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Statement of
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Before the Subcommittee on Mines and Mining
House Committee on Interior
and Insular Affairs
on
[Omnibus Geothermal Legislation]

HSE01903

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to be here this morning to discuss the proposed omnibus legislation as well as our work on the Federal Geothermal program. First, I would like to cover our most recent effort involving geothermal leasing activities. I also have a few comments about the omnibus legislation proposed by Chairmen Udall and Santini as well as H.R. 4471, the bill introduced by Congressman Symms.

Jackson, Henry M

FEDERAL GEOTHERMAL LEASING ACTIVITY

SEN. 06300

At the request of the Chairman of the Senate Energy Committee, we looked at the manner in which Federal lands are leased for geothermal development. Our work was aimed at the Geothermal Steam Act of 1970; the methods used to carry it out; and whether its implementation has impeded development on Federal lands. We have concluded that leasing and permitting delays are not in themselves the only or even the primary

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reasons for the slow pace of geothermal development. On the whole, economic and technical constraints are considered to be the major impediments to geothermal development. There are exceptions which I will address in my testimony, and we certainly believe that leasing improvements are needed. The regulations to implement the Federal program went into effect in January 1974, and the first leases were issued in 1974. According to the Department of Energy, the first commercial production of geothermal energy from Federal lands is scheduled to begin in the Imperial Valley in California in the near future.

Although it started out slow, in terms of the end result, the pace of geothermal leasing has resulted in considerable areas being offered and leased. For example, over one-half of all Federal 'known geothermal resource area" (KGRA) lands (about 1.2 million acres) have been offered for lease, and over one-third of these lands have been leased (about 440,000 acres/265 leases). In addition, about two and one-quarter million acres of non-KGRA lands have been leased. As of June 1979, about 1,670,000 acