential amount of usable geothermal energy as a function of time between now and the year 2020, and will describe the factors or actions which will influence, control, or accelerate the prescribed rate of development. The site-specific development plan will be provided to NMEI for the purposes of a collaborative effort in constructing state and regional aggregations of geothermal development activities and in identifying public and private sector actions necessary to achieve state and regional geothermal development and commercialization.

2.5 Selected Time-Phase (Heber-Type) Commercialization

A time-phase commercialization plan will be prepared for a selected site (Valle Caldera) application that is in some advanced stage of development.

One time-phase commercialization plan is to be prepared by this state team for a selected site and application which is in the advanced stages of development or commercialization by industry, agriculture, commerce, or government. Selection of the site, or sites, and the associated applications, will be made as a joint decision of the state team leader, the EG&G technical project manager, and the DOE geothermal program office.

Geothermal sites which fall into this category will generally be sites for which industrial, commercial, or municipal utilization is at an advanced stage of planning or commercialization by the public and/or private sector, but for which significant value may be derived from an independent and comprehensive evaluation of the technical, economic, environmental, institutional, and political factors which control the timing and energy magnitude of the proposed or active project. The objective of the state team activity is to construct a real-time description of the site-specific commercialization project and to identify local, state, and federal government actions which could augment the success of the project. Information generated in this activity will be provided to NMEI for the state and regional economic and energy analyses.

The time-phase commercialization plan will follow the technical approach, format, and content of the plan developed by Science Applications, Inc. for the Heber geothermal prospect and electrical application (cross-reference "Heber Electric Scenario," Science Applications, Inc., March 3, 1978). Preparation of the plans will require close communication with the prospect developer, the energy user, and governmental agencies in order

to specify the step-by-step procedures, the actions necessary, and the times required to achieve full-scale commercialization. Detailed consideration will be given to the technical, environmental, economic, market, institutional, legal, and political factors which affect and/or control the success of commercialization in a timely manner. The state team will utilize the findings of task 6 on institutional analyses of the basis for certain aspects of task 5.

The product of task 5 will be a detailed event versus time chart for the geothermal project, and a narrative analysis of the technical, environmental, market and economic, and institutional aspects of the project. Actions required by both public and private sectors to achieve timely commercialization will be identified. The time-phase project plan will be consistent with the plans of the actual developer/ user, and should represent the roles of other decision-making institutions and organizations in a realistic way. The project plan will be conveyed to NMEI for use in their regional energy and economic analyses and to DOE/EG&G for integration into the RMB&R Regional Commercialization Plan.

2.6 Institutional Analyses

An identification and analysis of the local, state, and federal legislative and regulatory procedures and practices relative to the development and commercialization of geothermal energy will be performed by the New Mexico State Team. The analysis will encompass all stages of a geothermal activity, including leasing, exploration surveys, drilling, field development, facility construction, energy conversion and/or transmission, and application. The roles and responsibilities of local, state, and federal agencies will be identified and described, including the number of persons available for processing applications, etc. The amount of time in days or months required or taken for each step in the institutional chain of applications, permits, reviews,

etc. will be ascertained and documented. Institutional constraints to the timely and successful development of geothermal energy will be identified, and solutions recommended in terms of procedures, manpower, times, etc.

The product of task 6 will be a flow chart, and an accompanying narrative, of the governmental agencies, regulatory procedures, and action or decision times which affect or control the development and commercialization of geothermal energy in New Mexico. Critical paths of strategic points should be defined. Both electric and direct thermal applications will be analyzed and documented. In addition, recommendations for the mitigation of institutional constraints will be reported in task 10.

The New Mexico State Team will research, document, and assess the local and state legislative and regulatory procedures and practices associated with geothermal leasing, exploration, field development, plant construction, energy transmission, utilization, etc. In addition, federal rules and regulations will be examined, and interactions and overlaps with local and state regulatory activities will be documented. This information will be utilized by the state team in their activities for substate area development plans, site-specific development plans, and the selected time-phase commercialization project plans.

2.7 State Handbook of Institutional Analyses

Preparation is being made for an information manual and procedural guide which will identify the governmental regulations, procedures, and practices that affect geothermal development in New Mexico.

In addition, the state handbook, which describes the institutional procedures and time factors for evolving a geothermal resource from the leasing stage through the utilization stage for both electric and direct thermal applications.

The handbook is intended to be an information manual and a procedural guide for the full array of parties who may be participants in geothermal development and commercialization, including, but not limited to, investors, financial institutions, developers, utilities, energy users, industry, commerce, business, and local governments. The handbook will chart and describe the agencies, regulatory procedures, action or decision times, and procedural costs in a clear and easily readable form. A specific format for the handbook has been prescribed by DOE/EG&G. This task includes preparation of the material content of the handbook in a final form, but does not include the actual publication. Publication procedures and costs will be separately discussed and negotiated with DOE/EG&G.

2.8 State and Site Energy and Economic Data Analyses

The New Mexico State Team is responding to requests from NMEI for specific energy and economic data necessary for the performance of the NMEI site, state and regional economic and energy analyses. The State Team also requests, from time to time, specific economic, energy or geothermal process analyses from NMEI. The essence of this task is a cooperative interaction between New Mexico and NMEI to produce information of value to state and regional decision makers.

Energy and economic data is collected and analyses performed as necessary, to accomplish tasks 3, 4, and 5, and to assist NMEI in their economic analyses and energy forecasting activities. Data applicable on a statewide or area basis was suitable for the prioritization of the substate area development plans, whereas site specific data is required for the site-specific development plans.

The state team is working in collaboration with NMEI, both in identifying and quantifying the geothermal economic factors and in performing economic analyses for specific geothermal sites and uses.

2.9 State and Regional Aggregations of Development Plans

State aggregations of the utilization prospects from task 3 and the site-specific development plans from task 4 is performed by the state team, in collaboration with NMEI. The purpose of the aggregations is to obtain estimates of the amount of geothermal energy that can be brought on line and utilized between now and the year 2020. The state and regional aggregations are carried out separately for the following three geothermal prospect classifications: proven reserve, potential resource, and inferred source. Both electric and direct thermal applications are evaluated within the aggregations of the three geothermal prospect classifications. The state team will be concentrating on the technological, environmental, and institutional factors in providing input to the aggregations, whereas NMEI is concentrating on the economic and energy/demand factors in finalizing the aggregations. NMEI will use computerized aggregation procedures in some cases; therefore, the state team will provide complete and consistent data for the requirements of NMEI. NMEI will make available the draft and final state and regional aggregations to the state team for review prior to publication and for use in the state outreach programs.

The product of task 9 will be a set of state-aggregations of geothermal utilization prospects and site-specific development plans prepared by state team and based primarily upon technological, environmental, and institutional factors. The three geothermal prospect classifications will be retained throughout the documented aggregations.

2.10 Identification of Constraints and Recommended Actions

An examination of the products of tasks 3, 4 5, 6, and 9 will be carried out for the purpose of identifying the various technological, environmental, economic, and institutional constraints which might delay or prevent the development and commercial-

ization of geothermal energy in New Mexico. Both generic and specific constraints will be identified. Possible solutions to the problems will be evaluated, and actions necessary to remedy the problems or implement the solutions will be recommended. Actions by parties in both the public and private sectors will be recommended.

The product of task 10 for New Mexico will be a documentation of constraints, solutions, and recommended actions for the timely and successful development and commercialization of geothermal energy within the context of the state aggregations of geothermal utilization prospects and site-specific development plans.

Many constraints to geothermal development were identified by New Mexico during last year's work. However, a continued review will be performed, and the effects of new legislation, regulations and interpretations will be evaluated.

2.11 State Outreach Program and Economic Development

The state team will develop several projects for greater public awareness of the potential of geothermal energy. In order to promote the use of geothermal energy by industry, utilities, commerce, agriculture, business and governmental units, the State of New Mexico team will convey information on geothermal prospects, applications, economics and institutional procedures as well as coordinating other educational programs needed to assist the people of New Mexico.

A state outreach program is being organized and conducted the state team for the purpose of promoting the utilization of geothermal energy by industry, utilities, commerce, agriculture, business, and governmental units. The state team is implementing different and alternative educational and promotional approaches for the public and private sectors. The state team is drawing upon the activities of tasks 1-10, and upon the

resources of NMEI, EG&G, and DOE to carry out an effective outreach program. In particular, the state team is conveying information on geothermal prospects, applications, economic, energy supply/demand projections, institutional procedures, and environmental advantages. The New Mexico State Team is keeping a record of its outreach contacts and activities, and these are summarized in the project progress reports.

Essentially, the outreach program is conducted by (1) interacting with community, business, industrial, and governmental leaders concerning geothermal development opportunities and programs; (2) disseminating information; (3) coordinating regional support for limited user assistance to potential geothermal developers and users.

2.12 Project Meetings, Progress Reports and Reporting Network

The State of New Mexico team is participating with DOE's Division of Geothermal Energy in a reporting network program which records significant geothermal events (technological, developmental, etc.). Progress reports are being prepared and submitted by the New Mexico team which will then document all findings and conclusions in a final report. Quarterly project progress reporting meetings are being attended by the state team.

2.12.1 Geothermal Activity Reporting Network

The state team is participating in the DOE Division of Geothermal Energy activity reporting network by providing weekly, monthly, and baseline reports of on-going geothermal development activity within each state. A baseline report of 4-6 pages length was prepared by the state team at the beginning of the current contract year, which summarizes the status of geothermal development and commercialization for both electric and direct thermal applications. Each month, the baseline document is updated by telephone communication to Dr. Richard Meyere, WEPL,

on or before the 25th day of the month. Major significant events which relate to or affect geothermal activities in each state are telephone reported by Thursday of any given week to EG&G, if and when such significant events occur; the significant events may be of a technological, environmental, economic, institutional, legislative, judicial, or political nature.

2.12.2 Progress Reports and Final Report

Progress reports are prepared and submitted on a regular basis, at times specified by DOE/EG&G. The progress report uses a format consistent with the task set forth in the scope of work. A final report for the 1979 contract year will be prepared and submitted at a time to be specified by DOE/EG&G by the state team. The final report will document all of the findings and results specified in the description of tasks 1-11.

2.12.3 Project Meetings

Project progress reporting meetings are held on a regular basis. The New Mexico State team will attend those meetings, as specified by DOE/EG&G, and will report on the progress for the past term.

3.1 Geothermal Prospect Identification

To provide the starting point for the geothermal resource data base, the New Mexico Team had available an inventory of hot springs and wells that included a brief description of each resource area, surface temperatures and estimated subsurface temperatures. To aid in the evaluation of the energy content of these resource areas, an estimate was made of the areal extent and thickness of each. This resulted in the estimation the energy content of each reservoir. Table 3.1 lists the thermal areas, their areal extent and the amount of energy estimated to be contained in each system. The map, Figure 3.1, shows the location of the areas. As shown, the amount of geothermal energy contained in all these systems was estimated to total 21.3 quads (1 quad = 10^{15} BTU).

These geothermal resource areas were identified by studying the records of geothermal leases on public lands obtained from state and federal agencies. Subsequently, discussions were held with lease holders to learn about the current status and future plans. Consulting geologists and appropriate Federal agencies were also interrogated. Additional information and ideas for future development plans were gleaned through various publications and conversations with community groups and potential users. These publications included catalogs of hot springs and wells, pertinent geophysical data, and documents on historical geologic activity.

Most of the resource areas including the eight known Geothermal Resource Areas (KGRA's) are located along the Rio Grande Valley and the southwestern part of the state. Very few of these sites are hot enough for electrical generation while most others are quite adequate for spaceheating, industrial processing, and even food drying. Since the majority of the state's population is located in the Rio Grande Valley, the coincidental pockets of underground heat there are of greatest economic interest.

Number	County
1	San Juan
2	Rio Arriba
3	Taos
4	Colfax
5	Union
6	McKinley
7	Sandoval
8	Sante Fe
9	Mora
10	Harding
11	San Miguel
12	Valencia
13	Bernalillo
14	Torrance
15	Guadalupe
16	Quay
17	Catron
18	Socorro
19	Lincoln
20	De Baca
21	Curry
22	Roosevelt
23	Grant
24	Sierra
25	Otero
26	Chaves
27	Eddy
28	Lea
29	Hidalgo
30	Luna
31	Dona Ana
32	Los Alamos

Fig. 3.1 New Mexico counties and geothermal springs and resource areas.

Tables 3.1 and 3.2 list areas and sites of geothermal prospects in the state of New Mexico as these have been identified by various criteria, for both electric and direct thermal uses.

The prospective sites and areas are broken down in these lists to those which are (1) proven, (2) potential, and (3) inferred.

The definitions used are those recommended by Meyer (December 1978):

Proven sites are those: (1) which are in an advanced stage of development or commercialization by a private company or by government for specific applications, or demonstrations, or those (2) on which is available favorable quantitative data on the measured subsurface temperatures, volume, and water flows.

Potential sites are those on which (1) there is exploration/development activity, or (2) some favorable quantitative subsurface data have been estimated or measured.

Inferred sites or areas are those identified by (1) surface manifestations such as wells or springs, (2) chemical thermometry, or (3) proximity to potential or proven sites.

Tables 3.3 and 3.4 provides further information on proven and potential sites, both for electric and direct thermal applications in New Mexico.

TABLE 3.1
NEW MEXICO IDENTIFIED GEOTHERMAL PROSPECTS

ELECTRIC (150°C)

PROVEN	POTENTIAL	INFERRED
Baca Location	Animas Kilbourne Hole Radium Springs	Closson Guadalupe Area Columbus Area Lower Frisco H.S. Southern Tularosa Basin White Sands (Town) Socorro Prewitt Area Jemez Reservoir Lordsburg

DIRECT THERMAL (20°C T 150°C)

PROVEN	POTENTIAL	INFERRED
Animas Truth or Consequences Faywood Jemez Springs Ponce de Leon H.S. Gila H.S.	Albuquerque Los Alturas Ojo Caliente Radium Springs San Ysidro Socorro	Mamby's H.S. Derry H.S. Montezuma H.S. San Diego Mtn. Turkey Creek H.S. Closson Fort Wingate Mimbres H.S. Mesquite - Berino Tohatchi San Francisco H.S. Crown Point E. San Augustin Plain Garton Well Cliff Area Black Mtn. West Mt.

TABLE 3.2
STATE GEOTHERMAL RESOURCE CHARACTERISTICS

<u>NMEI SITE ID</u>	<u>NAME</u>	<u>COUNTY</u>	<u>RES. VOL. (KM)³</u>	<u>SUB- SURFACE T (°C)</u>	<u>SURFACE T (°C)</u>
25001	Baca Location	Sandoval	125.00	273*	87
25502	Lightning Dock	Hidalgo	3.30	144*	102
25003	Lwr San Francisco HS	Catron	3.30	109	49
25004	Kilbourne Hole	Dona Ana	3.50	155*	45
25006	Jemez Springs	Sandoval	3.30	103*	73
25008	Radium Springs	Dona Ana	3.30	98*	53
25009	Ojo Caliente	Rio Arriba	3.30	130	56
25010	Gila HS Below Bridge	Grants	1.00	77	66
25011	Gila HS Middle Fork	Catron	1.00	77	65
25012	Montezuma HS	San Miguel	1.00	130	59
25013	Gila HS Doc Campbell	Catron	1.00	77	66
25014	Mambys HS	Taos	1.00	125	41
25015	Turkey Creek	Grants	1.00	0	74
25016	White Sands MSL RGE	Dona Ana	3.00	150	54
25017	Las Alturas	Dona Ana	3.00	120	43
25018	Berino - Mesquite	Dona Ana	3.00	120	31
25019	Mimbres HS	Grants	1.00	0	58
25020	Ponce de Leon	Taos	1.00	105	34
25022	Upper San Francisco HS	Catron	1.00	0	27
25023	Faywood HS	Grants	1.00	0	54
25024	T or C	Sierra	1.00	100*	0
25025	Gila HS UPR MDL FRK	Catron	1.00	77	36
25026	Black Mtn W. Mesa	Dona Ana	1.00	95	0
25027	Closson	Valencia	3.00	150	61
25028	Playas Valley	Hidalgo	3.00	144	28
25029	Cliff Area	Grants	1.00	0	31
25030	Derry Warm Spring	Sierra	3.00	100	33
25032	Tohatchi Area	McKinley	1.00	0	39
25033	Crown Point	McKinley	3.00	150	37
25034	Prewitt North East	McKinley	3.00	150	46
25035	Guadalupe SP	Sandoval	1.00	120	0
25036	Hot Well	Sandoval	1.00	100	0
25037	San Ysidro	Sandoval	1.00	100	52
25040	Crocker	Sierra	3.00	0	30
25041	Freiborn Canyon	Catron	1.00	0	30
25042	Las Palomas	Sierra	3.00	0	30
25043	Rincon East	Dona Ana	3.00	0	50
25044	Aleman	Sierra	1.00	110	0
25046	Garton Well	Otero	1.00	0	34
25049	Carne	Luna	3.00	40*	0
25051	Guadalupe Area	Sandoval	1.00	170	35
25052	Columbus Area	Luna	3.00	155	31
25053	San Diego Mountain	Dona Ana	1.00	125	0
25054	Tularosa Basin South	Otero	3.00	150	71
25055	Socorro - RA24	Socorro	3.00	35	33
25056	Jemez Reservoir	Sandoval	3.00	150	0
25057	Lordsburg	Grants	3.00	150	33
25058	Fort Wingate	McKinley	1.00	0	61

<u>NMEI</u> <u>SITE ID</u>	<u>NAME</u>	<u>COUNTY</u>	<u>RES. VOL. (KM)³</u>	<u>SUB-</u> <u>SURFACE</u> <u>T (°C)</u>	<u>SURFACE</u> <u>T (°C)</u>
25059	San Augustine Plain	Catron	3.00	0	35
25060	Isleta	Bernalillo	3.00	33*	0
25061	Albuquerque	Bernalillo	3.00	0	27
25062	Laguna	Bernalillo	3.00	50*	0
25063	Mancisco Mesa	San Juan	3.00	72*	27
25064	Jicarilla Apache Ind.	Rio Arriba	3.00	98*	41
25065	Blue Mesa	McKinley	3.00	98	32

*measured, all other estimated

TABLE 3.3
STATE OF NEW MEXICO
PROVEN AND POTENTIAL ELECTRIC APPLICATIONS

SITE	LATITUDE LONGITUDE	TEMPERATURE (°C)		ESTIMATED VOLUME (km ³)	ESTIMATED ENERGY (MWe)		
		SURFACE	SUBSURFACE		PROVEN	POTENTIAL	TOTAL
Animas (lightning Dock)	32° 85' 108° 50'	102	144	3.3		20	100
Kilbourne Hole	31° 57' 106° 58'	45-83	155	3.50		20	50
Radium Springs	32° 30' 107° 58'	30-85	93-130	3.3		5	30
Baca Location	35° 53'		260-315	125.00	50	350	1942
					<u>50</u>	<u>395</u>	<u>2122</u>

TABLE 3.4
STATE OF NEW MEXICO
PROVEN AND POTENTIAL DIRECT THERMAL APPLICATIONS

SITE	<u>LATITUDE</u> <u>LONGITUDE</u>	TEMPERATURE (°C)		ESTIMATED VOLUME (km ³)	ESTIMATED ENERGY (Quad)		
		SURFACE	SUBSURFACE		PROVEN	POTENTIAL	TOTAL
Albuquerque	35° 05' 106° 45'	27		3.0			0.0449
Faywood H.S.	32° 33' 108° 00'	54	--	1.0			
Jemez Springs	35° 47' 106° 4'	73	103	3.0		0.0206	0.6150
Los Alturas	32° 16' 106° 42'	46	120	3.0			0.5635
Ojo Caliente	36° 18' 106° 3'	45	122-161	3.3			
Radium Springs	32° 30' 107° 58'	30-85	130-198	3.3			0.0368
San Ysidro	35° 30' 106° 40'	50	80	1.0			0.0206
Socorro	34° 2' 106° 56'	33	35	3.0			0.0135
Truth or Consequences	33° 9' 107° 15'	36-46	100	1.0		0.0269	0.4563
Animas	32° 85' 108° 50'	102	144	3.3		<u>0.0359</u>	<u>0.4102</u>
					0	0.0834	2.1508

TABLE 3.5

TOTAL ACREAGES OF GEOTHERMAL LEASES - NEW MEXICO

Federal Leases

Total Acreages of Competitive Lease in KGRA's: (51 Leases)	86,839
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Total Acreages of Non-Competitive Leases: (67 Leases)	129,156
--	---------

State Leases:

Total Acreages of State Leases: (100 Leases)	<u>41,707</u>
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TOTAL OF ALL ACREAGES LEASED	257,703
------------------------------	---------

TABLE 3.6

FEDERAL ACTIVE COMPETITIVE GEOTHERMAL LEASES - NEW MEXICO
(as of 7/6/78)

COUNTY & LESSEE	SIZE, ACRES & (NO. OF LEASES)	KGRA/LOCATION	DATE ISSUED & (COST/ACRE)
<u>DONA ANA</u>			
Aminoil USA, Inc.	1,235.45(1)	Radium Springs, KGRA, T21S, R1W	2/1/78 (\$8.29)
Anadarko Production Co.	18,476.45(9)	Kilbourne Hole, KGRA, T27 & 28S, R1W	7/1/75 (\$10.06- 31.26)
Chevron USA	2,198.48(3)	Radium Springs, KGRA, T21S, R1W	12/1/77 & 12/1/78 (\$30.50 & \$10.63)
N.K. Hunt	360.00(2)	Radium Springs, KGRA, T21S, R1W	12/1/78 (\$56.00)
<u>HIDAGLO</u>			
Amax Exploration	6,580.43(3)	Lightning Dock KGRA, T25S, R19 & 20W	Various (\$3.13, 8.11 & 13.07)
Aminoil USA, Inc.	1,271.64(1)	Lightning Dock KGRA, T25S, R19W	1/1/77 (\$1.99)
J.E. Blankenship	1,235.72(1)	Lightning Dock KGRA, T25S, R19W	1/1/77 (\$1.99)
Earth Power Corp.	5,060.12(3)	Lightning Dock KGRA, T24 & 25S, R19 & 20W	10/1/76 & 12/1/78
Phillips Petroleum Co.	2,898.37(2)	Lightning Dock KGRA T25S, R19W	10/1/76 (\$3.38 & 5.23)
<u>RIO ARRIBA</u>			
Amax Exploration	6,183.45(4)	Baca Location No. 1 KGRA, T21N, R3 & 4E	8/1 & 12/1/77 (\$5.67 & 5.31)
<u>SANDOVAL</u>			
Amax Exploration	3,870.84(2)	Baca Location No. 1 KGRA, T18N, R3 & 4E	8/1/77 (\$5.67)

TABLE 3.7

FEDERAL ACTIVE NON-COMPETITIVE GEOTHERMAL LEASES - NEW MEXICO
(as of 7/6/79)

COUNTY & LESSEE	SIZE, ACRES & (NO. OF LEASES)	LOCATION	DATE ISSUED
<u>DONA ANA</u>			
Mary Antweil	1,365.44(1)	T19S, R2W	3-19-79
Chevron USA Inc.	2,522.17(2)	T20 & 21S, R1E & 1W	6-29-79
J.F. Grimm	9,568.61(5)	T25 & 26S, R1E	6-11-75
C.L. Hunt	1,501.16(7)	T27S, R1 & 2W & T20 21S, R1W	5-30-75 & 4-27 & 6-26-79
Lamar Hunt	16,624.78(7)	T28 & 29S, R2W & T21S, R1W	5-29-75 & 6-26-79
Nancy B. Hunt	1,280.00(1)	T28S, R2W	5-29-79
Nelson B. Hunt	15,536.00(7)	T26S, R1 & 2W	5-29-79
N.K. Hunt	8,306.94(4)	T29S, R1 & 2W	5-29-79
M.W. Sands	2,440.00(1)	T20S R1W	4-27-79
Ramona Sands	4,307.79(3)	T20 & 21S, R1W	4-27-79
H.W. Schoellkopf, Jr.	9,636.92(3)	T17 & 28S, R2W	5-29-75
Southland Royalty Co.	14,263.29(7)	T19, 20 & 21S, R1E, 1W & 2W	6-15-79
<u>HIDAGLO</u>			
J.E. Blankenship	1,280.00(1)	T24 & 25S, R19W	
Earth Power Corp.	533.68(1)	T26S, R19W	12-28-76
Sun Oil Company	1,288.00(1)	T25S, R20W	5-18-79
Thermal Resources, Inc.	1,280.00(2)	T25 & 26S	1-7-77
U.S. Geothermal Corp.	2,314.57(2)	T25 & 26S, R19 & 20W	1-7-77

TABLE 3.7 (contd)

COUNTY & LESSEE	SIZE, ACRES & (NO. OF LEASES)	LOCATION	DATE ISSUED
<u>SANDOVAL</u>			
Oxy Petroleum Corp.	2,977.95 (4)	T15N, R1 & 2E	1-7-77 & 6-21-79
Sunoco Energy Dev. Co.	1,542.32 (2)	T15N, R3 & 4W	7-28 & 8-19-77
<u>SIERRA</u>			
Fluid Energy Corp.	12,182.93 (5)		

TABLE 3.8
STATE LEASES - NEW MEXICO
(as of 8-1-79)

COUNTY & LESSEE	SIZE, ACRES & (NO. OF LEASES)	DATE ISSUED
<u>DONA ANA</u>		
Gulf Oil Corp.	2,150.56(4)	3-12-75
Mounment Solar Corp.	640.00(1)	7-19-79
<u>GRANT</u>		
Aminoil USA	2,215.63(10)	8-14-74 & 3-12-75
Supron Energy Corp.	4,229.34(18)	3-12-75
<u>HIDALGO</u>		
Amax Exploration	6,560.17(14)	7-19-79 & 12-29-75
Aminoil USA	10,038.59(23)	8-14-74 & 3-12-75
Calvert Geothermal	5,423.13(8)	9-18-73
<u>SANDOVAL</u>		
Amax Exploration	29.30(1)	12-29-75
Cherokee & Pittsburg Mining	1,280.00(2)	3-12-75
<u>SOCORRO</u>		
J.W. Covello	640.00(1)	3-12-75
J.M. Kelly	2,024.27(5)	3-12-75
E.E. Wolter	1,682.08(4)	8-14-74
ARCO	4,793.82(9)	7-19-79

3.2 Area Development Plans

3.2.1 State Geothermal Planning Areas

The New Mexico State Team will define 8 substate geographical areas for which the development and utilization of geothermal energy prospects are likely between now and the year 2020.

The areas considered for commercialization planning are primarily multi-county substate areas based on the state planning district format. These substate regions also coincide with geological provinces and with distributions of geothermal resource sites that are unique to those respective areas.

The 1st-priority target areas for area development planning are centered on the Rio Grande River Valley throughout its entire length within the state.

The description of the multi-and single-county areas follows:

ADP-1: Dona Ana County

This county is emerging as the first area of intense study and planning activity by private and government entities. The strong interest shown in geothermal energy for economic considerations plus the adjacent overflowing economic growth pattern of El Paso, Texas provides the basis of selection for the first area development plan. A number of research investigations of the geothermal potential here have been conducted. There are 2 KGRA's in the county: Radium Springs and Kilbourne Hole. The Kilbourne Hole KGRA, located next to the U.S. - Mexico border, has potential electrical generation capacity.

FIGURE 3.2

STATE PLANNING AREA DEVELOPMENT DISTRICTS

ADP-2: Bernalillo, Tarrant and Valencia Counties

With the exception of Standard Metropolitan Statistical Area of Albuquerque. Located in central New Mexico, the area roughly coincides with the Middle Rio Grande Council of Government's District. The brightest geothermal energy potential lies in the West Mesa area of Albuquerque.

ADP-3: Los Alamos, Rio Arriba, Sandoval, Santa Fe and Taos Counties

The area is comprised of all north central counties, all of which straddle the Rio Grande River. All counties encompass the Baca Location geothermal resource in the Valles Caldera, the state's largest resource and only proven electrical generation reserve. The most significant geothermal features are located in this area including the southern extension of the San Luis Valley of Colorado. The population is sparse except for the concentrations along the Rio Grande River Valley.

ADO-4: Sierra and Socorro Counties

These counties are part of the Southern Rio Grande Council of Governments and roughly located in the southern central area of the state. There is significant geothermal potential in the cities of Truth or Consequences, where 2 demonstration projects are underway, and Socorro, where shallow magma bodies have been detected and the community's water supply is piped from 3 hot springs.

ADP-5: Catron, Grant, Hidalgo and Luna Counties

These southwestern counties make up the Southwestern New Mexico COG. The prominent geothermal features are the Lightning Dock KGRA, near Animas, the Gila Hot Springs

KGRA, and the Lower Frisco Hot Springs KGRA. The latter 2 areas are located in the Gila Wilderness Area and all counties are sparsely populated. Direct-heat applications have been in continuous operation for 40 years at the Gila H.S. and for 10 years at the Animas anomaly.

ADP-6: Southeastern New Mexico Economic Deveoopment
District

This area consists of the 5 southeastern counties. The only significant geothermal prospects seem to exist in the Tularosa Basin, a large enclosed basin in Otero County. There may be possibilities for space-heating uses for the community of White Sands at the White Sands Missile Range.

ADP-7: San Juan and McKinley Counties

This area comprises the northwest corner of the state and is part of the Colorado Plateau. There are a few hot springs here but they are of low temperatures and remotely located. Only bottom-hole temperatures of very deep oil test holes show any heat potential. The Navajo Indian Reservation occupies most of this area.

ADP-8: Northeastern and Eastern Central Counties

This area consists of all counties of the Eastern Plains COG and the 3 counties covering the Sangre de Christo mountain range: Colfax, Mora, and San Miguel. This primarily cattle-ranching country. The only geothermal prospect seems to exist at Montezuma Hot Springs, the former site of a stat. turn-of-the century resort spa.

3.2.2 Dona Ana County Area Development Plan

This county was selected as a first priority target study area because of its potential resource and the excellent

spirit of cooperation and commitment shown by the communities leaders and citizens.

The evaluation of the development potential in Dona Ana County is complicated by several inherent features of geothermal energy. First, the transportability of geothermal energy is technically and economically limited. Second, the kinds of potential uses of the resource are limited to its quantity and quality. Third, the cost of its development requires a sufficiently large market to justify the development costs. Fourth, the development costs vary among all the sites because of site-specific characteristics.

However, by focusing the investigation on a specific area, these difficulties are minimized.

The Dona Ana Area Development Plan involves first, the investigation of the area attributes such as geography, population, economy and attitudes of the residents. Second, the energy demands of the area were considered for both current and projected needs by the Standard Industrial Code and fuel types. Third, the current and future geothermal energy development is described. The estimated usable thermal energy is matched with the estimated demand. A possible schedule of activities has been estimated. It should be kept in mind that actual development is entirely dependent on the actions of the entrepreneurs.

Outside the Baca Location, Dona Ana County has the second largest geothermal heat potential in the state. In terms of geography and agriculture, Dona Ana is to New Mexico as the San Luis Valley is to Colorado. Located in south-central New Mexico, it is a prime productive agricultural area for a large number of vegetable crops, nuts, and fruits.

LOCATION OF DONA ANA COUNTY

FIGURE 3.3

● Hot springs and wells

TABLE 3.9

GENERALIZED LAND USEDONA ANA COUNTY

(OWNERSHIP BY ACREAGE)

<u>PRIVATE</u>	<u>FEDERAL</u>	<u>STATE</u>	<u>TOTAL</u>
326,135	1,821,515	286,910	2,434,560
13%	75%	12%	

TABLE 3.10

CURRENT GEOTHERMALENERGY USE

DONA ANA COUNTY, NEW MEXICO

1979

<u>SITE</u>	<u>USE</u>
RADIUM SPRINGS	WOMEN'S MINIMUM DETENTION CENTER
LOS ALTURAS	SUBDIVISION WATER SUPPLY

LAND USE MAP DONA ANA COUNTY

• EXPLANATION •

FARM LAND

- IRRIGATED
- DRY FARM

GRAZING

- RANGELAND
- WOODLAND

RECREATION, FISH & WILDLIFE

- PARKS, MONUMENTS, PRESERVES, WILD RIVERS
- WILDERNESS, PRIMITIVE & WILD AREAS

DEFENSE

- MILITARY

FIGURE 3.4

SOURCE: NEW MEXICO WATER RESOURCES, 1974

LAND STATUS MAP DONA ANA COUNTY

LEGEND

- PUBLIC LANDS
- BANKHEAD JONES L U LANDS
- STATE LANDS
- INDIAN RESERVATION AND INDIAN TRUST LAND
- NATIONAL PARKS AND MONUMENTS
- MILITARY LANDS
- PRIVATE LANDS BLANK
- NATIONAL FOREST
- NATIONAL WILDLIFE REFUGE
- WILD RIVERS
- DOUBLE STATUS Wide band of color indicates current land status
Narrow band of color indicates original land status
- GRANTS
- B L M ACQUIRED LANDS OR ADMINISTERED LANDS

Figure 3.5

TOPOGRAPHIC MAP DONA ANA COUNTY

Contour interval 500 feet

SOURCE DATA

U. S. Dept. of the Interior, Geological Survey topographic maps.
U. S. Dept. of the Army, Corps of Engineers, topographic maps.

Figure 3.6

POPULATION - DONA ANA COUNTY

..... Enumeration District Boundary Line

Las Cruces 1970 pop.(37,857); 1976 pop.(40,797)

Hatch 1970 pop.(867); 1976 pop.(898)

Anthony 1970 pop.(1728)

FIGURE 3.7

FIGURE
3.8

DONA ANA COUNTY
HYDROTHERMAL
SITE DATA

LEGEND:

- Agricultural Area
- Major Geothermal Area
- Known Geothermal Resource Area
- Anomalous Area From Watstore
- Energy Consumption Centers - 1976 Figures
- Hydrothermal Sites

Dona Ana County Estimated Energy Content
989.9 (In Trillions of BTU's)

Commercial & Industrial Energy Consumption
Total Energy Consumption
(In Trillions Of BTU's)

Population
Residential Energy Consumption
(In Trillions Of BTU's)

Temperature
Estimated Energy Content
(In Trillions Of BTU's)

0 5 10 Miles

TABLE 3.11

GEOTHERMAL RESOURCE CHARACTERISTICS
DONA ANA COUNTY, NEW MEXICO

<u>Resource Site</u>	<u>ID Number</u>	<u>Areal Extent Km²</u>	<u>Surface Temperature °C</u>	<u>Estimated Subsurface Temperature Range °C</u>	<u>Dissolved Solids PPM Low-High</u>	<u>Estimated Energy Content Quad BTU</u>
Kilbourne Hole	25004	3.0	40	80-155		0.2167
Radium Springs	25008	1.0	26-65	65-95	3460-3738	0.0413
White Sands Missile Rge	25016	3.3	54	80-98		0.1413
Las Alturas	25017	3.0	26-46	80-150	1000-1983	0.2089
Berino-Mesquite	25018	3.0	31-36	80-120	714-1020	0.1625
San Diego Mountains	20553	3.0		65-120		0.1625
Black Mountain/West Mesa	25026	3.0	50	50-65	494	0.0542
Rincon East	25043	1.0	56	65-125	1171	0.0567
					TOTAL	<u>1.0441</u>

TABLE 3.12

TYPICAL RESIDENTIAL ENERGY CONSUMPTION IN DONA ANA COUNTY

APPROXIMATELY 25,000 KWH/YEAR
BASED ON FLOOR SPACE OF 1600 FEET

HEATING DEGREE DAYS
3,194 DAYS

COOLING DEGREE DAYS
1,585 DAYS

WITH REFRIGERATED AIR CONDITIONING,
CONSUMPTION INCREASES TO
APPROXIMATELY 35,000 KWH/YEAR

SOURCES: NEW MEXICO SOLAR ENERGY ASSOCIATION, PERS. COMM., 1979
EDWARD LUMSDAINE, ASSIST. DIR. N.M. SOLAR INSTITUTE, PERS. COMM., 1979

TABLE 3.13

NATURAL GAS CONSUMPTION
DONA ANA COUNTY
NEW MEXICO
1978

<u>RESIDENTIAL</u>		<u>COMMERCIAL</u>		<u>INDUSTRIAL</u>	
<u>MCF</u>	<u>NUMBER OF CUSTOMERS</u>	<u>MCF</u>	<u>NUMBER OF CUSTOMERS</u>	<u>MCF</u>	<u>NUMBER OF CUSTOMERS</u>
1,089,978	18,563	1,189,314	1,320	105,895	6
<u>IRRIGATION</u>		<u>TOTAL*</u>		<u>BTU x 10¹⁰/YR</u>	
<u>MCF</u>	<u>NUMBER OF CUSTOMERS</u>	<u>MCF</u>	<u>NUMBER OF CUSTOMERS</u>		
205,255	510	2,605,218	20,406	263.6	

Industrial consumption growth rate:
2.7%/yr (estimated)

SOURCES: Barbara Willis, Las Cruces Gas Department and Rio Grande Gas Association, Pers. Comm
Lionel Holguin, Gas Company of New Mexico, Albuquerque, Pers. Comm., 1979
Flo Fullman, Gas Company of New Mexico, Silver City, Pers. Comm., 1979

*Total includes gas sales to public authorities.

TABLE 3.14
ESTIMATED THERMAL ENERGY DEMAND
FOR ALL COMMUNITIES
IN DONA ANA COUNTY

COMMUNITY	ESTIMATED POPULATION 1976	ESTIMATED DWELLING UNITS 1976	BTU'S x 10 ¹⁰ ESTIMATED RESIDENTIAL AND COMMERCIAL THERMAL ENERGY DEMAND 1978	FORECAST POPULATION 2020	FORECAST DWELLING UNITS 2020	FORECAST RESIDENTIAL AND COMMERCIAL THERMAL ENERGY DEMAND 2020 BTU'S x 10 ¹⁰	YEARLY ENERGY CONSUMPTION INCREASE	
Anthony	1,545	429	3.349	3,533	1,039	8.110	0.11	(3.4%)
Meadow Vista	1,500	364	2.841	4,140	1,220	9.523	0.16	(5.6%)
Berino	288	76	0.593	1,130	332	2.592	0.05	(0.08%)
Brazito	126	35	0.273	835	246	1.920	0.04	(3.9%)
Butterfield Park	360	113	0.882	1,058	311	2.428	0.04	(4.0%)
Chamberino	400	111	0.866	840	270	2.107	0.03	(3.4%)
Chapparel	1,500	500	3.903	3,504	1,031	8.048	0.10	(2.5%)
Dona Ana	240	67	0.523	436	128	0.999	0.01	(2.2%)
Fair Acres South	280	63	0.492	700	206	1.608	0.03	(5.4%)
Fair Acres West	175	23	0.179	437	129	1.007	0.02	(13.3%)
Garfield	288	80	0.624	602	177	1.382	0.02	(2.9%)
Hacienda Acres	435	145	1.113	1,279	376	2.935	0.04	(7.8%)
Hatch	1,000	277	2.162	2,091	615	4.801	0.06	(2.9%)

<u>COMMUNITY</u>	<u>ESTIMATED POPULATION 1976</u>	<u>ESTIMATED DWELLING UNITS 1976</u>	<u>BTU'S x 10¹⁰ ESTIMATED RESIDENTIAL AND COMMERCIAL THERMAL ENERGY DEMAND 1978</u>	<u>FORECAST POPULATION 2020</u>	<u>FORECAST DWELLING UNITS 2020</u>	<u>FORECAST RESIDENTIAL AND COMMERCIAL THERMAL ENERGY DEMAND 2020 BTU'S x 10¹⁰</u>	<u>YEARLY ENERGY CONSUMPTION INCREASE</u>	
San Miguel	850	236	2.545	1,331	391	3.052	0.01	(0.5%)
Santa Theresa	666	208	1.623	1,399	411	3.208	0.04	(2.3%)
Santo Thomas	600	167	1.304	940	276	2.154	0.02	(1.6%)
University Park-Tortugas	4,165	1,262	9.851	7,830	2,303	17.977	0.19	(2.0%)
Vado	280	22	0.172	1,625	178	1.394	0.03	(16%)
White Sands	3,072	375	45.000	3,072	375	45.0	0	

Sources:

1. Loring Spitler, Physical Planning Division, Southern Rio Grande Council of Governments, April, 1979, Personnal Communication
2. U.S. Bureau of Census, Revised Data, 1978
3. Roy Cunniff, RPPM Data Team, Regional Geothermal O/R Project, P.S.L., NMSU, Las Cruces, 1979, Pers. Comm.

COMMUNITY	ESTIMATED POPULATION 1976	ESTIMATED DWELLING UNITS 1976	BTU'S x 10 ¹⁰ ESTIMATED RESIDENTIAL AND COMMERCIAL THERMAL ENERGY DEMAND 1978	FORECAST POPULATION 2020	FORECAST DWELLING UNITS 2020	FORECAST RESIDENTIAL AND COMMERCIAL THERMAL ENERGY DEMAND 2020 BTU'S x 10 ¹⁰	YEARLY ENERGY CONSUMPTION INCREASE	
Hill	125	35	0.273	227	67	0.523	0.01	(2.2%)
La Mesilla	1,919	548	4.278	5,726	1,684	13.145	0.21	(4.9%)
La Mesa	330	92	0.718	517	152	1.187	0.01	(1.6%)
La Union	700	194	1.514	1,470	432	3.372	0.04	(2.9%)
Las Cruces	45,200	13,696	106.911	125,000	36,764	286.980	4.28	(4.0%)
Leasburg	430	116	0.905	781	230	1.795	0.02	(2.3%)
Mesquite	405	203	1.585	1,335	393	3.068	0.04	(2.2%)
Mesilla Park	1,454	425	3.318	4,338	1,276	9.960	0.16	(4.8%)
Organ	250	83	0.648	745	219	1.701	0.03	(3.9%)
Picacho	250	71	0.554	624	184	1.436	0.02	(3.8%)
Radium Springs	18	4	0.031	45	13	0.101	0.002	(5.4%)
Rincon	220	60	0.468	460	135	1.054	0.01	(2.9%)
Rodey	135	39	0.304	282	83	0.648	0.008	(2.7%)
Salem	270	24	0.187	270	79	0.617	0.01	(5.4%)
San Andres	525	164	1.280	954	281	2.193	0.02	(1.7%)

TABLE 3.15
MANUFACTURERS
IN DONA ANA COUNTY
1978

<u>Type</u>	<u>Location</u>	<u>SIC¹ Code</u>	<u>Number of Facilities</u>	<u>Estimated Energy Use 10¹⁰ Btu/yr</u>	<u>Low or Moderate Temp. Required (°C)</u>
Meat Packing Plant	Las Cruces	2011	2	1.831	177
Frozen Fresh Eggs	L.C.	2017	½	.280	50
Creamery Butter	L.C.	2021	1/3	1.664	77
Frozen Desserts	L.C.	2024	1/3	.964	77
Fluid Milk	L.C.	2026	1/3	1.590	77
Canning Specialists (Chili peppers)	L.C.	2032	1	0.263	121
Shelled Pecans	L.C.	2034	½	7.110	176
Pet Food	Chamberino	2047	1	3.701	121
Bottled & Canned Soft Drinks	L.C.	2086	1	.224	76
Manufactured Ice	L.C.	2097	2	.225	65
Frozen & dehydrated Chili	L.C.	2099	4	4.178	150
Mexican Food	Mesilla Park			1.950	150
Mexican Food	San Miguel			9.748	150
Corn & Flour Tortillas	L.C.			0.279	150
Hosiery Manufacturing	M.P.	2251	1	11.57	99
Women's Clothing	L.C.	2330	1	N/A	N/A
Work Gloves	L.C.	2381	1	N/A	N/A
Modular Branch Bank	L.C.	2451	1	N/A	N/A
Wood Household Furniture	L.C.	2511	1	0.014	66
Newspapers	L.C.	2711	1	.375	149
Commercial Printing	L.C.	2751	1½	.021	149

Continued-

Lithographic	L.C.	2752	1½	.021	149
Fertilizers	Mesquite	2875	½	6.099	200
Agricultural Chemicals	Mesquite	2879	½	4.401	149
Distilled Water	L.C.	2899	½	0.225	149
Bullet Lubricant	L.C.	2992	1	0.210	93
Concrete Block	L.C.	3271	1	2.646	204
Pre-Cost Concrete Products	L.C.	3272	1	2.646	115
Ready-Mix Concrete	L.C.	3273	2	.0003	65
Solar Heat Exchangers	L.C.	3433	1	.155	93
Fabricated Structural Steel	L.C.	3441	1	.792	93
Fabricated Plate Work	L.C.	3443	½	0.086	93
Sheet Metal Work	L.C.	3444	½	0.086	93
Precision Machinery	L.C.	3599	1	0.062	1371
Turntable	L.C.	3651	½	0.0325	149
Antennas Printed Circuits	L.C.	3679	1½	0.187	149
Advertising Displays	L.C.	3993	1	N/A	N/A

- Sources:
1. University of New Mexico, Albuquerque, Bureau of Business and Economic Research, New Mexico Directory of Manufacturing and Mining, 1978-1979
 2. Solar Energy Research Institute, Denver, 1978, unpublished draft.
 3. Physical Science Laboratory, NMSU, Las Cruces, RPPM Team.
 4. Personal communication with firms.

NOTE: Data from SERI was adjusted to the local conditions including size of facilities, number of employees, etc.

TABLE "3.16"
 POTENTIAL INDUSTRIAL AND AGRICULTURAL PROCESS
 USERS OF GEOTHERMAL ENERGY
 DONA ANA COUNTY
 1978 MANUFACTURERS

NAME OF COMPANY	LOCATION	TYPE	SIC CODE	EST. NO. EMPLOYEES	REQUIRED TEMPERATURE °C	ESTIMATED ENERGY USE 10 ¹⁰ BTU/YR.
Bouvet & Sons Chili Products	Garfield	Canning Specialties	2032	5	121	0.263
Burn Con- struction, Inc.	Las Cruces	Pre-Cast Concrete	3272	35	116	2.646
Cal Compack Foods, Inc.	Las Cruces	Frozen & Dehydrated Chili	2099	75	150	4.178
Chavez Commercial Signs	Las Cruces	"	3993	5	N/A	N/A
City Ice Service	Las Cruces	Distilled Water Ice	2899 2097	5	149 66	0.050
Coca Cola Bottling Co.	Las Cruces	Soft Drinks	2086	35	77	0.224
Cruces Transit Mix	Las Cruces	Concrete	3273	5	66	0.0003
Duntech Industries, Inc.	Las Cruces	Electronic Components	3679 3651	5	149 149	0.065
J.M. Manu- facturing	Las Cruces	Clothing	2330	5	N/A	N/A

NAME OF COMPANY	LOCATION	TYPE	SIC CODE	EST. NO. EMPLOYEES	REQUIRED TEMPERATURE °C	ESTIMATED ENERGY USE 10 ¹⁰ BTU/YR.
L'eggs Products, Inc.	Mesilla Park	Hosiery	2251	750	99	11.57
Las Cruces Foods, Inc.	Mesilla Park	Food Preparation	2099	35	150	1.950
San Juanito Chili Products Co.	San Miguel	Food Preparation	2099	175	150	9.748
Future New Firm	Las Cruces	Wool Prod.	2239	1000	99	15
White Sands Missile Range	White Sands	Military				45
NMSU	University Park	University			80	30
NMSU	Las Cruces	University			60	10
Memorial General Hospital	Las Cruces	General Medical & Surgical				0.782

NAME OF COMPANY	LOCATION	TYPE	SIC CODE	EST. NO. EMPLOYEES	REQUIRED TEMPERATURE °C	ESTIMATED ENERGY USE 10 ¹⁰ BTU/YR.
La Pierre Electronic, Inc.	Las Cruces	Electronic Components	3679	15	149	0.308
Las Cruces Meat Co.	Las Cruces	Meat Packing	2011	5	177	0.144
Mac's Wholesale Meats	Las Cruces	Meat Packing	2011	5	177	0.144
Marquez Brothers Tortilla Factory	Las Cruces	Food Preparation	2099	5	150	0.279
Micro Ammuni- tion Company	Las Cruces	Lubricant	2992	5	93	0.210
Prices Creameries	Las Cruces	Creamery	2021	35	77	4.218
		Frozen Products	2024		77	
		Fluid Milk	2026		77	
Solar Innovations	Las Cruces	Solar Heat Exchangers	3433	5	93	0.155
Stahmann Farms, Inc.	Las Cruces	Egg Products	2017	75	177	7.110
Three C Ice Company	Las Cruces	Ice	2097	5	66	0.060
Valley Transit Mix, Inc.	Las Cruces	Concrete	3273	35	66	0.002
Wells Lamont Corp.	Las Cruces	Work Gloves	2381	175	N/A	N/A

TABLE 3.17

DONA ANA COUNTY (NEW MEXICO REGION ONE)
POSSIBLE HYDROTHERMAL DEVELOPMENT

CITY	POP	<u>\$/MMBTU</u>		<u>FIRST YEAR HEAT-ON-LINE</u>		OPTIMUM DEVELOPER
		CITY DEVELOPER	PRIVATE DEVELOPER	CITY DEVELOPER	PRIVATE DEVELOPER	
WHITE SANDS M.R.	3072		\$ 5.96		1995	GOV'T DEVELOPMENT
MESILLA PARK	1850	\$ 1.87	4.37	1984	1984	PRIVATE OR CITY DEVELOPMENT
NMSU	0		1.54		1984	PRIVATE DEVELOPMENT
LAS CRUCES	50,000 (SEE SPECIAL ANALYSIS)					PRIVATE OR CITY DEVELOPMENT
"NEW FIRM"	0	15.13	18.75	2015	2019	
"NEW SHOPPING CENTER"		15.14	18.76	2015	2019	
ANTHONY	1728	2.83	7.02	1984	1984	CITY DEVELOPMENT
MESQUITE	400	1.70	3.96	1984	1984	PRIVATE OR CITY DEVELOPMENT
SAN MIGUEL	350	1.21	2.78	1984	1984	PRIVATE OR CITY DEVELOPMENT
VADO	200	9.74	23.87	1984	1984	
BERINO	200	8.13	20.17	1984	1984	
MEADOW VISTA	1402	6.12	14.99	1995	2009	
LA UNION	2580	5.84	14.12	1995	2009	
PRISON (LA TUNA)	1500	10.00	11.66	1995	2009	
RADIUM SPRINGS	100	4.16	10.66	1988	2007	
HATCH	920	7.91	18.44	2001	2019	
GARFIELD	300	5.93	14.04	1995	2013	
RINCON	300	4.13	9.95	1988	2006	
STAHMANN FARMS	350		18.47		2019	

TABLE 3.18

COMMERCIAL DEVELOPMENT OF HYDROTHERMAL ENERGY

SPECIAL ANALYSIS: LAS CRUCES, NEW MEXICO
 RESOURCE: LAS ALTURAS
 TEMPERATURE: 80°C
 WELL DEPTH: 2500 FEET
 DISTANCE: 7 MILES

EXISTING CITY

CURRENT POPULATION:
 50,000
 GROWTH RATE: 0

NEW DEVELOPMENT

FIRST YEAR: 2500
 GROWTH RATE: 0.10
 2020 POPULATION: 113,000

HEATING DISTRICT SIZE	\$/MMBTU		\$/MMBTU	
	PRIVATE	CITY UTILITY	PRIVATE	CITY UTILITY
			\$3.10	\$1.28
1,000	\$18.36	\$8.10		
2,000	14.65	6.44		
3,000	13.76	6.00		
4,000	12.86	5.60		
5,000	12.47	5.44		

CONCLUSIONS:

1. IT IS PROFITABLE RIGHT NOW FOR EITHER PRIVATE DEVELOPMENT OR A CITY UTILITY FOR NEW GROWTH.
2. AT OPTIMUM HEATING DISTRICT SIZE OF 5,000 PEOPLE, IT WILL BE PROFITABLE TO DEVELOP THE FIRST DISTRICT BY THE CITY IN THE YEAR 1995.

POTENTIAL MARKET OUTPUT SITES
DOMA ANA COUNTY, NEW MEXICO

TABLE 3.19

SITE ID	NAME	TEMP °C	DEPTH	COMM. ID	NAME	POP.	DIS. (MI)	L.T. °C	DEG. D.	$\frac{PH}{10} \frac{DI}{Btu/yr}$	NHRS	POP
25016	White Sands Missile Range	80	3500	25580	White Sands	3072	10	27	3500	35	2500	0.005
25017	Las Alturas	80	2500	25536	Mesilla	1850	6	27	3500	11.57 (Includes Leggs & two small firms)	8760	0.05
25017	Las Alturas	80	2500	25576	NMSU		1	-	-	30	5860	-
25017	Las Alturas	80	2500	25537	Las Cruces	50,000	7	27	3500	14.05	4000	0.05
25017	Las Alturas	80	2500	25800	New Firm	0	5	-	-	10 (1000 employees)	4000	-
25017	Las Alturas	80	2500	25801	New Shop Center	0	5	-	-	10 (construction planned 1980-81)	5200	-
25017	Las Alturas	80	2500	25802	New Development	1200	7	27	3500	0 (New subdivision with no planned NG service)	-	-
25018	Berino	80	2500	25503	Anthony	1728	5	16	2800	0		0.06
25018	Berino	80	2500	25609	Mesquite	400	2	26	3000	3.5	4000	0.06
25018	Berino	80	2500	25610	San Miguel	350	4	26	3000	9.75	4000	0.06
25018	Berino	80	2500	25611	Vado	200	4	26	2950	0		0.06
25018	Berino	80	2500	25612	Berino	200	3	26	2900	0		0.06
25004	Kilbourne Hole	80	3500	25547	Meadow Vista	1402	17	29	2800	0	-	0.06
25004	Kilbourne Hole	80	3500	25605	La Union	2580	17	29	2800	0	-	0.04

<u>SITE ID</u>	<u>NAME</u>	<u>TEMP °C</u>	<u>DEPTH</u>	<u>COMM. ID</u>	<u>NAME</u>	<u>POP.</u>	<u>DIS. (MI)</u>	<u>L.T. °C</u>	<u>DEG. D.</u>	<u>X 10¹⁰ Btu/yr</u>	<u>NHRS</u>	<u>POP</u>
25004	Kilbourne Hole	80	3500	25803	Prison	1500	17	29	2800	1.0	8760	0
25008	Radium Springs	65	300	25613	Radium Springs	100	0	26	3100	0	-	-
25053	San Diego Mtn.	65	1000	25529	Hatch	920	12	26	3300	0	-	0.03
25030	Derry	65	1500	25608	Garfield	300	3	26	3300	0.263	4000	0.03
25026	Black Mtn.	65	1500	25806	Stahman Farms	350	5	26	3000	7.11	1000	0.0
25043	Rincon East	65	1000	25614	Rincon	300	1	26	3300	0	-	0.03

Source: RPPD Data Base Team, PSL/New Mexico's Energy Institute, 1979, Pers. Com.

To some degree, most current food drying processes could be suitable to conversion with the use of heat from geothermal water depending on the resource and the location.

Dona Ana County is also one of the fastest growing areas in the state. The total county population is about 80,000 and the Las Cruces SMSA stands at about 51,000. Both the expanding industrial and governmental sectors are contributing to a robust economy in the county.

The county has numerous hot water wells and hot springs as well as 2 KGRA's: Radium Springs and Kilbourne Hole. The geothermal potential considering all sites is 0.9899 Quad BTU's for 30 years for direct thermal use.

3.3 Site Specific Development Plans

3.3.1 Candidate Geothermal Sites

The specific resource sites and energy applications (residential, commercial, industrial, and agribusiness) which are candidates for the SSDP are identified and briefly described as follows:

Animas/Lightning Dock

Applications: Current: 2 geothermally heated greenhouses with total 130,000 sq. ft.

Projected: 500,000 sq. ft. area of geothermally heated, geothermal irrigation of crops and orchards with soil-warming systems.

Resource Data: Surface Temp. 102°C
Subsurface Temp. 144°C

Estimated Energy Potential: 2,300,000 kw-h/A²

Estimated Reservoir Size: 3.3 km³

LOS ALTURAS

Applications: Current: none, only used as domestic water supply for Los Alturas subdivision.

Projected: Industrial process heat - L'eggs Corp., space heating: shopping center, hospital, NMSU campus, city district heating, dairy, school, and factory.

Resource Data: Surface Temp. 43°C
Subsurface Temp. 120°C

Estimated Energy Potential: 141.75×10^{15} cal
Estimated Reservoir Size: 3.0 km^3

TRUTH OR CONSEQUENCES

Applications: Current: several resort spas, baths, and pools, Carrie Tingley Hospital therapeutic pools, space-heating of lodge.

Projected: spaceheating of senior citizens center, apartment building complex and commercial buildings, pre-heated boiler water for C.T. Hospital

Resource Data: Surface Temp. 45°C
Subsurface Temp. 100°C

Estimated Energy Potential: 180×10^6 cal/min
Estimated Reservoir Size: 1.0 km^3

ALBUQUERQUE

Applications: Current: Heat pump spaceheating of multi-story office building.

Projected: large user spaceheating: West Mesa airport,
West Mesa High School, U of A campus pre-heat boiler system,
district heating of future subdivisions.

Resource Data: Surface Temp. 27°C
Subsurface Temp. N/A

Estimated Energy Potential: 0.0449 quad
Estimated Reservoir Size: 3.0 km³

JEMEZ SPRINGS

Applications: Current: bathhouse, greenhouse spaceheating

Projected: district heating

Resource Data: Surface Temp. 73°C
Subsurface Temp. 103°C

Estimated Energy Potential: 0.0206 quad
Estimated Reservoir Size: 3.3 km³

3.4

Time Phased Project Plan

3.4.1 Active Demonstration/Commercialization Projects

There are 9 geothermal developments in the state that are currently active demonstration and commercialization projects. All of these projects are considered to be candidates for the time-phased project plans.

3.4.1.1 There are 6 demonstration projects that have been funded by the New Mexico Energy and Minerals Department:

1. Carrie Tingley Hospital at the City of Truth or Consequences thermal basin. The hospital has the right to use 170,350 liters of the basin water (43°C) which contains a useful heat content of 12,000 BTU/min. Previously this water was being used by the hospital in its therapeutic pools for physical therapy. However the energy content is not being fully utilized. The hospital's present energy consumption for hot water is 9000 BTU/min. The project which commenced on July 18, 1979, will design, install, operate, monitor and evaluate a geothermal preheating system for the therapeutic pool and boiler by June 1981.
2. City of T or C Senior Citizens Center, spaceheating. The resource is the thermal basin underlying the city averaging 43°C temperature. The geothermal water will be pumped from a 154m or less well which is being drilled on city property. This well will be connected to the city's Senior Citizens Center to supply up to 100,000 BTU/hr during peak demand period. The complete design, installation and monitoring of the spaceheating system will be completed by June 1981. The project was commenced on June 28.
3. Solar-assisted geothermal greenhouse, Taos County. (High-Altitude) The resource is the Ponce de Leon. Hot Springs

near Ranchos de Taos. The springs discharge 1,305,977 liters per day at 35°C at an evaluation of about 2,256m (7,400 ft.). The project will analyze and determine the use of a geothermal heat recovery system to provide thermal energy for greenhouse spaceheating for growing cash crops (for 5,574m²) and other commercial processes. This project uses technology transfer from power plant waste heat recovery. The project began May 22, 1979 and will finish December 1980.

4. Solar-assisted geothermal greenhouse, Faywood (Upper Sonora Desert). The resource is the Faywood Hot Springs 48.3 km (30 miles) southeast of Bayard, New Mexico which flows at 132.5l./m. at 57°C. Runoff water has previously been used for irrigation. The objective is to operate and monitor the geothermal greenhouse which will produce native plants for waste tailings reclamation projects by Kennecott Copper Corporation. Initiation of this project was on June 18, 1979 and is to be completed December 1980.
5. Spaceheating of the University Center at New Mexico State University, Las Cruces. The resource is the Los Alturas anomaly adjacent to the university's east boundary. It appears to be fault-controlled. Investigations indicate possible 80°C water at flow rates of 1893 #l/m (500GPM) from well depths of 610m. A well is being drilled with the instrumentation installed. Monitoring and reporting will be completed by June 1981. The project commenced June 28, 1979.
6. Industrial process geothermal heat for L'eggs Products, Inc. No resource is confirmed. However, geophysical studies have begun June 28, 1979 for placement of a geothermal well. If an appropriate resource is encountered a well will be drilled, equipment installed, operated, monitored and evaluated for industrial use by June 1981.

3.4.1.2 With the exception of some aged hot spring resort spas, most private business enterprises utilizing geothermal energy in the state started in the 1960's. The most significant developments are listed here:

1. Baca Location geothermal power plant demonstration program, Jemez Mountains. The resources of the project area inside the Valles Caldera include both a liquid and vapor-dominated reservoir. The major, liquid-dominated reservoir is over-pressured and contains a calculated 1.8×10^{12} kg of fluid in place. The average reservoir fluid temperature is in excess of 260°C. The main production and injection zone is the lower Bandelier Tuff; the upper Bandelier forms the caprock. Since the first geothermal well was acquired in 1963, Union Geothermal of New Mexico has drilled 18 wells and probably 13 to 16 more wells may be needed for the proposed 50 MWe plant. Final approval of the environmental impact statement must be made before construction can start in Spring of 1980. Barring major snags, its believed the demonstration plant could go on line by Spring 1982.
2. The Animas Valley geothermal greenhouses. Operators: Tom McCants and Dale Burgett. Two hothouse operations are described together because of the same underlying resource, identical characteristics, energy-use applications and geothermal energy-requirements.

The resource is the Animas "hotspot," a very shallow anomalous aquifer, where abundant water of 102°C is obtained at depths of less than 29 meters. The thermal anomaly has not surface manifestations and it is very geophysically conspicuous in a 1 square mile section. This apparently is a fault-controlled feature adjoining a sediment-filled basin.

The 2 greenhouse operations overlying the thermal anomaly use 3600 BTU/min and 1700 BTU/min with no thermal drawdown. The thermal capacity is used for the production of various high-price floral plants particularly roses.

3. Geothermal heat pump system of Sandia Savings Building, Albuquerque. Two aquifers, at 90' and 270' deep, supply cool and warm waters according to the seasonal demand. Two wells are involved in this operation. The shallow well supplies cool water with a temperature range from 60° to 70°F. The deeper well supplies warm water at 78° to 80°F. The water is withdrawn from either the cool or warm well, depending on the season, and injected into the other well. A heat exchanger and three 100 horsepower compressors are used to boost or lower the water temperatures for winter heating or summer cooling. Heating requires 2,518,000 BTU/h and cooling requires 3,467,182 BTU/h.

3.5 State Aggregation of Prospective Geothermal Utilization

Estimates are made of the total geothermal energy on-line for the area development plans as a function of time.

Projected Geothermal Energy On-Line (Quad)

<u>ADP</u>	<u>1979</u>	<u>1985</u>	<u>2000</u>	<u>2020</u>
#1	0.000	0.06	0.34	0.76
2	0.0001	80.0	0.03	0.05
3	0.0009	2.17	8.00	16.01
4	0.0003	0.002	0.015	0.03
5	0.002	0.001	0.009	0.018
6	0	0	0	0
7	0	0.001	0.002	0.007
8	0	0	0	0

ADP KEY (COUNTIES)

1. Dona Ana County
2. Albuquerque Area - Bernalillo, Torrance and Valencia
3. Los Alamos, Rio Arriba, Sandoval, Santa Fe and Taos
4. Sierra and Socorro
5. Catron, Grant, Hidalgo, and Luna
6. Chaves, Eddy, Lea, Lincoln and Otero
7. McKinley and San Juan
8. All northeastern counties

3.6 Institutional Analysis

3.6.1 Overview of State Laws and Regulations

This is a summary of the key pieces of legislation, regulatory actions, judicial decisions and time factors which control geothermal development in the State. The first legal provisions enacted in the state was the Geothermal Resources Act (1967) which requires all state lands to be leased through competitive bidding only. Lease terms are for an initial five years. As a result, most state leases are expiring in the next twelve months due to the short terms and could not be renewed. The act restricted the size of any lease to between 640 and 2,560 acres and prohibits any lessee from leasing over 25,000 acres in New Mexico. As of 1979, however, the state legislature relaxed these lease terms. This statute exacts royalties of 10 percent of gross revenue from the sale of steam and eight percent of net revenue from the operation of an energy plant, as well as a nominal lease rental of \$1 per acre per year. However, the Commissioner of Public Lands may suspend or reduce royalties and rentals if he finds it necessary to prove development. The commissioner has broad powers to improve various requirements and terms by lease negotiation or by regulation.

In 1973, the legislature directed the Oil Conservation Commission to regulate the drilling, development and production of geothermal resources and to conserve and prevent waste of the resource in the same way as it regulates natural gas production. This Act was followed, in 1975, by passage of the Geothermal Resources Conservation Act to prohibit waste and to give the Oil Conservation Commission board powers to prevent waste and protect correlative rights.

The 1975 Legislature enacted the Energy Research and Development Act (Sections 65-12-1 through 65-12-8, NMSA 1953) to create a fund, administered by the state energy agency, for the purpose of financing research or development projects in the energy field. This aims to provide solutions to the energy crisis through R&D in all fields including geothermal energy. Since 1975, the State of New Mexico has funded 36 geothermal projects for about \$1.5 million.

While it is possible that the New Mexico laws and regulations covering geothermal leasing of state lands and covering the drilling, development and production of geothermal resources may be construed as constraining geothermal development, the New Mexico legislature is expressing interest in geothermal energy with some incentives for its development. This was shown by a 1977 legislative memorial requesting a study of heating state buildings with geothermal energy. The resulting study indicated little evidence that geothermal energy could be found in the capitol city of Santa Fe. It stated, however, that money might be saved by conversion of state buildings to geothermal heating in areas of potential resource. In the special session in 1978, the Legislature appropriated \$200,000 to establish geothermal space heating demonstration projects. This required 100% matching funds from federal, local or private sources and this program has successfully resulted in the funding of 6 projects.

The following actions on geothermal legislation were taken by the state legislature in the 1979 session:

1. House Bill 446 providing for geothermal lease terms and acreages was passed. The bill extends the total state acreage limitation from 25,600 acres to 51,200 acres and extends the time limitation of the leases from five years to ten years. (A duplicate Senate Bill was not acted upon.)

2. House Bill 447 was passed and provides for powers of the Oil Conservation Division over geothermal resources. The bill clarifies procedures and powers regarding the administration of the geothermal resources conservation act by the Oil Conservation Division of the Energy and Minerals Department.
3. Senate Joint Memorial 9 for a geothermal policy study was adopted. The memorial directs the legislative council to include geothermal policy studies in the work under at least one interim legislative study committee.
4. Senate Joint Memorial 10 for a study of state land leases was adopted. The Memorial directs the Commissioner of Public Lands to consult with the Energy and Minerals Department, and the New Mexico Energy Institute to examine the existing policy and leases of state lands for geothermal purposes, and to report back by July 3, 1979 to the legislature with recommendations.

The state Energy and Minerals Department has broad powers concerning all aspects of energy development. It has the power to review decisions of the Oil Conservation Commission. The State Engineer also has regulatory powers; he must issue a permit to drill a well or appropriate the geothermal resource within a declared underground basin from which water as a gas or liquid will be withdrawn.

Additional regulatory power is exercised by the Environmental Improvement Division over air quality, radiation control, noise control and occupational health and safety. The division enforces regulations set by the Water Quality Control Commission.

There has been no court litigation on geothermal development in the state, but there are many potential problems which ultimately will

have to be resolved either through legislation or litigation. One issue is whether geothermal resources are to be defined as minerals in cases where the mineral estate has been severed from surface ownership.

New Mexico taxes the production of various forms of energy. None of these taxes specifically apply to the geothermal resource, but there may be future debate on whether or not this resource may be considered a mineral within the meaning of the tax laws. One tax, the oil and gas conversation tax of 19/100ths of one percent on sale value less transportation costs and royalties, would apply to geothermal production. It is not a revenue tax, but is used to insure proper abandonment of oil and gas wells and to help pay expenses of the Energy and Minerals Department.

TABLE 3.20

RESOURCE DEVELOPMENT TIME TABLE - NEW MEXICO

Activity	Approximate Min. Time
Developer conducts casual reconnaissance exploration	10 mo.
BLM, State Leases Land	10 mo.
USGS makes Environment Assesement	9 mo.
USGS, State approves plan of operation and issue permit to explore	9 mo.
Developer conducts geophysical work and drills T.G. Holes	10 mo.
USGS makes EA for drilling deep exploratory wells	6 mo.
USGS, State give permission to drill	3 mo.
Developer drills deep exploratory well	18 mo.
Developer conducts feasibility study	15 mo.
Developer files water rights application with State Engineer	6 mo.
USGS makes EA for development	8 mo.
Gives permission to develop	3 mo.
Developer drills development wells and runs production tests	28 mo.
USGS approves plan of operation	8 mo.
Developer/User installs district heating system	8 mo.

3.7 Public Outreach Program

The goal of this program is to increase awareness and acceptance of geothermal energy and to promote the use of our geothermal resources by industry, commerce, agriculture and government. This program is designed to expedite the direct applications of geothermal energy by 1) identifying geothermal application concepts and potential resource developers, 2) identifying potential funding, 3) acting as a broker between developers and governmental funding sources, and 4) coordinating educational and public information programs.

3.7.1 Outreach Mechanisms

The New Mexico Outreach Program has three major activities associated with it: 1) identifying potential developers and assisting them in their efforts to secure funding, 2) participating in the State's Research and Development Program and 3) administering the State's Geothermal Demonstration Program.

New Mexico has an annual energy research and development budget of \$2.5 million. The R&D program has existed for five years and has promoted geothermal research and the identification of the State's geothermal resources. Geophysical and engineering projects have been funded by R&D funds and this source of funding has generated numerous contacts and projects in New Mexico.

The geothermal team reviews geothermal proposals, makes staff recommendations to the R&D Review Board, monitors funded projects and transfers the technology developed under R&D to the citizens of New Mexico.

New Mexico has awarded \$200,000 to six contractors for geothermal spacheating demonstrations. These demonstration projects are New Mexico's way of leading by example and

they are our announcement that New Mexico has viable geothermal resources that can be developed now.¹

The geothermal team monitors the construction, operation and evaluation of the six projects and transfers the information and experience to the public and to potential developers. The demonstrations also offer the team the opportunity to assist developers in administrative and permit procedures and thereby gaining practical experience that will be useful to future developers.

The geothermal team is beginning to develop future outreach activities around the New Mexico Energy Extension Service. Discussions are focusing on increased public contacts, future workshops and developing more contacts.

The team will work with the Energy Extension Service to transfer to the public, updated information and materials on geothermal energy relating to resource availability, spaceheating, agricultural applications, industrial uses and commercial applications. In the fall of 1979 the team plans to hold a statewide workshop focusing on resource availability, technical issues, institutional issues, and funding opportunities.

3.7.2 Summary Listing of Contacts and Results

Contact	Prospective Application	Comments
<u>Industry</u>		
Public Service Company of New Mexico	Electrical	Discussed environmental concerns
Construction Analysis Inc.	Electrical and Spaceheating	Will work with NMEI to develop proposal for Columbus, New Mexico

Contact	Prospective Application	Comments
L'eggs Products, Inc.	Spaceheating	Agreed to submit a proposal for NM Geothermal Spaceheating Program and was funded with \$56,200.00
Solar America, Inc.	Direct Heat	Initial contact to evaluate funding sources for a food processing application
Dean Hernandez, NMSU	Industrial	Outreach for possible leads

Agribusiness

Southwestern Services for Handicapped Children and Adults	Native Plant Greenhouse	Received \$21,208 from Geo Demo Program to build and operate
Solar America, Inc.	Commercial Greenhouse	Received \$40,663 to build and operate
Toney Anaya	Greenhouse	
Bill Stevens, Sec. of Agriculture	Outreach	

Individuals

George Anderson Director, N.M. Energy Extension Service	Increase Outreach Capabilities	Developing a plan to utilize EES personnel outreach
Morris Skalka, DOE	Briefing on DOE funding	
Frank Hudson, DOE	Briefing on environmental concerns	
W.D. Gertsch, EG&G	Increasing NM's expertise	Discussed 100 hour program; technology transfer, assisted on Jemez Springs well
Art Wilbur, DOE	Electrical at Baca Location	Discussed communication over DOE's project

Contact	Prospective Application	Comments
A. Thienprasert, Thai Government	Direct Heat Application	Discussed information transfer from our Demonstration Program
E.L. Kaufman, LASL	Hot Dry Rock	Briefing on LASL Research
L.S. Germain, LASL	Direct Heat	LASL's new well for spaceheating
Ivar Engen, EG&G	Well drilling and connections	Advised on Jemez Springs
Leonard Sugerman	Direct Heat	Discussed possible use at White Sands
Douglas Roberts, NMEI	Outreach	Discussed information needs
H.M. Stoller, Sandia	Technology transfer	
George Abunathy, NMSU	Direct Heat	Discussed state policies, regs. and procedures
Jewel Burk, SWSH	Agribusiness	Developed contract for SWSH greenhouse
Bert Barnes, DOE	Spaceheating	Funding for Carrie Tingely Hospital
Dr. Daw, NMSU	Geothermal Demonstrations	Acting Director for NMEI at NMSU
Keith Dotson, Four Corner Regional Commission	Spaceheating	Commission agreed to partially fund T or C Senior Citizens Center
Bob Grant	Spaceheating Direct Heat	Furnishes major leads for commercialization
R. Gerson, DOE	Spaceheating	DOE funding for N.M. Geothermal Spaceheating program
Tom Gipson, Consultant	Spaceheating	Stopped leakage of Jemez Springs well
Tom Gebhard, Consultant	Spaceheating	T or C Senior Citizens Center

Contact	Prospective Application	Comments
David Hanna, Consultant	Spaceheating	Possible applications at Zia Pueblo
Ron Hilker, EG&G	Spaceheating	Explained the 100 Hour Program
G. Hummer	Spaceheating	COG Director participating in Dona Ana County geothermal planning
Calvin Jackson, DOE	Electrical	Discussed Baca problem
R.O. Livergood L'eggs Products	Spaceheat Direct Heat	L'eggs participation in Geothermal Demo Program
George Orminston, Four Corners Regional Commission	Spaceheating	Discussed funding
Peter Pino, Zia Pueblo	Spaceheating	Discussed possible application
Barbara Gray - Pendelton, SWSH	Agribusiness	Funded their proposal
Howard Ross, UURT	Spaceheating	Discussed the industry coupled program
A. Starkey, NMEI	Spaceheating Agribusiness Industrial Institutional	Work closely to develop commercialization leads and to identify funding
Ed Smith, Eight Northern Indian Pueblos	Spaceheating Outreach	Developed \$35,000 proposal and submitted to DOE
Mort Smith, LASL	Hot Rock	
Quinton Dringer, City Manager, Truth or Consequences	Spaceheating	Developed demonstration and funded for \$24,726.00
Paul Tafoya - Santa Clara Pueblo	Spaceheating	Outreach
Tom Ortiz, Tierra Engineering	Spaceheating	Hooking up Jemez Springs well
Tom Clemmons	Spaceheating	Principal Investigator Jemez Springs

Contact	Prospective Application	Comments
Mayor Armento Jemez Springs	Spaceheating	Funded well drilling \$35,000
Mayor Rusk Albuquerque	Spaceheating Direct Heat	Discussed exploration on West Mesa
J. W. Harrison, City Manager, Las Cruces	Spaceheating Direct Heat	Planning for Las Cruces
Fred Day, County Planner, Las Cruces	Spaceheating Industrial Use	Planning for Dona Ana County
Gladys Dietzman, County Manager, Luna County		Geothermal possibilities in Columbus
Glenn Hummer, Southern Rio Grande COG		Planning for Las Cruces

Contact	Prospective Application	Comments
<u>State Government</u>		
Cubia Clayton, EID		Enviornmental regulations
Sally Chapel, DOD	Direct Heat	Furnished leads on Columbus
Kay Hatton, State Geologist's Office	Spaceheating Direct Heat Industrial	Monitoring well drilling
Al Dietz, Director Industrial Development	Spaceheating Agribusiness Industrial	Working on Columbus and Las Cruces
Ken Hargis, EID		Air Quality regulations
Bob Rodgers, State Engineer's Office	Spaceheating	Jemez Springs
Gene Gray, State Engineer's Office		Water Rights
Joe Ramey, OCD		Geothermal regulations
Maxine Goad, EID		Water discharges
John Carr	Spaceheating	Carrie Tingley Hospital demonstration funded \$46,185
<u>Local Government</u>		
Mayor Laubacher Truth or Consequences	Spaceheating	T or C Senior Citizens Center
Mayor Armento Jemez Springs	Spaceheating	Funded well drilling \$35,000
Mayor Rusk Albuquerque	Spaceheating Direct Heat	Discussed exploration on West Mesa
J.W. Harrison, City Manager, Las Cruces	Spaceheating Direct Heat	Planning for Las Cruces
Fred Day, County Planner, Las Cruces	Spaceheating Industrial Use	Planning for Dona Ana County
Gladys Dietzman, County Manager, Luna County		Geothermal possibilities in Columbus
Glenn Hummer, Southern Rio Grande COG		Planning for Las Cruces

The state had completed contract negotiations with six contractors and has disbursed \$199,019.52. Awards were made based upon the recommendations of the state's R&D Review Committee to:

67-51 BDM Corporation for Carrie Tingley Hospital, \$46,185.50 to design, install, operate, monitor and evaluate a geothermal preheating system for the therapeutic pool and boiler by June, 1981.

67-52 The City of Truth or Consequences \$24,726.36 to drill a geothermal well on city property which will be connected to the city's Senior Citizen Center; and to design, install and monitor the geothermal spaceheating systems by June, 1981.

67-53 Solar America, Inc. \$40,663.00 to design, construct, operate, monitor, evaluate and report on a geothermal greenhouse to be built in Taos by December, 1980.

67-4 Southwestern Services to Handicapped Children and Adults, Inc. \$21,208.00 to design, construct, operate, monitor and report on the demonstration of a geothermal greenhouse to grow native plants by December, 1980.

67-70 Monument Solar Corporation for L'eggs Products, Inc. \$56,236.66 to evaluate L'eggs property for the placement of a geothermal well (along with four other sites funded by DOE), and if an appropriate resource is encountered a well will be drilled, equipment installed, operated, monitored and evaluated for industrial use by June, 1981.

67-71 New Mexico State University \$10,000 to drill a geothermal well, install instrumentation, monitor and report on the geothermal spaceheating of the University Center by June, 1981.

All the contracts require a minimum of one hundred percent matching funds from private or federal sources.

3.7.3

Overall Prospectus for Future Geothermal Activity

The New Mexico Geothermal Demonstration Program has successfully raised the profile of the viability of geothermal as an alternative energy resource. New Mexico now finds itself in a position of not only having six active demonstrations but also having an acute interest in geothermal shown by a broad spectrum of our community.

Greatest interest in geothermal development is being shown in Dona Ana County in the southern part of the state. The county is the home of New Mexico State University which has been actively planning for geothermal applications on campus. At this time the university is developing a detailed proposal for preheating boiler waters used for spaceheating and the administration is actively seeking financial assistance.

A successful well has been completed in Jemez Springs and negotiations will soon begin to develop the spaceheating planning. Successful hook-up of the Jemez Springs well is expected in the near future.

Columbus, which is located on the Mexican border, is presently being evaluated for a twin industrial park. Local leaders and the New Mexico Department of Commerce and Industry have shown great interest in evaluating the geothermal potential of the area. Discussions have led to the call for proposals to conduct geophysical testing in the area.

The City of Truth or Consequences is beginning to evaluate the possibility of electrical generation.

A construction company has contacted EMD to begin discussing the use of geothermal spaceheating in low cost, fixed-income, housing that they plan to build.

The University of New Mexico in Albuquerque has secured a PRDA to evaluate geothermal applications on campus and a private engineering firm has developed a proposal to use very low temperature water and heat pumps to heat certain buildings on the campus.

EMD personnel have been working with community leader in Dona Ana County to identify potential users. Initial information has furnished prospects in the areas of spaceheating for a shopping center, process heat for a pet food processor and geothermal application for a dairy.

Finally, the West Mesa area of Albuquerque has become the focal point of geothermal discussions in Bernalillo. The West Mesa area is the center of new growth in Albuquerque and geothermal applications may have a viable future. Plans for accelerated outreach efforts in this area have been delayed, but should be back on track by this fall.

The pace and magnitude of geothermal development will be greatest in Dona Ana County. It is difficult to estimate future commercialization commitments for several reasons which include cost, financing, reservoir information and institutional barriers.

Another reason for having problems in forecasting is the availability of state and federal geothermal funds. DOE appears to have the majority of its 1980 funds already committed to existing projects. At the same time the EMD has not finalized its thinking on a request for a special geothermal development appropriation.

New Mexico's natural gas future is in serious question and interest in geothermal has increased with the threat of natural gas curtailment. Dona Ana County is facing severe natural gas problems and it has become very active in geothermal planning.

All in all, New Mexico's geothermal future is bright and its activity is increasing. The EMD is taking a very active role in geothermal R&D, demonstration, outreach and commercialization and this effort should expedite development.

4.0 Summary of Major Findings and Recommendations

During the 1st six months, this project has attempted to estimate the market potential for geothermal energy development in New Mexico. It has also attempted to identify those conditions that may impede market penetration. As a third objective, it has identified and initiated those actions that seem necessary to advance the development of geothermal resources.

The results show the market potential of geothermal resources will be most significant in the north central part of the Rio Grande Valley including the Albuquerque Basin. The southern third of the valley from Truth or Consequences to the Texas stateline and isolated areas throughout the southwest corner of the state appear to be strong potential areas of direct application.

The following are the State Team's findings and recommendations:

1. Outreach effort has increased substantially and has raised the geothermal profile.
2. New Mexico's Research and Development fund has had a substantial impact on geothermal development and outreach.
3. New Mexico's Geothermal Demonstration Program has provided the biggest boost to geothermal development and the \$200,000 appropriation has been developed into over \$500,000 of projects.
4. The state of the art for determining geothermal reservoirs has to be improved and refined and the new improvements have to be forwarded to outreach personnel.

5. Outreach personnel should be offered special seminars on 1) DOE organization and responsibility, 2) DOE funding opportunities, 3) funding procedures and regulations, 4) other federal sources of funding, and 5) the Geothermal Loan Guarantee Program.
6. DOE should make a special effort to work with the states to increase their knowledge of geothermal issues particularly issues relating to resource identification, reservoirs determination and resource management. In particular special assistance should be offered to the state's regulatory agencies so they can increase their expertise and staffing to meet geothermal growth. The states need to begin to view the management of geothermal in a manner similar to oil and gas, that is, the resource needs to be managed and conserved much as the oil conservation commission's manage oil and gas development, production and correlative rights.
7. DOE needs to understand each state program to a greater degree and should work with the states to enhance the state's objectives. For example, here in New Mexico we have an aggressive R&D Program and Geothermal Demonstration Program yet our present contract requires that more effort go into resource planning (under DOE procedures and guidelines) then go into R&D.
8. Specially trained and experienced geothermal personnel should be made available to the states for 30-90 days to assist the states in organizing and fine tuning their operations. Examples: resource planning, well drilling, contracting, electrical generation, spaceheating engineering.
9. State and Federal agencies have to realize that loan guarantees address a symptom not the illness. Major technical efforts must be made to reduce geothermal risks by improving the technology, especially technologies associated with exploration, well drilling and reservoir identification. Financially covering a failure does little to improve the image of geothermal.

10. State governments need to realize that geothermal is a viable option and they need to give proper priority to permit processing and regulation development.

A P P E N D I X

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NEW MEXICO STATUTES AND REGULATIONS
AFFECTING
GEOTHERMAL DEVELOPMENT

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GEOHERMAL

AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
DEPARTMENT OF FINANCE AND ADMINISTRATION	6-2-29.1	ADMINISTRATION; RESEARCH	PRIOR TO ENTERING A CONTRACT FOR CONSTRUCTION, MAJOR ALTERATION OR RENOVATION OF ANY STATEOWNED BUILDING, REQUIRES A FEASIBILITY STUDY OF THE ENERGY SOURCES, OTHER THAN FOSSIL FUELS WHICH COULD BE USED TO HEAT OR COOL THE BUILDING.
STATE LAND OFFICE	7-1-1 THROUGH 7-1-27	ADMINISTRATION; POLICY	CREATES STATE LAND OFFICE, POSITION OF COMMISSIONER, DEFINES POWERS AND DUTIES, CREATES STATE LANDS MAINTENANCE FUND, PROVIDES FOR DISPOSITION OF FUNDS COLLECTED BY STATE LAND OFFICE, CREATES PERMANENT FUNDS, PROVIDES ACCOUNTING PROCEDURES.
STATE LAND OFFICE	7-2-1 THROUGH 7-2-1.3	ADMINISTRATION; POLICY	AUTHORIZES COMMISSIONER TO DEED STATE LANDS TO THE U. S. GOVERNMENT, ESTABLISHES PROCEDURES, SETS LIMITATIONS.
STATE LAND OFFICE	7-2-11	ADMINISTRATION; POLICY	AUTHORIZES COMMISSIONER TO RETAIN TITLE TO MINERALS UNDER STATE LANDS EXCHANGED FOR FEDERAL LANDS, LESSEES CONSENT REQUIRED.
STATE LAND OFFICE	7-6-1 THROUGH 7-6-2	ADMINISTRATION	AUTHORIZES COMMISSIONER TO EXPEND STATE LANDS MAINTENANCE FUND TO ASCERTAIN POSSIBILITIES OF DEVELOPMENT OF MINERAL PRODUCTION ON STATE LANDS.
STATE LAND OFFICE	7-7-1 THROUGH 7-7-10	ADMINISTRATION; LEASES; CONSERVATION; SAFETY; ENVIRONMENT	TRESPASS AND VIOLATIONS RELATING TO STATE AND UNITED STATES LANDS. PROVIDES PENALTIES FOR MALICIOUSLY LIGHTING OR LEAVING FIRES ON STATE LANDS, FOR FAILURE TO EXTINGUISH FIRES ON STATE LANDS, FOR TRESPASS OR COMMITTING WASTE ON STATE LANDS, FOR FAILURE OF LESSEE OR PURCHASER TO PROVIDE GATES AND RUNWAYS AT INTERSECTION OF PUBLIC HIGHWAY OR FAILURE TO CLOSE GATE, FOR DAMAGE TO OR DESTRUCTION OF A FENCE OR GATE ON STATE LANDS; PROVIDES A PENALTY FOR ANY "PERSON WHO SHALL CUT DOWN,

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
			REMOVE, DESTROY OR INJURE, OR WHO SHALL TAKE, REMOVE OR CARRY AWAY ANY TIMBER, TREES OR FIREWOOD STANDING, CROWING OR LYING UPON STATE LANDS, OR WHO SHALL EXTRACT OR REMOVE, OR ATTEMPT TO EXTRACT OR REMOVE, FROM ANY STATE LANDS, ANY STONE, MINERALS, OIL, GAS, SALT OR OTHER NATURAL PRODUCTS OR DEPOSITS..." THESE STATUTES ALSO REQUIRE EVERY LESSEE OF STATE LANDS TO PROTECT THE LEASED LAND FROM WASTE OR TRESPASS BY UNAUTHORIZED PERSONS.
STATE LAND OFFICE	7-8-1 THROUGH 7-8-8	LEASES; PROCEDURES	SETS GENERAL REQUIREMENTS FOR THE LEASE OF STATE LANDS
STATE LAND OFFICE	7-8-26	LEASES	PROHIBITS SALES OF STATE LANDS WHICH ARE KNOWN CONTAIN MINERAL DEPOSITS, LEASING AUTHORIZED
STATE LAND OFFICE	7-8-29	LEASES; RIGHTS OF WAY	RESERVES MINERAL RIGHTS UNDER GRAZING AND AGRICULTURAL LEASES, GRANTS RIGHTS OF WAY.
STATE LAND OFFICE	7-8-61 THROUGH 7-8-62	RIGHTS OF WAY	COMMISSIONER AUTHORIZED TO GRANT RIGHTS OF WAY ON STATE LANDS, LIMITATIONS.
STATE LAND OFFICE	7-8-63 THROUGH 7-8-67	LEASES	AUTHORIZES REPAYMENT OF MONEY ERRONEOUSLY PAID ON A LEASE CONTRACT AFTER DISTRIBUTION OF MONEY TO AN INCOME FUND, AUTHORIZES APPEALS TO DISTRICT COURT.
STATE LAND OFFICE	7-8-68 THROUGH 7-8-73	LEASES	AUTHORIZES COMMISSIONER TO DETERMINE DISPUTES TO STATE LANDS, SETS PROCEDURES, AUTHORIZES APPEALS.
STATE LAND OFFICE	7-9-6 THROUGH 7-9-8	REPORTS	REQUIRES ACCURATE REPORTING OF MINERAL PRODUCTION, PROVIDES FOR INSPECTIONS, PENALTIES.

AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
STATE LAND OFFICE	7-9-15 THROUGH 7-9-16	MINERAL DEVELOPMENT	AUTHORIZES LEASES OF NATURAL DEPOSITS OR PRODUCTS OF STATE LANDS; REQUIRES DEVELOPMENT OF MINERALS IN WORKMANLIKE MANNER.
STATE LAND OFFICE	7-9-17 THROUGH 7-9-34	LEASES	SETS SPECIFIC REQUIREMENTS FOR THE LEASING OF STATE LANDS.
STATE LAND OFFICE	7-15-1 THROUGH 7-15-4	ADMINISTRATION; POLICY	GEO THERMAL RESOURCES ACT. DEFINES TERMS; SETS POLICY FOR ADMINISTRATION OF ACT: AUTHORIZES COMMISSIONER TO REQUIRE PRODUCTION UNDER CERTAIN CIRCUMSTANCES.
STATE LAND OFFICE	7-15-5 THROUGH 7-15-28	LEASES; REGULATION; BONDS	AUTHORIZES COMMISSIONER TO LEASE STATE LANDS FOR DEVELOPMENT OF GEO THERMAL RESOURCES; LIMITS SIZE OF LEASES AND ACREAGE WHICH MAY BE LEASED TO A SINGLE INDIVIDUAL; DIRECTS COMMISSIONER TO DESIGNATE "KNOWN GEO THERMAL RESOURCES FIELDS" AND LEASE LANDS THEREIN BY COMPETITIVE BIDS; SETS LEASE TERMS, RENTALS AND ROYALTIES; PROVIDES FOR RELINQUISHMENT OF THE LEASE; AUTHORIZES COMMISSIONER TO WAIVE, SUSPEND OR REDUCE RENTALS AND ROYALTIES UNDER CERTAIN CIRCUMSTANCES; EMPOWERS COMMISSIONER TO SUSPEND OPERATIONS ON A LEASE; SETS TERM OF LEASE; PROVIDES FOR COMMINGLING PRODUCTION; AUTHORIZES REINJECTION OF GEO THERMAL RESOURCES WITH APPROVAL OF THE COMMISSIONER; AUTHORIZES COOPERATIVE EFFORTS TO DEVELOP RESOURCES OR OPERATE FACILITIES; SETS RULES GOVERNING POSTING; PROVIDES FOR RESERVATIONS OF CERTAIN RIGHTS IN ALL LEASES, DEEDS OR SALES CONTRACTS GOVERNING STATE LANDS; PROVIDES FOR SURFACE USE IN GEO THERMAL OPERATIONS; REQUIRES BONDS; REQUIRES CONSENT OF OTHER AGENCIES WITH JURISDICTION OVER PROPERTY OR WATER BEFORE THE COMMISSIONER CAN LEASE THE PROPERTY; LEASES ARE TRANSFERABLE; COMMISSIONER OR HIS AGENTS MAY INSPECT ALL RECORDS PERTAINING TO GEO THERMAL RESOURCES TAKEN FROM STATE LAND; PROVIDES FOR LEASE CANCELLATION UNDER CERTAIN CIRCUMSTANCES; PROVIDES FOR REMOVAL OF

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
			IMPROVEMENTS ON TERMINATION OF LEASE; DIRECTS COMMISSIONER TO PROMULGATE RULES AND REGULATIONS; COMMISSIONER MAY WITHHOLD LANDS FROM LEASE; REQUIRES PUBLIC NOTICE PRIOR TO HEARING UNDER THIS ACT; AUTHORIZES ASSIGNING LEASES AS COLLATERAL.
STATE LAND OFFICE	RULES AND REGULATIONS RELATING TO GEOTHERMAL RESOURCES LEASES RULES 1 THROUGH 44	REGULATIONS; LEASES; BONDS	DEFINES TERMS USED IN RULES; SETS RULES GOVERNING APPLICATIONS FOR LEASES, REQUIRES DEPOSITS; SETS RULES GOVERNING WITHDRAWAL AND WITHHOLDING LANDS FROM LEASING, SALE OR LEASES AT PUBLIC AUCTION, FORMS AND TERMS OF LEASES, ASSIGNMENTS, CANCELLATION FOR CAUSE, BONDS, REPORTS AND INSPECTION OF RECORDS, PUBLIC HEARINGS, COLLATERAL ASSIGNMENTS, CO-OPERATIVE AGREEMENTS. FEES; SETS ROYALTIES.
STATE LAND OFFICE	7-16-1 THROUGH 7-16-3	ADMINISTRATION	RESERVES TO THE STATE IN ALL LEASES ON STATE LAND THE OPTION OF PURCHASING THE PRODUCTS FROM THE LEASE AT THE PREVAILING MARKET PRICE; THE COMMISSIONER MAY WAIVE THIS CALL ON MINERALS EXCEPT AS TO FOSSIL FUELS UNDER CERTAIN CIRCUMSTANCES; THE COMMISSIONER IS AUTHORIZED TO SELL THESE PRODUCTS AT THE BEST PRICE AVAILABLE.
HEALTH & SOCIAL SERVICES DEPT.	12-1-27 THROUGH 12-1-29	ADMINISTRATION; ENVIRONMENT	HEALTH AND SOCIAL SERVICES DEPARTMENT CREATED, BOARD CREATED, TERMS DEFINED.
HEALTH & SOCIAL SERVICES DEPT.	12-1-30	ADMINISTRATION; ENVIRONMENT; POLICY	BOARD AUTHORIZED TO ESTABLISH POLICIES APPLYING WITHIN AND WITHOUT THE DEPARTMENT AND TO EMPLOY A DIRECTOR.
HEALTH & SOCIAL SERVICES DEPT.	12-1-30.1 THROUGH 12-1-30.2	ADMINISTRATION; ENVIRONMENT; POLICY	PROVIDES THAT THE ENVIRONMENTAL IMPROVEMENT AGENCY MAY ENTER INTERSTATE AGREEMENTS ON AIR POLLUTION. AUTHORIZES ENTERING AGREEMENTS WITH STATE AND LOCAL AUTHORITIES OF OTHER STATES AFFECTED BY AIRSHEDS LYING PARTLY WITHIN ANOTHER STATE. ALLOWS MUNICIPALITIES, COUNTIES AND OTHER

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
HEALTH & SOCIAL SERVICES DEPT.	12-1-30.3	ADMINISTRATION; ENVIRONMENT; POLICY	LOCAL AUTHORITIES HAVING RESPONSIBILITIES RELATING TO AIR QUALITY TO BE PARTIES TO, OR OTHERWISE PARTICIPATE IN, AGREEMENTS. AUTHORIZES STATE AND LOCAL AUTHORITIES TO TAKE ACTION TO MONITOR, REDUCE OR ABATE AIR CONTAMINATION RESULTING FROM DISCHARGE WITHIN OR WITHOUT THE STATE UNDER THE LAWS OF STATE WHERE DISCHARGE OCCURS.
HEALTH & SOCIAL SERVICES DEPT.	12-1-30.4 THROUGH 12-1-30.5	ADMINISTRATION; ENVIRONMENT; POLICY	PROVIDES THAT AGREEMENTS ON AIR POLLUTION ARE TO BE ADMINISTERED ONLY BY AGENCIES AND OFFICIALS CHARGED WITH ADMINISTERING SUCH PROGRAMS OF THE PARTICIPATING GOVERNMENTAL ENTITIES, SETS RULES ON CONFIDENTIALITY OF TRADE SECRETS AND OTHER INFORMATION.
ENVIRONMENTAL IMPROVEMENT AGENCY	12-9-1 THROUGH 12-9-11	REGULATION; RADIATION; ENVIRONMENT; SAFETY	RADIATION PROTECTION ACT. CREATES RADIATION TECHNICAL ADVISORY COUNCIL; PROVIDES FOR APPOINTMENT OF MEMBERS; SETS POWERS; DEFINES TERMS, AUTHORIZES ENVIRONMENTAL IMPROVEMENT BOARD TO PROMULGATE RULES WITH ADVICE AND CONSENT OF THE COUNCIL; PROVIDES FOR INSPECTIONS; REQUIRES THOSE WHO POSSESS, USE, STORE, DISPOSE OF, MANUFACTURE, REPAIR, ALTER OR INSPECT RADIATION EQUIPMENT TO REGISTER WITH THE ENVIRONMENTAL IMPROVEMENT AGENCY; REQUIRES LICENSING OF RADIOACTIVE MATERIAL; SETS EXEMPTIONS; SETS PENALTIES; AUTHORIZES INJUNCTIONS; PROHIBITS USE OF CERTAIN EQUIPMENT; AUTHORIZES AGREEMENTS WITH OTHER AGENCIES.
ENVIRONMENT IMPROVEMENT AGENCY	REGULATIONS FOR GOVERNING THE HEALTH AND ENVIRONMENTAL ASPECTS OF RADIATION 1-100 THROUGH	RADIATION; REGULATIONS; ENVIRONMENT; SAFETY	SETS GENERAL RULES GOVERNING LICENSING AND USE OF RADIOACTIVE MATERIALS IN NEW MEXICO; SETS STANDARDS; ESTABLISHES SAFETY REQUIREMENTS; PROMULGATES GUIDELINES FOR URANIUM MILL LICENSING.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
ENVIRONMENTAL IMPROVEMENT AGENCY	4-460 AND 8-100 THROUGH 8-430 12-12-1 THROUGH 12-12-14	ADMINISTRATION; ENVIRONMENT	ENVIRONMENTAL IMPROVEMENT ACT. STATES PURPOSE OF ACT, DEFINES TERMS, CREATES ENVIRONMENTAL IMPROVEMENT AGENCY, CREATES ENVIRONMENTAL IMPROVEMENT BOARD; DIRECTS THE AGENCY AND BOARD TO PROMULGATE REGULATIONS AND STANDARDS FOR ENVIRONMENTAL MANAGEMENT AND CONSUMER PROTECTION IN CERTAIN AREAS, INCLUDING BUT NOT LIMITED TO WATER SUPPLY AND WATER POLLUTION, LIQUID WASTE, SOLID WASTE SANITATION AND REFUSE DISPOSAL, AIR QUALITY MANAGEMENT, NOISE CONTROL, NUISANCE ABATEMENT AND OCCUPATIONAL HEALTH AND SAFETY; ESTABLISHES HEARING PROCEDURES, PROVIDES FOR APPEALS, SETS PENALTIES.
ENVIRONMENTAL IMPROVEMENT AGENCY	SOLID WASTE MANAGEMENT REGULATION SECTIONS 101 THROUGH 108	REGULATIONS; ENVIRONMENT	SOLID WASTE MANAGEMENT REGULATIONS. (DEPENDING UPON THE LOCATION OF A MINE OR OTHER FACILITY, THESE RULES COULD BECOME INVOLVED IN DEVELOPING AN ENERGY RESOURCE).
ENVIRONMENTAL IMPROVEMENT AGENCY	12-14-1 THROUGH 12-14-13	ADMINISTRATION ENVIRONMENT	AIR QUALITY CONTROL ACT. DESIGNATES ENVIRONMENTAL IMPROVEMENT AGENCY AS STATE AIR POLLUTION CONTROL AGENCY; DIRECTS ENVIRONMENTAL IMPROVEMENT BOARD TO ACT IN AIR QUALITY MATTERS; CONFERS CERTAIN POWERS ON MUNICIPALITIES; REQUIRES PROMULGATION AND ENFORCEMENT OF REGULATIONS AND STANDARDS CONCERNING AIR POLLUTION; DIRECTS THE BOARD TO COLLECT DATA, ACCEPT AND ADMINISTER GRANTS, CLASSIFY AND RECORD AIR CONTAMINATION; ALLOWS THE BOARD TO PERMIT NEW SOURCES OF AIR CONTAMINANTS AND GRANT VARIANCES UNDER CERTAIN CIRCUMSTANCES; APPEALS ARE AUTHORIZED; EMERGENCY POWERS CONFERRED; PROVIDES FOR CONFIDENTIAL RECORDS; INSPECTIONS ARE AUTHORIZED; PENALTIES SET OUT.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
ENVIRONMENTAL IMPROVEMENT AGENCY	AIR QUALITY CONTROL REGULATION NUMBER 100	REGULATIONS; ENVIRONMENT	DEFINES TERMS USED IN THE AIR QUALITY REGULATIONS (NUMBER 100 - NUMBER 1301)
ENVIRONMENTAL IMPROVEMENT AGENCY	AIR QUALITY CONTROL REGULATION NUMBER 200	REGULATIONS; ENVIRONMENT	STATES PREAMBLE TO THE AMBIENT AIR QUALITY STANDARDS AND REGULATIONS.
ENVIRONMENTAL IMPROVEMENT AGENCY	AIR QUALITY CONTROL REGULATIONS NUMBER 201 THROUGH 1301	REGULATIONS; ENVIRONMENT	REGULATES AMBIENT AIR QUALITY STANDARDS AND AIR POLLUTION EMISSIONS; SETS STANDARDS FOR SUSPENDED PARTICULATES, ELEMENTS AND CONTAMINANTS.
MUNICIPALITIES	14-29-5 THROUGH 14-29-9	ADMINISTRATION; PUBLIC UTILITIES	MUNICIPAL DEBT - VOTING ON QUESTION. AUTHORIZE MUNICIPALITIES TO ISSUE GENERAL OBLIGATION BONDS FOR SPECIFIED PURPOSES; SETS LAWS GOVERNING MUNICIPAL BOND ELECTIONS; PROVIDE FOR ISSUANCE OF BONDS; PLEDGE THE FULL FAITH AND CREDIT TO THE MUNICIPALITY TO THE PAYMENT OF THE BONDS.
MUNICIPALITIES	14-37-1 THROUGH 14-37-12	OCCUPATION TAX; LICENSES	AUTHORIZES MUNICIPALITIES TO LICENSE BUSINESS ACTIVITIES AND CHARGE FEES FOR SUCH LICENSES; AUTHORIZES MUNICIPALITIES TO LEVY AN OCCUPATION TAX ON ANY OCCUPATION, PROFESSION, TRADE, PURSUIT, CORPORATION OR OTHER INSTITUTION OR ESTABLISHMENT; SETS LIMITATIONS; SETS SPECIFIC CLASSIFICATIONS OF OCCUPATIONS WHICH INCLUDE "MANUFACTURING" AND "QUALITY"; SETS PROVISIONS GOVERNING OBTAINING A LICENSE, COLLECTING A LICENSE FEE OR OCCUPATION TAX; PROVIDES FOR ASSESSING TAX AND KEEPING RECORDS; SETS PENALTIES; PROVIDES FOR TAX LIENS, FORECLOSURE OF LIENS, PAYMENT OF TAXES ON SALE OF PROPERTY AND INTEREST CHARGES ON DELINQUENT TAXES.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
NONE	14-60-1 THROUGH 14-60-14	ADMINISTRATION; ENVIRONMENT; BONDS	POLLUTION CONTROL REVENUE BOND ACT. THIS STATUTE AUTHORIZES MUNICIPALITIES TO ACQUIRE, OWN, LEASE OR SELL PROJECTS FOR THE PURPOSE OF REDUCING ABATING, PREVENTING POLLUTION OR REMOVING POLLUTION SOURCES; AUTHORIZES ISSUANCE OF BONDS TO FINANCE PROJECTS; PROVIDES FOR SECURITY FOR BONDS, SETS REQUIREMENTS RESPECTING LEASE OR SALE; PROVIDES FOR REFUNDING OF BONDS; SETS RESTRICTIONS ON THE USE OF PROCEEDS FROM SALE OF BONDS; SPECIFIES THE TYPE OF CONTRIBUTION ALLOWED BY THE MUNICIPALITY; MAKES BONDS LEGAL INVESTMENTS; PROVIDES FOR CERTAIN TAX EXEMPTIONS; PROVIDES THAT NO NOTICE OR PUBLICATION IS REQUIRED AS A PREREQUISITE TO SALE OR ISSUANCE OF BONDS EXCEPT AS PROVIDED IN THIS ACT.
NEW MEXICO BUREAU OF REVENUE	14-61-1 THROUGH 14-61-8	ADMINISTRATION; TAX	MUNICIPAL GROSS RECEIPTS TAX. THIS STATUTE AUTHORIZES A MUNICIPAL GROSS RECEIPTS TAX AND ESTABLISHES ITS RATE; PROVIDES FOR SPECIFIC EXEMPTIONS; COLLECTION BY THE BUREAU OF REVENUE; INTERPRETATION, ADMINISTRATION AND ENFORCEMENT OF THE ACT BY THE BUREAU OF REVENUE.
COUNTIES	15-36A-1 THROUGH 15-36A-9	ORDINANCES	CONFERS POWERS ON COUNTY GOVERNMENT; AUTHORIZES ADOPTION OF ORDINANCES.
COUNTIES	15-37-15 THROUGH 15-37-15.1	PROPERTY TAX	EMPOWERS COUNTY TO COLLECT TAXES; AUTHORIZES THE COLLECTION OF COUNTY PROPERTY TAXES ON ALL TAXABLE PROPERTY IN THE COUNTY.
COUNTIES	15-49-16	PROPERTY TAX	AUTHORIZES COUNTY COMMISSION TO LEVY A TAX ON PROPERTY IN THE COUNTY TO PAY FOR BONDS ISSUED BY THE COUNTY.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
COUNTIES	15-50-2	PROPERTY TAX	AUTHORIZES COUNTY PROPERTY TAX ASSESSMENTS ON PROPERTY LYING WITHIN 5 MILES OF A RIVER OR STREAM FOR FLOOD CONTROL PURPOSES.
COUNTIES	15-54-4	PROPERTY TAX	LIMITS ON THE AMOUNT OF PROPERTY TAX THAT CAN BE LEVIED BY A COMMUNITY SERVICE DISTRICT.
COUNTIES; BUREAU OF REVENUE	15-55-1 THROUGH 15-55-17	GROSS RECEIPTS TAX	COUNTY GROSS RECEIPTS TAX ACT. AUTHORIZES COUNTIES TO LEVY A GROSS RECEIPTS TAX; SETS EXEMPTIONS WHICH INCLUDE RECEIPTS FROM THE SALE OR LEASING OF OIL, NATURAL GAS OR MINERAL INTERESTS, PERSONS SUBJECT TO THE OIL AND GAS EMERGENCY SCHOOL TAX, REFINERS AND PERSONS SUBJECT TO THE NATURAL GAS PROCESSORS TAX ACT, PERSONS SUBJECT TO THE RESOURCES EXCISE TAX ACT, RECEIPTS FROM OIL AND GAS CONSUMED OR USED IN THE PIPELINE TRANSPORTATION OF OIL AND GAS PRODUCTS AND THE USE OF ELECTRICITY IN THE PRODUCTION AND TRANSMISSION OF ELECTRICITY; PROVIDE FOR ISSUING BONDS AND THE COLLECTION OF TAXES; PROVIDES FOR INTERPRETATION OF THE ACT BY THE BUREAU OF REVENUE; PROVIDES FOR CONFIDENTIALITY AND SETS PENALTIES.
COUNTIES	15-56-12	ASSESSMENTS	AUTHORIZES CREATION OF SPECIAL ASSESSMENT DISTRICTS IN CLASS A COUNTIES; AUTHORIZES ASSESSMENTS TO PAY FOR IMPROVEMENTS IN THE DISTRICT.
NONE	40A-8-1	ADMINISTRATION; ENVIRONMENT; SAFETY	DEFINES PUBLIC NUISANCE AS KNOWINGLY CREATING, PERFORMING OR MAINTAINING ANYTHING AFFECTING ANY NUMBER OF CITIZENS WITHOUT LAWFUL AUTHORITY WHICH IS EITHER INJURIOUS TO PUBLIC HEALTH, SAFETY, MORALS OR WELFARE, OR INTERFERES WITH THE EXERCISE AND ENJOYMENT OF PUBLIC RIGHTS, INCLUDING THE RIGHT TO USE PUBLIC PROPERTY.
NONE	40A-8-2	ADMINISTRATION; ENVIRONMENT; SAFETY	DEFINES POLLUTING WATER AS KNOWINGLY AND UNLAWFULLY INTRODUCING ANY OBJECT OR SUBSTANCE INTO ANY BODY OF PUBLIC WATER CAUSING IT TO BE OFFENSIVE OR DANGEROUS

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
NONE	40A-8-3	ADMINISTRATION; ENVIRONMENT; SAFETY	FOR HUMAN OR ANIMAL CONSUMPTION OR USE. POLLUTING WATER CONSTITUTES A PUBLIC NUISANCE.
ENVIRONMENTAL IMPROVEMENT AGENCY	40A-8-5	ADMINISTRATION; ENVIRONMENT; SAFETY	DEFINES REFUSE AS ANY ARTICLE OR SUBSTANCE WHICH IS COMMONLY DISCARDED AS WASTE OR WHICH, IF DISCARDED ON THE GROUND, WILL CREATE OR CONTRIBUTE TO AN UN- SANITARY, OFFENSIVE OR UNSIGHTLY CONDITION.
STATE CORPORATION COMMISSION	51-13-1 THROUGH 51-13-12.1	FRANCHISE TAX	LEGAL ACTION FOR ABATEMENT OF A PUBLIC NUISANCE AUTHO- RIZED. (PRIMARY JURISDICTION OF THE ENVIRONMENTAL IMPROVEMENT AGENCY. SEE <u>NORVELL V. ARIZONA PUBLIC SERVICE CO., 85 N.M. 165</u>).
STATE CORPORATION COMMISSION	51-21-1 THROUGH 51-21-9	ADMINISTRATION; REPORTS	IMPOSES A FRANCHISE TAX ON DOMESTIC AND FOREIGN COR- PORATIONS FOR PROFIT DOING BUSINESS IN NEW MEXICO; SETS RATE; PROVIDES FOR DISSOLUTION OF NON-ACTIVE CORPORATIONS AND REINSTATEMENT; PROVIDES FOR PENALTY AND INTEREST AND ENFORCEMENT; APPEALS AUTHORIZED; PROVIDES FOR DISPOSITION OF FUNDS.
LABOR AND INDUSTRIAL COMMISSION	59-1-1 THROUGH 59-1-16	ADMINISTRATION; LABOR	REQUIRES DOMESTIC AND FOREIGN CORPORATIONS DOING BUSINESS IN NEW MEXICO TO FILE ANNUAL REPORTS, IDENTIFIES EXEMP- TIONS AND SETS PENALTIES FOR FAILURE TO REPORT.
			CREATES THE LABOR AND INDUSTRIAL COMMISSION OF NEW MEXICO AND THE POSITION OF LABOR COMMISSIONER; PROVIDES FOR MEETINGS OF THE LABOR AND INDUSTRIAL COMMISSION; SETS FUNCTIONS OF THE CHAIRMAN; PROVIDES FOR HEARINGS; SUBPOENAS; NOTICE; WITNESS FEES; AND PENALTY FOR FAILURE TO COMPLY WITH SUBPOENA; DEFINES THE POWERS AND DUTIES OF THE LABOR COMMISSIONER; REQUIRES AN ANNUAL REPORT OF THE LABOR COMMISSIONER AND OUTLINES ITS CONTENT; PROVIDES FOR INSPECTIONS BY THE LABOR COMMISSIONER AND SETS PENALTIES FOR OBSTRUCTING IN- SPECTIONS, DEFINES OFFENSES BY COMMISSIONER OR AGENTS

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
NONE	59-2-1 THROUGH 59-2-2	ADMINISTRATION; LABOR	AND SETS PENALTIES; AUTHORIZES A FREE EMPLOYMENT AGENCY; THE REPORTING OF VIOLATIONS OF LABOR AND INDUSTRIAL LAWS; A REPORT OF OPERATIONS AND EXPENSES OF LABOR COMMISSIONER'S OFFICE, RULES AGAINST DISCLOSURE OF NAMES OF PERSONS, FIRMS OR CORPORATIONS SUPPLYING DATA; CERTAIN OCCUPATIONS EXEMPTED FROM THE ACT.
NONE	59-3-1 THROUGH 59-3-27	ADMINISTRATION; LABOR	PLACES RESTRICTIONS ON GRANTING OF INJUNCTIONS AND TEMPORARARY RESTRAINING ORDERS IN LABOR DISPUTES; BONDS REQUIRED.
LABOR AND INDUSTRIAL COMMISSION	59-6-1 THROUGH 59-6-16	REGULATION; LABOR	GOVERNS LABOR RELATIONS AND CONDITIONS AND PAYMENT OF WAGES.
LABOR AND INDUSTRIAL COMMISSION	59-7-13 THROUGH 59-7-18	REGULATION; LABOR; POLICY	SETS SPECIAL PROVISIONS GOVERNING THE EMPLOYMENT OF CHILDREN; DEFINES "CHILDREN"; LIMITS NUMBER OF HOURS TO BE WORKED; PROHIBITS EMPLOYMENT IN CERTAIN OCCUPATIONS; LABOR PERMITS REQUIRED; LABOR AND INDUSTRIAL COMMISSION TO ENFORCE ACT; SETS PENALTIES FOR VIOLATIONS OF ACT; CREATES POSITION OF STATE CHILD LABOR INSPECTOR.
EMPLOYMENT SECURITY COMMISSION	59-9-1 THROUGH 59-9-29	ADMINISTRATION; LABOR; POLICY; COMPENSATION; REGULATIONS	SETS SPECIAL RULES GOVERNING APPRENTICESHIP; DEFINES "APPRENTICESHIP"; CREATES APPRENTICESHIP COUNCIL; SETS DUTIES OF COUNCIL; LABOR COMMISSIONER TO ENFORCE ACT.
			UNEMPLOYMENT COMPENSATION LAW. DECLARES STATE POLICY; CREATES UNEMPLOYMENT COMPENSATION FUND; SETS PROCEDURE FOR DETERMINING AMOUNT OF AND ELIGIBILITY FOR BENEFITS; PROVIDES FOR DISQUALIFICATION FOR BENEFITS; SETS REQUIREMENTS FOR MAKING CLAIMS; PROVIDES FOR CONTRIBUTIONS; SETS RATE; PROVIDES FOR ACCOUNTING; SETS PENALTY FOR LATE CONTRIBUTION; CREATES EMPLOYMENT SECURITY COM-

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
LABOR AND INDUSTRIAL COMMISSION; INSURANCE DEPARTMENT	59-10-1 THROUGH 59-10-37	LABOR; COMPENSATION; BONDS; SAFETY	<p>MISSION AND POSITION OF EXECUTIVE DIRECTOR; SETS DUTIES AND POWERS OF COMMISSION WHICH INCLUDE ADMINISTERING THE UNEMPLOYMENT COMPENSATION LAW; AUTHORIZES THE PROMULGATION OF RULES AND REGULATIONS BY THE COMMISSION AND THE APPOINTMENT OF ADVISORY COUNCIL; DIRECTS COMMISSION TO TAKE STEPS TO PROMOTE EMPLOYMENT STABILIZATION; REQUIRES EMPLOYMENT UNITS TO KEEP RECORDS; CONFERS SUBPOENA POWER ON COMMISSION AND SETS PENALTY FOR FAILURE TO OBEY; AUTHORIZES COOPERATION WITH THE FEDERAL GOVERNMENT; PROVIDES FOR CONFIDENTIALITY OF CERTAIN INFORMATION; PROVIDES FOR A FREE EMPLOYMENT COMPENSATION ADMINISTRATION FUND; PROVIDES FOR AN INTEREST CHARGE ON LATE CONTRIBUTIONS; PROHIBITS AGREEMENTS TO WAIVE UNEMPLOYMENT BENEFITS; SETS PENALTIES; AUTHORIZES ACTIONS FOR ENFORCEMENT; DEFINES TERMS AND AUTHORIZES RECIPROCAL AGREEMENTS WITH OTHER STATES OR FEDERAL GOVERNMENT RELATING TO UNEMPLOYMENT COMPENSATION.</p> <p>WORKMEN'S COMPENSATION ACT. STATES WHICH EMPLOYERS COME WITHIN THE SCOPE OF THE ACT; REQUIRES FILING INSURANCE POLICY OR SECURITY BOND WITH THE DISTRICT COURT; DEFINES SCOPE OF THE ACT; DEFINES DEFENSES TO AN ACTION BROUGHT UNDER THE ACT; LIMITS LIABILITY OF EMPLOYER; PROVIDES THAT THE AMOUNT OF COMPENSATION IS PARTIALLY BASED ON THE USE OF SAFETY DEVICES; LIMITS COMPENSABLE INJURIES; EXEMPTS FROM ACT INTERSTATE COMMERCE; DEFINES TERMS; SETS PROVISIONS GOVERNING COURT ACTIONS TO RECOVER UNDER THE ACT INCLUDING SETTING OF TIME LIMITATIONS ON FILING A CLAIM; AUTHORIZES APPEALS; LIMITS INJURIES FOR WHICH AN ACTION MAY BE BROUGHT; SETS COMPENSATION BENEFITS BASED ON EXTENT OF THE INJURY, AMOUNT OF TIME LOST AND ASSISTANCE AND SERVICES NEEDED; SETS LIMITATIONS; AUTHORIZES PHYSICAL EXAMINATIONS ON DEMAND OF EMPLOYER; EXEMPTS COMPENSATION FROM CLAIMS OR ACTIONS BY CREDITORS; PROVIDES FOR ATTORNEY FEES; PROVIDES FOR</p>

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
LABOR AND INDUSTRIAL COMMISSION, INSURANCE DEPARTMENT	59-10-126 THROUGH 59-10-138	LABOR; COMPENSATION; POLICY; ADMINISTRATION; HANDICAPPED	<p>AMENDING THE AMOUNT OF COMPENSATION AWARDED BY THE DISTRICT COURT; REQUIRES ACCIDENT REPORTS BY EMPLOYER TO THE INSURANCE AND LABOR COMMISSIONER; REQUIRES EMPLOYER TO REPORT TO LABOR COMMISSIONER THE INITIAL DATE OF PAYMENT OF COMPENSATION; SETS PENALTIES; DIRECTS LABOR COMMISSIONER TO ENFORCE THE ACT; PROVIDES FOR EXTRA-TERRITORIAL COVERAGE, CREDIT FOR PAYMENTS MADE IN OTHER JURISDICTIONS, INJURIES IN TRANSITORY EMPLOYMENT AND METHODS OF DETERMINING LOCALE OF EMPLOYMENT, AUTHORIZES EMPLOYER TO REQUIRE AN EMPLOYEE TO CERTIFY A PREEXISTING DISABILITY AS A CONDITION OF EMPLOYMENT.</p> <p>SUBSEQUENT INJURY ACT. SETS STATE POLICY REGARDING EMPLOYMENT OF PHYSICALLY HANDICAPPED; DEFINES TERMS; CREATES THE SUBSEQUENT INJURY FUND; PROVIDES FOR PAYMENTS FROM THE FUND TO PERSONS WHO ARE PHYSICALLY HANDICAPPED AND SUSTAIN A SUBSEQUENT INJURY, THE RESULT OF WHICH ARE GREATER THAN THAT WHICH WOULD HAVE RESULTED FROM THE SUBSEQUENT INJURY ALONE; PROVIDES FOR FUND AND ACT TO BE ADMINISTERED BY THE INSURANCE COMMISSIONER; SETS PROCEDURES.</p>
LABOR AND INDUSTRIAL COMMISSION	59-11-1 THROUGH 59-11-43.5	LABOR; COMPENSATION; ADMINISTRATION	<p>NEW MEXICO OCCUPATIONAL DISEASE DISABLEMENT LAW. DEFINES TERMS AND SCOPE OF THE ACT; AUTHORIZES DEFENSES TO ACTIONS BROUGHT BY EMPLOYEES FOR DAMAGES RESULTING FROM AN OCCUPATIONAL DISEASE; SETS RIGHT OF COMPENSATION AND PROVIDES FOR IT BEING THE EXCLUSIVE RECOVERY IN CERTAIN CIRCUMSTANCES; PLACES LIABILITY ON EMPLOYER; LIMITS SCOPE OF THE ACT; LIMITS COMPENSATION TO THIS ACT AND IMPOSES OTHER LIMITATIONS ON ACTION ARISING UNDER THE ACT; SETS PROVISIONS GOVERNING THE FILING OF CLAIMS; AUTHORIZES VOCATIONAL REHABILITATION SERVICES FOR EMPLOYEES; AUTHORIZES COURT TRIALS, SETS REQUIREMENTS GOVERNING NOTICE TO EMPLOYERS; AUTHORIZES PAYMENTS OF BENEFITS IN INSTALLMENTS; SETS PROCEDURES.</p>

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
			<p>GOVERNING COURT ACTIONS; AUTHORIZES APPEALS; LIMITS AMOUNT OF RECOVERY UNDER THE ACT; PROVIDES FOR TERMINATION COMPENSATION AND REOPENING AWARDS, SETS LIMITS; EXEMPTS COMPENSATION FROM CLAIMS OF OR ACTIONS BY CREDITORS; PROVIDES FOR PHYSICAL EXAMINATION OF EMPLOYEE AND BARS CLAIMS OF EMPLOYEE WHO REFUSES; PROVIDES FOR AUTOPSIES; REQUIRES TIMELY FILING OF CLAIMS; SETS PROVISIONS GOVERNING SITUATIONS WHERE OCCUPATIONAL DISEASES ARE AGGRAVATED BY OTHER DISEASES; PROVIDES THAT RECOVERY UNDER THIS ACT PRECLUDES RECOVERY UNDER THE WORKMAN'S COMPENSATION ACT; PROVIDES FOR APPOINTMENT OF ATTORNEYS, RESTRICTS FEES; REQUIRES EMPLOYEE TO GIVE CERTAIN DATA ON HIMSELF AT TIME OF EMPLOYMENT; DEFINES RIGHTS AND LIABILITIES OF EMPLOYERS AND EMPLOYEES AFTER AWARDS ARE MADE; REQUIRES THE FILING OF REPORTS WITH THE LABOR COMMISSIONER BY EMPLOYERS OF ALL CLAIMS ARISING UNDER THE ACT AND NOTICE TO COMMISSIONER OF THE DATE OF INITIAL PAYMENT OF ANY CLAIM; SETS PENALTY FOR FAILURE TO REPORT; DIRECTS LABOR COMMISSIONER TO ENFORCE THE ACT; PROVIDES FOR EXTRA-TERRITORIAL COVERAGE OF THE ACT UNDER CERTAIN CONDITIONS.</p> <p>SETS SPECIAL RULES GOVERNING EMPLOYMENT OF THE BLIND.</p> <p>CORRUPT AND COERCIVE PRACTICES, LIMITS ACTIVITIES OF EMPLOYERS AND LABOR GROUPS.</p>
VOCATIONAL REHABILITATION DIVISION, DEPARTMENT OF EDUCATION	59-12-1 THROUGH 59-12-5	LABOR; HANDICAPPED	
NONE	59-13-1 THROUGH 59-13-4	LABOR; REGULATION	

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
ENVIRONMENTAL IMPROVEMENT AGENCY	59-14-1 THROUGH 59-14-24	ADMINISTRATION; ENVIRONMENT; SAFETY	OCCUPATIONAL HEALTH AND SAFETY ACT. STATES PURPOSES OF ACT; CREATES THE OCCUPATIONAL HEALTH AND SAFETY AGENCY; IMPOSES DUTIES ON EMPLOYERS AND EMPLOYEES; STATES DUTIES AND POWERS OF THE AGENCY AND ENVIRONMENTAL IMPROVEMENT BOARD; REQUIRES THE PROMULGATION OF REGULATIONS; ESTABLISHES REQUIREMENTS FOR TRAINING ASSISTANCE; CREATES AND ORGANIZES THE OCCUPATIONAL HEALTH AND SAFETY REVIEW COMMISSION; PROVIDES FOR RIGHTS OF ENTRY, INSPECTIONS, COMPLAINTS BY EMPLOYEES AND CONSULTATION WITH EMPLOYEES; REQUIRES REPORTS AND RECORD KEEPING BY EMPLOYERS; PROVIDES FOR ADOPTION OF REGULATIONS AFTER NOTICE AND HEARING; ESTABLISHES EMERGENCY PROCEDURES; VARIANCES AND TEMPORARY VARIANCES ARE AUTHORIZED; SETS FORTH ENFORCEMENT AND APPEAL PROVISIONS; CONFERS SUBPOENA POWER; ACCIDENT REPORTS REQUIRED; PROVIDES FOR CONFIDENTIALITY OF CERTAIN INFORMATION IN CIVIL ACTIONS; SETS CERTAIN LIMITATIONS ON APPLICABILITY OF ACT; PROVIDES PENALTIES; PROHIBITS DISCRIMINATION AGAINST EMPLOYEES FOR FILING A COMPLAINT UNDER THE ACT.
ENVIRONMENTAL IMPROVEMENT AGENCY	OCCUPATIONAL HEALTH AND SAFETY REGULATIONS NUMBERS 101 THROUGH 300	REGULATIONS; ENVIRONMENT; SAFETY	OCCUPATIONAL HEALTH AND SAFETY REGULATIONS SET REQUIREMENTS AND STANDARDS CONCERNING OCCUPATIONAL HEALTH AND SAFETY.
NONE	61-2-10	REGULATION; LIENS	MECHANICS OR MATERIALMEN'S LIENS. PROVIDES THAT LANDOWNERS OF PERSONS CLAIMING AN INTEREST THEREIN WHO KNOW THAT BUILDINGS ARE BEING CONSTRUCTED OR OTHER IMPROVEMENTS MADE ON THEIR LAND ARE HELD TO HAVE ORDERED THE CONSTRUCTION AND LIENS WILL ATTACH TO THE PROPERTY UNLESS THE LANDOWNER OR OTHER PERSON CLAIMING AN INTEREST THEREIN POSTS A WRITTEN NOTICE OF NONRESPONSIBILITY; SETS CONDITIONS.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
STATE PLANNING OFFICE; DEPARTMENT OF DEVELOPMENT; NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY	63-33-1 THROUGH 63-33-4	POLICY; RESEARCH	MINERAL RESOURCES DEVELOPMENT ACT. DECLARES THAT THE STATE WILL ENCOURAGE THE EXPLOITATION AND DEVELOPMENT OF MINERAL RESOURCES BY PRIVATE ENTERPRISES; DIRECTS THE NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY TO USE ITS MINERAL RESOURCE ECONOMIST TO UNDERTAKE STUDIES AIMED AT DEVELOPING TECHNOLOGY WHICH WILL MAKE POSSIBLE THE PROFITABLE EXPLOITATION OF NEW MEXICO'S MINERAL RESOURCES.
NONE	65-2-1 THROUGH 65-2-5	REGULATION; ASSIGNMENTS	REQUIRES RECORDING OF ASSIGNMENTS OF ROYALTY INTERESTS IN OIL, GAS OR OTHER MINERALS WITH THE COUNTY CLERK OF THE COUNTY IN WHICH THE LANDS ARE LOCATED; STATES EFFECT OF FAILURE TO RECORD; REQUIRES RELEASE FROM RECORD FOLLOWING FORFEITURE OF MINERAL LEASE; PROVIDES DAMAGES FOR FAILURE TO FILE RELEASE; REQUIRES A DEMAND FOR RELEASE AS A CONDITION PRECEDENT TO BRINGING AN ACTION FOR RELEASE.
OIL AND GAS ACCOUNTING COMMISSION	65-8-1 THROUGH 65-8-17	ADMINISTRATION; TAX; REGULATIONS	OIL AND GAS ACCOUNTING COMMISSION ACT. CREATES OIL AND GAS ACCOUNTING COMMISSION; SETS MEMBERSHIP; PROVIDES FOR APPOINTMENT OF AN EXECUTIVE DIRECTOR; SETS THE POWERS OF THE COMMISSION; AUTHORIZES THE PROMULGATION OF RULES AND REGULATIONS ON REPORTING OF PRODUCTION AND FORMS TO BE USED; EMPOWERS COMMISSION TO DESIGNATE PRODUCTION UNITS; REQUIRES INDEXING OF PRODUCTION UNITS, ASSIGNMENT OF NUMBER OR SYMBOL TO EACH UNIT, NOTICE OF ASSIGNED IDENTIFICATION NUMBER TO PRODUCER; REQUIRES MONTHLY EXAMINATION OF REPORTS AND RETURNS AND A MONTHLY PUBLISHED REPORT OF PRODUCTION.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
OIL CONSERVATION COMMISSION	65-11-1 THROUGH 65-11-5	ADMINISTRATION; POLICY	GEOTHERMAL RESOURCES CONSERVATION ACT. STATES PURPOSE OF ACT, DEFINES TERMS, DEFINES GEOTHERMAL RESOURCES AS INCLUDING NATURAL HEAT OF THE EARTH MINERALS IN SOLUTION AND PRODUCTS OBTAINED FROM NATURALLY HEATED FLUIDS; BRINES, ASSOCIATED GASES AND STEAM; PROHIBITS WASTE; DEFINES UNDERGROUND AND SURFACE WASTE.
OIL CONSERVATION COMMISSION	65-11-6 THROUGH 65-11-10	ADMINISTRATION; REGULATIONS; RECORDS	CONFERS JURISDICTION ON THE COMMISSION OVER ALL MATTERS RELATING TO THE CONSERVATION OF GEOTHERMAL RESOURCES; ENUMERATES ITS POWERS WHICH INCLUDE BUT ARE NOT LIMITED TO PREVENTION OF WASTE, PROTECTION OF CORRELATIVE RIGHTS, MAKING INVESTIGATIONS EXAMINING PROPERTIES AND RECORDS, EXAMINING AND TESTING GEOTHERMAL WELLS, RESOURCES; TRANSPORTATION FACILITIES, STORAGE FACILITIES AND UTILIZATION FACILITIES; EMPOWERS COMMISSION TO LIMIT AND ALLOCATE PRODUCTION OF GEOTHERMAL RESOURCES AND REQUIRE CERTIFICATES OF CLEARANCE FOR PRODUCTION OR TRANSPORTATION OF GEOTHERMAL RESOURCES; AUTHORIZES COMMISSION TO PROMULGATE RULES AND REGULATIONS, REQUIRE REPORTS, REQUIRE PERFORMANCE BONDS, REQUIRE PRODUCTION OF RECORDS, REGULATE THE DRILLING OF WELLS, IDENTIFY OWNERSHIP OF RESOURCES, FIX SPACING OF WELLS, CLASSIFY GEOTHERMAL RESERVOIRS, PERMIT AND REGULATE THE INJECTION OF FLUIDS INTO GEOTHERMAL RESERVOIRS, REGULATE THE DISPOSITION OF GEOTHERMAL RESOURCES AND THE RESIDUE THEREOF, LIMIT GEOTHERMAL PRODUCTION IN AREAS CONTAINING COMMERCIAL QUANTITIES OF POTASH.
OIL CONSERVATION COMMISSION	65-11-11	REGULATION	WHEN PRODUCTION IS LIMITED, AN EQUITABLE ALLOCATION OF PRODUCTION AMONG PRODUCERS IS REQUIRED, ESTABLISHES SPACING UNITS, AUTHORIZES FORCE POOLING ACREAGE INTO A SPACING UNIT, SETS CONDITIONS ON AND PROCEDURES FOR OBTAINING A POOLING ORDER; AUTHORIZES COMMISSION TO APPROVE AND TO MODIFY PLANS FOR SPACING WELLS AND DISTRIBUTING GEOTHERMAL PRODUCTION.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
OIL CONSERVATION COMMISSION	65-11-13 THROUGH 65-11-16	REGULATION	IMPOSES DUTIES ON OPERATORS OF SPACING UNITS WITH DIVIDED MINERAL INTEREST, APPROVES CREATION OF NON-STANDARD SPACING UNITS; PROHIBITS DISCRIMINATION BY PURCHASERS; PROHIBITS PURCHASE, SALE OR HANDLING OF GEOTHERMAL RESOURCES IN EXCESS OF AMOUNTS ALLOWED BY THE COMMISSION; COMMISSION TO PROMULGATE RULES AND REGULATIONS TO PROHIBIT ILLEGAL PURCHASE, SALE OR HANDLING OF GEOTHERMAL RESOURCES AND PROVIDES FOR CERTIFICATES OF CLEARANCE.
OIL CONSERVATION COMMISSION	65-11-17 THROUGH 65-11-24	REGULATIONS; BONDS	SETS PROCEDURES FOR ADOPTION OF RULES AND REGULATIONS; PROVIDES FOR EMERGENCY ORDERS, REHEARINGS, APPEALS; SETS LIMITATIONS ON AND PROVISIONS FOR OBTAINING A TEMPORARY RESTRAINING ORDER OR AN INJUNCTION, BOND REQUIRED; AUTHORIZES ACTIONS FOR VIOLATIONS OF COMMISSION RULES, REGULATIONS AND ORDERS; AUTHORIZES APPOINTMENT OF A RECEIVER WHENEVER A COURT ORDER ARISING UNDER THIS ACT IS VIOLATED; PENALTIES ARE SPECIFIED; ACCESSORIES DEFINED; SEIZURE AND SALE OF ILLEGAL GEOTHERMAL RESOURCES AUTHORIZED IN CERTAIN CIRCUMSTANCES AND UNDER CERTAIN PROCEDURES.
OIL CONSERVATION COMMISSION	GEOTHERMAL RESOURCES RULES AND REGULATIONS SECTION A	REGULATIONS; GEOTHERMAL	DEFINES TERMS USED IN GEOTHERMAL RULES AND REGULATIONS.
OIL CONSERVATION COMMISSION	SECTION B RULES 1 THROUGH 10	REGULATIONS; GEOTHERMAL; ENVIRONMENT	RULES OF STATEWIDE APPLICATION; ENFORCED BY OIL CONSERVATION COMMISSION; WASTE OF RESOURCE IS PROHIBITED, OPERATIONS TO BE CONDUCTED SO AS TO PROTECT LIFE, HEALTH AND ENVIRONMENT, AUTHORITY OF OTHER AGENCIES OVER GEOTHERMAL NOT SUPERCEDED, U. S. GOVERNMENT RULES TO BE COMPLIED WITH; COMMISSION MAY AUTHORIZE UNITIZATION FOR EXPLORATION AND PRODUCTION; COMMISSION WILL

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
OIL CONSERVATION COMMISSION	SECTION C RULES 100 THROUGH 103	REGULATIONS; GEOHERMAL; BOND; PERMITS	CLASSIFY WELLS, DEFINE POOLS; COMMISSION MAY REQUEST DATA AND MAY COOPERATE WITH OTHER AGENCIES WITH RESPECT TO GEOHERMAL PROJECTS, SERVICES AND STUDIES. RULES GOVERNING DRILLING GEOHERMAL WELLS; REQUIRES BONDS AND DRILLING PERMITS; SIGNS ON WELL REQUIRED.
OIL CONSERVATION COMMISSION	SECTION C RULE 104	REGULATIONS; GEOHERMAL	RULES ON WELL SPACING AND LOCATION REQUIREMENTS.
OIL CONSERVATION COMMISSION	SECTION C RULES 105 THROUGH 110	REGULATIONS; GEOHERMAL	RULES ON DRILLING GEOHERMAL WELLS, INCLUDING MUD, CASING AND CEMENTING REQUIREMENTS; RULES ON DIRECTIONAL DRILLING, DEVIATION TESTS, SHOOTING, CHEMICAL TREATMENT OF WELLS.
OIL CONSERVATION COMMISSION	SECTION C RULES 111 THROUGH 113	REGULATIONS; GEOHERMAL; ENVIRONMENT	COMMISSION HAS RIGHT TO INSPECT WELLS; NOISE ABATEMENT EQUIPMENT REQUIRED, LITTER AND SAFETY REGULATIONS SET OUT.
OIL CONSERVATION COMMISSION	SECTION c RULES 114 THROUGH 115	REGULATIONS; GEOHERMAL; ENVIRONMENT	RULES GOVERNING EQUIPMENT, PROVIDES FOR TESTS AND INSPECTIONS.
OIL CONSERVATION COMMISSION	SECTION C RULES 116 THROUGH 119	REGULATIONS; GEOHERMAL; ENVIRONMENT	RULES GOVERNING DISPOSAL OF MINERALIZED WATERS, PROVISIONS FOR NOTIFICATION OF FIRES, BREAKS, LEAKS, SPILLS AND BLOWOUTS.
OIL CONSERVATION COMMISSION	SECTION D RULES 200 THROUGH 212	REGULATIONS; GEOHERMAL; REPORTS	REQUIRES REPORTING OF ALL ASPECTS OF DRILLING FOR AND PRODUCTION OF GEOHERMAL RESOURCES.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
OIL CONSERVATION COMMISSION	SECTION E RULES 301 THROUGH 304	REGULATIONS; GEO THERMAL	RULES GOVERNING ABANDONMENT AND PLUGGING OF GEOTHERMAL WELLS.
OIL CONSERVATION COMMISSION	SECTION F RULES 401 THROUGH 403	REGULATIONS; GEO THERMAL	RULES GOVERNING THE PURCHASE OF GEO THERMAL RESOURCES.
OIL CONSERVATION COMMISSION	SECTION G RULES 501 THROUGH 506	REGULATIONS; GEO THERMAL	RULES GOVERNING GEO THERMAL INJECTION AND DISPOSAL WELLS.
OIL CONSERVATION COMMISSION	SECTION H RULES 601 THROUGH 604	REGULATIONS; GEO THERMAL	RULES TO BE FOLLOWED FOR BLOWOUT PREVENTION.
OIL CONSERVATION COMMISSION	SECTION I RULES 701 THROUGH 723	REGULATIONS; GEO THERMAL	RULES OF PROCEDURE FOR COMMISSION HEARINGS; NECESSITY FOR A HEARING, EMERGENCY ORDERS, METHODS OF INITIATING A HEARING, NOTICE REQUIREMENTS, FILING PLEADINGS, CONDUCT OF HEARING, SUBPOENA POWER, RULES OF EVIDENCE, APPOINTMENT, QUALIFICATIONS AND POWER OF EXAMINERS, HEARINGS BEFORE COMMISSION, DE NOVO HEARINGS, NOTICE OF COMMISSION ORDERS, REHEARINGS, CHANGES IN FORMS AND REPORTS AFTER NOTICE AND HEARING.
ENERGY RESOURCES BOARD	65-12-1 THROUGH 65-12-3	ADMINISTRATION; RESEARCH	AUTHORIZES ENERGY RESEARCH: CREATES ENERGY RESEARCH AND DEVELOPMENT FUND; APPROPRIATES FUND TO ENERGY RESOURCES BOARD; SETS MANNER OF DISBURSEMENT.
ENERGY RESOURCES BOARD	65-12-4 THROUGH 65-12-6	ADMINISTRATION; RESEARCH	CREATES ENERGY RESEARCH AND DEVELOPMENT REVIEW COMMITTEE; APPOINTMENT OF MEMBERS; SETS OUT DUTIES; REPORTS TO ENERGY RESOURCES BOARD; PROVIDES REIMBURSEMENT.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
ENERGY RESOURCES BOARD	65-12-7 THROUGH 65-12-8	ADMINISTRATION; RESEARCH	SETS OUT ADDITIONAL DUTIES OF ENERGY RESOURCES BOARD IN AWARDING RESEARCH CONTRACTS; AUTHORIZES BOARD TO ACCEPT MATCHING FUNDS, GRANTS, DONATIONS AND REQUESTS
ENERGY RESOURCES BOARD	65-13-1 THROUGH 65-13-3	ADMINISTRATION; POLICY	PURPOSES OF ACT STATED; TERMS DEFINED.
ENERGY RESOURCES BOARD	65-13-4 THROUGH 65-13-7	ADMINISTRATION	ENERGY RESOURCES BOARD CREATED; CONDITIONS OF APPOINTMENT AND TERMS OF OFFICE DEFINED; SETS COMPENSATION AND QUARUM PROVISIONS; PROVIDES FOR ATTORNEY SERVICES; AUTHORIZES BOARD TO HIRE EMPLOYEES.
ENERGY RESOURCES BOARD	65-13-8 THROUGH 65-13-8.5	ADMINISTRATION; REGULATION; RESEARCH; PLANT SITING	ENUMERATES POWERS AND DUTIES OF BOARD WHICH INCLUDE (1) MAINTAINING COMPLETE RECORDS OF ALL FUELS AND POWER PRODUCED IN THIS STATE AND A COMPLETE INVENTORY OF ALL RESERVES AND POTENTIAL SOURCES OF FUEL AND POWER IN NEW MEXICO, AND RECORDS OF THE WHOLESALE AND QUANTITY SALES OF FUEL AND POWER CONSUMED WITHIN THE STATE AND EXPORTED OUT OF THE STATE; (2) INsofar AS IS PRACTICABLE, MAINTAIN COMPLETE RECORDS OF PRICES PAID FOR AND TAXES PAID ON FUEL AND POWER PRODUCED IN NEW MEXICO, AND MAINTAIN A CONSTANT COMPARISON WITH SIMILAR PRICES AND TAXES PAID ON SIMILAR FUEL AND POWER IN OTHER STATES; (3) FORMULATE A GENERAL STATE-WIDE PLAN FOR THE SITING PRODUCTION AND REFINING OF FUEL AND POWER IN WHATEVER FORM IN THIS STATE, AND FOR WHOLESALE AND QUANTITY SALES OF FUEL AND POWER WHERE THE SALE INVOLVES FUEL OR POWER PRODUCED OR REFINED IN THIS STATE, REGARDLESS OF THE JURISDICTION IN WHICH THE CONTRACT FOR SUCH SALE IS CONSUMMATED; (4) ADOPT AND PUBLISH RULES; (5) ESTABLISH REGULATIONS; (6) CONSIDER APPLICATIONS FOR HEARINGS; (7) COOPERATE WITH OTHER ENERGY PRODUCING STATES IN THE FURTHERANCE OF THE STATEWIDE PLAN; (8) ADMINISTER ANY STATE FUEL

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
			<p>ALLOCATION PROGRAM; (9) ADMINISTER ANY STATE ENERGY CONSERVATION PROGRAM; (10) PREPARE AND ADMINISTER THE STATE ENERGY MANAGEMENT PROGRAM; (11) RECEIVE AND USE FUNDS, GRANTS AND GIFTS FROM VARIOUS SOURCES; AND (12) ADMINISTER ANY STATE FUNDED ENERGY RESOURCES RESEARCH AND DEVELOPMENT GRANTS PROGRAM. AUTHORIZES THE BOARD TO USE FUNDS AT ITS DISPOSAL TO BUILD FACILITIES AUTHORIZED BY THE LEGISLATURE FOR THE ORDERLY PRODUCTION OF FUEL AND POWER AND OPERATE OR LEASE THE OPERATION OF SUCH FACILITIES; AUTHORIZES THE BOARD TO ENTER AGREEMENTS AS AUTHORIZED BY THE LEGISLATURE FOR THE LEASE OR JOINT USE OF FACILITIES NECESSARY TO THE FURTHERANCE OF THE STATEWIDE PLAN; AUTHORIZES THE BOARD TO ESTABLISH ADVISORY COMMITTEES TO ASSIST IN CARRYING OUT ITS DUTIES; AUTHORIZES THE PURCHASE OF NATURAL GAS FOR RESALE TO POLITICAL SUBDIVISIONS OF THE STATE OR THEIR NATURAL GAS DISTRIBUTORS, PROVIDES FOR ENTERING CONTRACTS FOR THIS PURPOSE, INCLUDING THE STORAGE OF GAS, SETS LIMITATIONS AND CREATES THE "NATURAL GAS PURCHASERS REVOLVING FUND"; AUTHORIZES THE CONSTRUCTION AND OPERATION OF GAS PIPELINES AND STORAGE FACILITIES, SETS PROCEDURES, PROVIDES FOR SALE OF SEVERANCE TAX BONDS.</p>
ENERGY RESOURCES BOARD	65-13-9	REGULATION	<p>PROVIDES FOR APPEALS TO THE BOARD FROM DECISIONS OF THE OIL CONSERVATION COMMISSION UNDER LIMITED CIRCUMSTANCES AND THEN APPEALS TO THE COURTS.</p>
OFFICE OF STATE GEOLOGIST	65-13-10 THROUGH 65-13-12	ADMINISTRATION	<p>OFFICE OF STATE GEOLOGIST CREATED, AUTHORIZES EMPLOYMENT STAFF; ENUMERATES DUTIES, INCLUDING: (1) CONDUCTING GEOLOGICAL STUDIES OF KNOWN SUPPLIES OF NATURAL SOURCES OF ENERGY WITH THE AIM OF DETERMINING RESERVES AND LIFE EXPECTANCY THEREOF; (2) CONDUCTING GEOLOGICAL STUDIES OF PROBABLE AND POTENTIAL SUPPLIES OF NATURAL SOURCES OF ENERGY; (3) COOPERATING WITH THE NEW MEXICO</p>

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
			BUREAU OF MINES AND MINERAL RESOURCES IN THE PREPARATION AND PUBLICATION OF MAPS, BROCHURES AND PAMPHLETS DESCRIBING KNOWN, PROBABLE AND POTENTIAL SOURCES OF NATURAL ENERGY IN THIS STATE; (4) COOPERATING WITH PRIVATE STATE AND FEDERAL AGENCIES IN THE GATHERING OF GEOLOGICAL DATA CONCERNING ENERGY SUPPLIES IN THIS STATE AND IMMEDIATELY OFFSETTING STATES; AND (5) COOPERATING WITH THE ENERGY RESOURCES BOARD IN THE PERFORMANCE OF ITS DUTIES.
ENERGY RESOURCES BOARD	65-13-13	ADMINISTRATION	AUTHORIZES THE BOARD TO KEEP CERTAIN INFORMATION CONFIDENTIAL.
ENERGY RESOURCES BOARD	65-13-14	REGULATION	PROVIDES THAT BEFORE ENTERING A CONTRACT TO DISPOSE OF THE PRODUCTS OF A NEWLY COMPLETED WELL OR A POTENTIAL WELL CAPABLE OF PRODUCING COMMERCIAL QUANTITIES OF OIL, NATURAL GAS OR GEOTHERMAL ENERGY, EVERY PRODUCER SHALL REPORT THE POTENTIAL PRODUCTION TO THE BOARD WHICH MAY SUGGEST HOW THE PRODUCTS COULD BE USED IN FURTHERANCE OF ITS STATEWIDE PLAN.
ENERGY RESOURCES BOARD	65-13-15	ADMINISTRATION; REGULATION	REQUIRES PUBLIC HEARINGS BEFORE ADOPTION OF A STATEWIDE PLAN OR ANY RULE OR REGULATION.
ENERGY RESOURCES BOARD	65-13-16	ADMINISTRATION	PROVIDES THAT THIS ACT IS NOT TO BE CONSTRUED SO AS TO NULLIFY THE AUTHORITY OF ANY OTHER AGENCY.
CONSTRUCTION INDUSTRIES COMMISSION	67-35-1 THROUGH 67-35-67	ADMINISTRATION; POLICY	CONSTRUCTION INDUSTRIES LICENSING ACT. CREATES CONSTRUCTION INDUSTRIES COMMISSION; DEFINES POWERS AND DUTIES. (IN DEVELOPING ENERGY RESOURCES, CERTAIN STATUTES OF THE CONSTRUCTION INDUSTRIES COMMISSION MAY BE INVOLVED).

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
<p>STATE GENERAL CONSTRUCTION BOARD</p> <p>NEW MEXICO PUBLIC SERVICE COMMISSION; COUNTIES; MUNICIPALITIES</p>	<p>GCB RULES 200 THROUGH 245</p> <p>68-1-1 THROUGH 68-1-7</p>	<p>PERMITS</p> <p>ADMINISTRATION; PUBLIC UTILITY; RIGHTS OF WAY; EMINENT DOMAIN; PROPERTY TAX</p>	<p>REQUIRES STATE BUILDING PERMIT PRIOR TO BUILDING OF FACILITIES; RULES APPLY TO THE USE AND ENFORCEMENT OF THE NEW MEXICO UNIFORM BUILDING CODE.</p> <p>INCORPORATION AND POWERS OF UTILITIES. PROVIDES FOR ORGANIZATION OF CORPORATIONS FOR GENERATION, PRODUCTION, TRANSMISSION, DISTRIBUTION, SALE OR UTILIZATION OF GAS, ELECTRICITY OR STEAM UNDER THE GENERAL INCORPORATION LAWS OF THE STATE; AUTHORIZES ACQUISITION OF WATER RIGHTS AND PLACING NECESSARY FIXTURES, APPLIANCES AND STRUCTURES UPON OR ACROSS PUBLIC ROADS, STREET ALLEYS, HIGHWAYS AND WATERS IN THIS STATE SUBJECT TO COUNTY AND MUNICIPAL REGULATION; SETS POWERS OF COUNTY COMMISSIONERS, AUTHORIZES FRANCHISES; PROVIDES FOR SURVEYS, RIGHTS OF WAY, USE OF EMINENT DOMAIN, ENTRY ON LANDS AND CROSSING RIGHT OF WAY OF ANOTHER CORPORATION; NEW MEXICO CORPORATIONS AUTHORIZED TO PURCHASE OR LEASE FACILITIES WHOLLY OR PARTIALLY WITHOUT THE STATE AND TO CONSOLIDATE WITH CORPORATIONS ORGANIZED UNDER LAWS OF ANOTHER JURISDICTION AND TO PURCHASE, HOLD, OWN AND VOTE STOCK OR SECURITIES OF SUCH OTHER CORPORATIONS; OWNERSHIP BY FOREIGN MUNICIPAL CORPORATIONS OF ELECTRIC PROPERTIES IN THE STATE OF NEW MEXICO AUTHORIZED BUT SUBJECT TO REGULATION BY STATE PUBLIC SERVICE COMMISSION AND SUBJECT TO ALL LAWS AND LIABLE FOR ALL TAXES TO THE SAME EXTENT AS ELECTRIC PROPERTIES OWNED BY PRIVATE CORPORATIONS IN THIS STATE; IMPOSES LIMITATIONS ON THIS ACT.</p>
<p>CORPORATION COMMISSION</p>	<p>68-2-1 THROUGH 68-2-23</p>	<p>REGULATION; WATER</p>	<p>AUTHORIZES THE INCORPORATION OF WATER WORKS FOR A NUMBER OF PURPOSES INCLUDING SUPPLYING WATER FOR MINING AND OTHER PUBLIC USES; REQUIRES ARTICLES OF INCORPORATION TO BE FILED WITH THE STATE CORPORATION COMMISSION; PRESCRIBES PROCEDURES FOR INCORPORATION; DEFINES POWERS OF SUCH CORPORATIONS; ESTABLISHES RULES GOVERNING BOARDS</p>

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
			OF DIRECTORS, MEETINGS, TRANSFERS OF SHARES, SUBSCRIPTIONS AND SALES OF STOCK, VOTING, INCREASES OR DECREASE OF CAPITAL STOCK, COMMENCEMENT OF BUSINESS, VOLUNTARY DISSOLUTION, POWERS OF DIRECTORS AFTER DISSOLUTION, BORROWING MONEY AND MORTGAGES; CONFERS POWER OF EMINENT DOMAIN; SETS OTHER PROVISIONS GOVERNING THE ACQUISITION OF LANDS AND AUTHORIZES THE USE OF MATERIALS FOUND ON STATE LANDS.
BUREAU OF REVENUE	72-13-13 THROUGH 72-13-94	TAX; ADMINISTRATION	TAX ADMINISTRATION ACT GOVERNS ADMINISTRATION AND ENFORCEMENT OF VARIOUS TAX STATUTES, INCLUDING TAXES ON AND RELATED TO ENERGY.
BUREAU OF REVENUE	72-15-49 THROUGH 72-15-66	INCOME TAX; ADMINISTRATION	WITHHOLDING TAX ACT. DEFINES TERMS; REQUIRES EMPLOYERS TO WITHHOLD A PORTION OF EMPLOYEE'S WAGES FOR PAYMENT OF INCOME TAX; PROVIDES THAT THESE DEDUCTIONS WILL BE CONSIDERED COLLECTED TAXES; DECLARES EMPLOYERS LIABLE FOR AMOUNTS WITHHELD; REQUIRES MONTHLY REMITTANCE OF TAX; REQUIRES ANNUAL STATEMENTS OF WITHHOLDING FROM EMPLOYERS WITH A COPY GIVEN TO EMPLOYEE; PROVIDES THAT AMOUNTS WITHHELD SHALL BE APPLIED AGAINST TAX DUE; AUTHORIZES VOLUNTARY SUBMISSION TO THIS ACT OF EMPLOYEES WHOSE PARTICIPATION IS NOT MANDATORY.
BUREAU OF REVENUE	72-15A-1 THROUGH 72-15A-15	INCOME TAX; ADMINISTRATION	INCOME TAX ACT. DEFINES TERMS; LEVIES A TAX ON THE NET INCOME OF EVERY RESIDENT INDIVIDUAL AND EVERY DOMESTIC CORPORATION AND EVERY NONRESIDENT INDIVIDUAL AND EVERY FOREIGN CORPORATION ENGAGED IN THE TRANSACTION OF BUSINESS IN, INTO OR FROM THE STATE OR WHICH IS DERIVING INCOME FROM EMPLOYMENT OR PROPERTY IN THE STATE; SETS EXEMPTIONS AND TAX RATES; PROVIDES METHOD FOR COMPUTATION OF TAXES; AUTHORIZES ALLOCATION OF INCOME DURING THE FIRST TAXABLE YEAR IN THE STATE; PROVIDES FOR REMITTANCE OF TAX AND SETS TAX DATES; PROVIDES A CREDIT FOR TAX PAID TO OTHER STATES; AUTHORIZES

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
BUREAU OF REVENUE	72-15A-16 THROUGH 72-15A-36	INCOME TAX; ADMINISTRATION	<p>TAX CREDITS FOR STATE AND LOCAL TAXES, MEDICAL AND DENTAL EXPENSES AND INSTALLATION OF SOLAR HEATING AND COOLING; PROVIDES TAX CREDITS FOR TAXES PAID OTHER STATES BY NON-RESIDENT INDIVIDUALS; AUTHORIZES COMMISSION TO REQUIRE INFORMATION RETURNS; PERMITS FILING RETURNS BASED ON FISCAL YEARS.</p> <p>UNIFORM DIVISION OF INCOME FOR TAX PURPOSES ACT. DEFINES TERMS; AUTHORIZES TAXPAYER TO APPORTION HIS INCOME BETWEEN STATES; DEFINES TAX LIABILITY IN ANOTHER STATE; PROVIDES FOR ALLOCATION OF CERTAIN NONBUSINESS INCOME; REQUIRES RENTS AND ROYALTIES FROM PROPERTY IN NEW MEXICO BE ALLOCATED TO THIS STATE, AS WELL AS RENTS AND ROYALTIES FROM TANGIBLE PERSONAL PROPERTY; SETS CONDITIONS; PROVIDES FOR ALLOCATION OF CAPITAL GAINS AND LOSSES, INTEREST AND DIVIDENDS, PATENT AND COPYRIGHT ROYALTIES AND BUSINESS INCOME; SETS RULES GOVERNING VALUATION OF PROPERTY AND PAYROLL FACTORS WHICH ARE USED IN DETERMINING BUSINESS INCOME; PROVIDES FOR DETERMINATION OF COMPENSATION FOR SERVICES AND FOR INCLUSION IN PAYROLL FACTOR; AUTHORIZES ADJUSTMENT OF STANDARD ALLOCATION OR APPORTIONMENT TO FAIRLY REPRESENT TAXPAYER'S BUSINESS ACTIVITY; AUTHORIZES COMMISSIONER TO ENTER AGREEMENTS WITH TAXPAYER.</p>
BUREAU OF REVENUE	72-15A-37	INCOME TAX	<p>ENACTS THE MULTISTATE TAX COMPACT WHICH IS AN AGREEMENT AMONG JURISDICTIONS TO PROMOTE UNIFORMITY OR COMPATIBILITY IN SIGNIFICANT COMPONENTS OF TAX SYSTEMS, PROVIDE FOR EQUITABLE ALLOCATIONS OF TAXES, FACILITATE TAXPAYER CONVENIENCE AND PREVENT DUPLICATIVE TAXATION.</p>

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
BUREAU OF REVENUE	72-15A-38 THROUGH 72-15A-44	INCOME TAX	PROVIDES FOR AN ALTERNATIVE TAX OF 3/4 PERCENT OF TOTAL GROSS RECEIPTS ON PERSON WHOSE ONLY ACTIVITY IN NEW MEXICO CONSISTS OF MAKING SALES, SETS CERTAIN LIMITATIONS; PROVIDES FOR APPOINTMENT OF MEMBERS AND ALTERNATES TO THE MULTISTATE TAX COMMISSION.
BUREAU OF REVENUE	72-16A-1 THROUGH 72-16A-19	GROSS RECEIPTS TAX; ADMINISTRATION	GROSS RECEIPTS AND COMPENSATING TAX ACT; PAID IN LIMITED SITUATIONS BY PRODUCERS OF ENERGY RESOURCES. SEE SECTION 72-16A-27.
BUREAU OF REVENUE	72-16A-20 THROUGH 72-16A-29	RESOURCES EXCISE TAX; ADMINISTRATION	RESOURCES EXCISE TAX ACT; LEVIES A TAX ON SEVERING AND PROCESSING NATURAL RESOURCES; THIS TAX IS PAID IN LIEU OF GROSS RECEIPTS AND COMPENSATING TAX WITH CERTAIN EXCEPTIONS.
BUREAU OF REVENUE	72-16A-30 THROUGH 72-16A-39	GROSS RECEIPTS TAX; ADMINISTRATION	GROSS RECEIPTS REGISTRATION ACT. PERSONS DOING BUSINESS WITH STATE MUST REGISTER WITH BUREAU OF REVENUE. LIMITED APPLICATION TO ENERGY PRODUCERS. SEE SECTIONS 72-16A-12.23 AND 72-16A-27.
BUREAU OF REVENUE	72-18-1 THROUGH 72-18-51	SEVERANCE TAX; ADMINISTRATION	SEVERANCE TAX ACT. IMPOSES A TAX ON THE GROSS VALUE OF NATURAL RESOURCES FOR THE PRIVILEGE OF SEVERING THOSE RESOURCES.
OIL AND GAS ACCOUNTING COMMISSION	72-20-1 THROUGH 72-20-26	CONSERVATION TAX; REPORTS	OIL AND GAS CONSERVATION TAX ACT. TAXES OIL, GAS, LIQUID HYDROCARBONS, COAL, URANIUM AND GEOTHERMAL RESOURCES. DEFINES TERMS; STATES PURPOSES OF THE ACT; DIRECTS COMMISSION TO COLLECT A TAX ON ALL PRODUCTS AS DEFINED IN THE ACT WHICH ARE SEVERED AND SOLD. SETS THE TAX RATE AT 18/100 OF ONE PERCENT OF THE TAXABLE VALUE OF THE SOLD PRODUCTS; SETS METHOD OF DETERMINING TAXABLE VALUE; SETS METHODS OF COLLECTING TAX; REQUIRES MONTHLY REPORTS FROM EACH OPERATOR AND EACH PURCHASER; REQUIRES MONTHLY REPORTS FROM EACH OPERATOR AND EACH PURCHASER; REQUIRES MONTHLY REPORTS TO THE DEPARTMENT

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PROPERTY TAX DEPARTMENT	72-28-1 THROUGH 72-28-13	PROPERTY TAX; ADMINISTRATION	<p>OF FINANCE AND ADMINISTRATION; APPROPRIATES FUND TO ENERGY RESOURCES BOARD, OIL CONSERVATION COMMISSION AND STATE GEOLOGIST'S OFFICE; AUTHORIZES REFUNDS OF TAXES ERRONEOUSLY PAID; AUTHORIZES PAYMENT UNDER PROTEST AND SUITS BY TAXPAYERS; SETS ENFORCEMENT PROCEDURES AND PENALTIES; CONFERS SUBPOENA POWER ON COMMISSION; AUTHORIZES COMMISSION TO SET TAX ON A TAXPAYER WHO REFUSES TO FILE PROPER REPORT; AUTHORIZES TAX LIENS AND TAX SALES OF REAL PROPERTY OF DELINQUENT TAXPAYERS; SETS A FIVE YEAR STATUTE OF LIMITATIONS.</p> <p>FIRST ARTICLE OF PROPERTY TAX CODE, CREATES PROPERTY TAX DEPARTMENT; DEFINES DUTIES AND POWERS OF DIRECTOR; REQUIRES DEPARTMENT TO ISSUE MANUALS, SCHEDULES, BULLETINS, REGULATIONS AND OTHER MATERIAL CONCERNING PROPERTY TAX LAWS; AUTHORIZES DIRECTOR TO SUSPEND FUNCTIONS OF COUNTY ASSESSOR AND COUNTY TREASURER; REQUIRES DEPARTMENT TO SUPPLY ANNUAL REPORT TO GOVERNOR.</p>
PROPERTY TAX DEPARTMENT	72-29-1 THROUGH 72-29-2	PROPERTY TAX	STATES GENERAL PROVISIONS FOR VALUATION FOR PROPERTY TAX PURPOSES; PROVIDES THAT VALUATION OF MINERAL PROPERTY AND PROPERTY USED IN CONJUNCTION THEREWITH IS THE RESPONSIBILITY OF THE DEPARTMENT, NOT THE COUNTY ASSESSOR.
PROPERTY TAX DEPARTMENT	72-29-2.1	PROPERTY TAX	EXEMPTS FROM PROPERTY TAX PROPERTY INTEREST HELD UNDER LEASE FROM A COUNTY OR A MUNICIPALITY UNDER AUTHORITY OF AN INDUSTRIAL REVENUE BOND OR POLLUTION CONTROL REVENUE BOND ACT FOR SO LONG AS THE PROJECT PROPERTY REMAINS SECURITY FOR THE BOND, BUT NOT TO EXCEED 30 YEARS.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
PROPERTY TAX DEPARTMENT	72-29-3 THROUGH 72-29-4	PROPERTY TAX	DEFINES PROPERTY SUBJECT TO VALUATION, IDENTIFIES EX-EMPT PROPERTY, SETS FORTH RULES GOVERNING TAXABLE SITUS.
PROPERTY TAX DEPARTMENT	72-29-5 THROUGH 72-29-8	PROPERTY TAX	STATES GENERAL PROVISIONS FOR METHODS OF VALUATION AND FOR COLLECTION AND PUBLICATION OF PROPERTY VALUATION DATA. PROVIDES FOR VALUATIONS FOR MAJOR INDUSTRIAL AND COMMERCIAL PROPERTIES.
PROPERTY TAX DEPARTMENT	72-29-11	PROPERTY TAX	STATES SPECIFIC DEFINITIONS AND CLASSIFICATIONS FOR VALUATIONS OF MINERAL PROPERTY.
PROPERTY TAX DEPARTMENT	72-29-12 AND 72-29-22	PROPERTY TAX	SETS PROVISIONS GOVERNING METHOD OF VALUATION OF MINERAL PROPERTY (THE EXTENT TO WHICH THESE SECTIONS ARE INVOLVED DEPENDS ON WHETHER OR NOT GEOTHERMAL ENERGY AND BY PRODUCTS ARE TREATED AS MINERALS - SOME DISPUTE EXIST ON THIS SUBJECT).
PROPERTY TAX DEPARTMENT; DEPARTMENT OF FINANCE AND ADMINISTRATION	72-30-1 THROUGH 72-30-7	PROPERTY TAX	PROVIDES FOR IMPOSITION OF TAX; ESTABLISHES TAX RATIO AND LIMITATIONS.
PROPERTY TAX DEPARTMENT	72-31-1 THROUGH 72-31-93	PROPERTY TAX; ADMINISTRATION	ESTABLISHES GUIDELINES FOR ADMINISTRATION AND ENFORCEMENT OF PROPERTY TAX CODE.
STATE ENGINEER	75-1-1 THROUGH 75-1-6	ADMINISTRATION; WATER; POLICY	WATER RIGHTS IN GENERAL; WATER IS SUBJECT TO APPROPRIATION
STATE ENGINEER	75-2-1 THROUGH 75-2-5	ADMINISTRATION; WATER	ESTABLISHES OFFICE OF STATE ENGINEER; SETS TERM OF OFFICE, DEFINES GENERAL DUTIES, REQUIRES REPORTS TO THE GOVERNOR.

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STATE ENGINEER	75-2-6 THROUGH 75-2-7	ADMINISTRATION; WATER	REQUIRES STATE ENGINEER TO COLLECT CERTAIN FEES IN CARRYING OUT THE FUNCTIONS OF HIS OFFICE; REQUIRES RECORDS OF STATE ENGINEER TO BE MADE PUBLIC.
STATE ENGINEER	75-2-8	ADMINISTRATION; REGULATIONS; WATER	AUTHORIZES STATE ENGINEER TO ADOPT REGULATIONS, CODES AND ORDERS TO IMPLEMENT AND ENFORCE PROVISIONS OF LAW ADMINISTERED BY HIM.
STATE ENGINEER	75-2-9	ADMINISTRATION; REGULATION; WATER	AUTHORIZES STATE ENGINEER TO SUPERVISE THE APPORTIONMENT OF WATER IN NEW MEXICO.
STATE ENGINEER	75-2-11	ADMINISTRATION; WATER	ABOLISHES BOARD OF WATER COMMISSIONERS AND TRANSFERS RECORDS TO STATE ENGINEER.
STATE ENGINEER	75-2-12 THROUGH 75-2-16	ADMINISTRATION; REGULATIONS; WATER	AUTHORIZES STATE ENGINEER TO PROMULGATE RULES AND REGULATIONS REGARDING HEARINGS, APPOINT EXAMINERS AND PROVIDES SUBPOENA POWER.
STATE ENGINEER	75-4-2 THROUGH 75-4-11	ADMINISTRATION; WATER	DIRECTS STATE ENGINEER TO SURVEY STATE'S STREAM SYSTEMS; DETERMINE WATER RIGHTS, BRING SUITS AND INTERVENE IN SUITS THROUGH THE ATTORNEY GENERAL'S OFFICE TO DETERMINE THE RIGHT OF APPROPRIATION; SETS OUT CERTAIN RULES GOVERNING SUITS TO DETERMINE SURFACE WATER RIGHTS, INCLUDING NAMEING OF PARTIES, UNKNOWN CLAIMANTS, SUBMITTING QUESTIONS TO A JURY AND SPECIFYING MATTERS WHICH MUST BE INCLUDED IN A JUDGMENT.
STATE ENGINEER	75-5-1	REGULATION; WATER; PERMITS	RULES GOVERNING APPROPRIATION AND USE OF WATER, SETS REQUIREMENTS OUT FOR APPLICATION FOR A PERMIT TO APPROPRIATE SURFACE WATER.
STATE ENGINEER	75-5-3 THROUGH 75-5-18	REGULATION; WATER; PERMITS	PROVISIONS FOR AMENDMENT OF APPLICATION FOR APPROPRIATION OF WATER; REQUIRES NOTICE OF APPLICATION; ALLOWS TIME FOR OBJECTIONS, HEARINGS; REQUIRES STATE ENGINEER

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
STATE ENGINEER	75-5-19 THROUGH 75-5-29		<p>TO SET A TIME LIMIT FOR WATER UNDER A PERMIT TO BE PUT TO BENEFICIAL USE; SETS OUT REASONS FOR DISAPPROVAL OF AN APPLICATION; PROVIDES FOR SUPERVISION AND INSPECTION OF CONSTRUCTION OF WATER WORKS AND PENALTIES FOR USE OF UNSAFE WATERWORKS; REQUIRES ISSUANCE BY STATE ENGINEER OF A LICENSE TO APPROPRIATE SURFACE WATER; PLACES LIMITS ON AMOUNT OF WATER THAT CAN BE USED AND LIMITS RATES CHARGED FOR SALE OF SURPLUS WATER.</p> <p>SETS STANDARDS FOR MEASUREMENT OF WATER; PROVIDES FOR RECORDING OF DOCUMENTS, TRANSFERS AND ASSIGNMENTS OF SURFACE WATER RIGHTS; SETS PROCEDURES FOR CHANGING THE LOCATION AND USE OF WATER RIGHTS; SETS PROCEDURES FOR CHANGING THE POINT OF DIVERSION OR DIVERTING WATER INTO ANOTHER STREAM; CONTAINS EMERGENCY PROVISIONS; GOVERNS USE OF ARTIFICIAL WATER; PROVIDES FOR FORFEITURE FOR FAILURE TO USE WATER; SETS PRIORITIES FOR RESIDENTS OF UPPER VALLEY STREAM SYSTEMS; APPEALS FROM DECISIONS OF STATE ENGINEER ALLOWED.</p>
STATE ENGINEER	75-5-30	REGULATIONS; WATER	GOVERNS. CONSTRUCTION OF DAMS.
STATE ENGINEER	75-5-37	REGULATION; WATER	PROVISIONS CONCERNING ILLEGAL APPLICATION OF WATER; PROVIDES FOR INJUNCTIONS.
STATE ENGINEER	RULES AND REGULATIONS GOVERNING APPROPRIATION AND USE OF SURFACE WATERS IN THE STATE OF NEW MEXICO. SECTIONS I	REGULATIONS; WATER	PROMULGATES COMPREHENSIVE REGULATIONS COVERING THE MATERIAL CONTAINED IN SECTION 75-5-1 THROUGH 75-5-37 AS OUTLINED ABOVE.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
STATE ENGINEER	75-6-1 THROUGH 75-6-3	REGULATIONS; WATER	SETS OUT THE PROVISIONS GOVERNING APPEALS FROM DECISIONS OF THE STATE ENGINEER.
STATE ENGINEER	75-7-1 THROUGH 75-7-6	REGULATIONS; WATER	DEFINES PENALTIES WHICH MAY BE IMPOSED UNDER THE ACT.
STATE ENGINEER	75-11-1 THROUGH 75-11-12	REGULATION; WATER	UNDERGROUND WATER. PROVIDES FOR APPLICATIONS FOR USE; NOTICE AND HEARINGS; REQUIRES A DECLARATION OF THE BENEFICIAL USE TO WHICH THE WATER IS TO BE PUT; SETS PROCEDURES FOR CHANGING THE LOCATION OF A WELL, CHANGING THE USE OF WATER AND FORFEITURE OF THE WATER RIGHT; PROVIDES FOR APPEALS; DECLARES VIOLATIONS TO BE MISDEMEANORS.
STATE ENGINEER	75-11-13 THROUGH 75-11-18	REGULATION; WATER; LICENSES; BONDS	REQUIRES A LICENSE TO DRILL A WATER WELL; SETS OUT REQUIREMENTS OF APPLICATIONS; PROVIDES FOR SUSPENSION OF LICENSE; AUTHORIZES INJUNCTIONS AGAINST ILLEGAL APPLICATIONS OF WATER AND UNAUTHORIZED DRILLING; PROVIDES FOR FINES; REQUIRES A BOND FROM THE OWNER OR DRILLER OF A WELL.
STATE ENGINEER	75-11-19 THROUGH 75-11-22	REGULATION; WATER	PROHIBITS REMOVAL OF UNDERGROUND WATER FROM STATE, PROVIDES FOR ENFORCEMENT.
STATE ENGINEER	75-11-23 THROUGH 75-11-25	REGULATION; WATER	AUTHORIZES REPLACEMENT WELLS; REQUIRES APPLICATIONS IN CERTAIN CASES; SETS OUT PROVISIONS GOVERNING SUPPLEMENTAL WELLS.
STATE ENGINEER	75-11-26 THROUGH 75-11-36	REGULATION; WATER	GOVERNS RIGHT TO UNDER GROUND WATERS ACQUIRED PRIOR TO INCLUSION OF WATER IN A DECLARED BASIN.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
STATE ENGINEER	75-11-37	REGULATION; WATER	AQUIFERS CONTAINING NON-POTABLE WATER AT A DEPTH OF TWENTY-FIVE HUNDRED FEET OR MORE IS EXCLUDED FROM UNDERGROUND BASINS; NOTICE OF DRILLING WELL REQUIRED; INJUNCTIVE RELIEF ALLOWED IF WELL IMPAIRS AN EXISTING WATER RIGHT.
STATE ENGINEER	RULES AND REGULATIONS, GROUND WATER IN NEW MEXICO ARTICLE 1	PERMIT; REGULATIONS; WATER	REGULATIONS DEFINING EXISTING WATER RIGHTS AND INITIATION OF WATER RIGHTS; SETS OUT FORM OF APPLICATIONS; PROVIDES FOR NOTICE OF APPROPRIATIONS, PROTESTS HEARINGS, CANCELLATION OF PERMIT, STORAGE OF WATER, CERTIFICATE AND LICENSE TO APPROPRIATE; AUTHORIZES RETENTION OF OLD WELLS FOR DOMESTIC USE,
STATE ENGINEER	ARTICLE 2	PERMIT; REGULATION; WATER	REGULATIONS CONCERNING CHANGE OF WATER WELL LOCATION OR USE; SUPPLEMENTAL WELLS, EXTENSIONS OF TIME, DRILLING PREREQUISITES, DEEPENING AND REPAIRING.
STATE ENGINEER	ARTICLE 3	REGULATIONS; WATER	REGULATIONS CONCERNING HEARINGS BEFORE STATE ENGINEER.
STATE ENGINEER	ARTICLE 4	PERMITS; REGULATIONS; WATER	REGULATIONS CONCERNING LICENSING OF DRILLERS; CONSTRUCTION, REPAIR AND PLUGGING OF WELLS.
STATE ENGINEER	ARTICLE 5	REGULATIONS; WATER	REGULATIONS CONCERNING MAPS AND PLANS.
STATE ENGINEER	ARTICLE 6	REGULATIONS; WATER	REGULATIONS CONCERNING FEES.
STATE ENGINEER	ARTICLE 7	REGULATIONS; ADMINISTRATION; WATER	REGULATIONS CONCERNING DECLARATION, DESCRIPTION AND MAPS OF EXISTING UNDERGROUND BASINS.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
STATE ENGINEER	75-12-1 THROUGH 75-12-12	REGULATIONS; WATER	REGULATES ARTESIAN WELLS, AUTHORIZES PROMULGATION OF RULES AND REGULATIONS, REQUIRES FILING OF DRILLING RECORD WHENEVER DRILL HOLE ENCOUNTERS AN ARTESIAN STRATUM WITHIN AN ARTESIAN BASIN.
ENVIRONMENTAL IMPROVEMENT AGENCY	75-39-1 THROUGH 75-39-12	ADMINISTRATION; ENVIRONMENT; WATER	WATER QUALITY ACT. ESTABLISHES THE WATER QUALITY CONTROL COMMISSION AND REQUIRES THE PROMULGATION OF COMPREHENSIVE WATER QUALITY REGULATIONS AND STANDARDS AS A GUIDE TO WATER POLLUTION CONTROL; AUTHORIZES A PERMIT SYSTEM FOR THE DISCHARGE OF WATER CONTAMINANTS WITH PENALTY PROVISIONS; PRESCRIBES PROCEDURES TO BE FOLLOWED IN ADOPTING REGULATIONS AND METHOD OF APPEAL, DIRECTS CONSTITUENT AGENCIES TO ADMINISTER WATER QUALITY REGULATIONS, SETS OUT POWERS OF CONSTITUENT AGENCIES; PROVIDES ENFORCEMENT PROVISIONS, EMERGENCY PROCEDURES, AND IMPOSES CERTAIN LIMITATIONS ON THE ACT.
ENVIRONMENTAL IMPROVEMENT AGENCY	WATER QUALITY CONTROL STANDARDS SECTIONS A THROUGH H	REGULATIONS; ENVIRONMENT; WATER	SETS WATER QUALITY STANDARDS FOR INTERSTATE AND INTRASTATE STREAMS IN NEW MEXICO. THESE STANDARDS FOR STREAMS DESIGNATE THE USE FOR WHICH SURFACE WATERS IN NEW MEXICO SHALL BE PROTECTED. STANDARDS BY WATER BASIN ARE SET FORTH.
ENVIRONMENTAL IMPROVEMENT AGENCY	WATER QUALITY CONTROL COMMISSION REGULATIONS 1-100 THROUGH 3-209	REGULATIONS; ENVIRONMENT; WATER	PART 1, "GENERAL PROVISIONS AND PROCEDURES," PROMULGATES GENERAL PROVISIONS WHICH INCLUDES DEFINITIONS, PROCEDURES, NOTICE OF INTENT TO DISCHARGE, REQUIREMENTS FOR FILING OF PLANS AND SPECIFICATIONS FOR SEWERAGE SYSTEMS, REQUIREMENTS FOR NOTIFICATIONS OF DISCHARGE AND REMOVAL, AND VARIANCE PETITION REQUIREMENTS; PART 2, "WATER QUALITY CONTROL," PROMULGATES REGULATIONS FOR DISPOSAL OR REFUSE IN A NATURAL WATERCOURSE; AND PART 3 "UTILITY OPERATORS CERTIFICATION," PROMULGATES REGULATIONS CONCERNING THE CLASSIFICATION OF WATER SUPPLY SYSTEMS AND WASTEWATER FACILITIES.

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AGENCY	STATUTE OR REGULATION	SUBJECT	CONTENT
COUNTIES	77-6-38	PROPERTY TAX	SCHOOL TAX LEVIES. AUTHORIZES COUNTIES TO LEVY A PROPERTY TAX TO BE USED FOR OPERATING SCHOOLS IN EACH SCHOOL DISTRICT IN WHICH THERE IS NO MUNICIPALITY; SETS TAX RATE.
SCHOOL DISTRICTS PUBLIC SCHOOL FINANCE DIVISION OF THE DEPARTMENT OF FINANCE AND ADMINISTRATION	77-25-1 THROUGH 77-25-10	PROPERTY TAX	PUBLIC SCHOOL CAPITAL IMPROVEMENTS ACT. DEFINES TERMS, AUTHORIZES SCHOOL BOARDS TO PROPOSE A PROPERTY TAX FOR SCHOOL CAPITAL IMPROVEMENTS; REQUIRES AN ELECTION IN THE DISTRICT; SETS RULES GOVERNING THE ELECTION; IMPOSES LIMITATIONS ON THE EXPENDITURES OF FUNDS AND THE LENGTH OF TIME DURING WHICH THE TAX MAY BE IMPOSED; AUTHORIZES THE PUBLIC SCHOOL FINANCE DIVISION OF THE DEPARTMENT OF FINANCE AND ADMINISTRATION TO IMPOSE THE TAX UNDER CERTAIN CIRCUMSTANCES; CREATES "PUBLIC SCHOOL CAPITAL IMPROVEMENT FUND."
DEPARTMENT OF EDUCATION	LAWS OF 1975, SENATE MEMORIAL 7	CONSERVATION	DIRECTS THE DEPARTMENT OF EDUCATION TO TEACH ENERGY CONSERVATION TO CHILDREN IN NEW MEXICO'S PUBLIC SCHOOLS.
LEGISLATIVE ENERGY COMMITTEE	LAWS 1975, CHAPTER 98, SECTIONS 1 THROUGH 7	RESEARCH; REPORTS	CREATES A JOINT INTERIM COMMITTEE ON ENERGY; PROVIDES FOR APPOINTMENT OF MEMBERS, A CHAIRMAN AND A VICE CHAIRMAN; DIRECTS THE COMMITTEE TO EXAMINE STATUTES, CONSTITUTIONAL PROVISIONS, REGULATIONS AND COURT DECISIONS GOVERNING ENERGY AND RECOMMEND LEGISLATION; DIRECTS COMMITTEE TO SEEK AND MAKE PUBLIC ALL COST FACTORS OF EACH UTILITY WHICH ARE PASSED ON TO CONSUMERS; REQUIRES ANNUAL REPORTS TO THE LEGISLATURE; AUTHORIZES EMPLOYMENT OF A STAFF AND APPROPRIATES FUNDS.

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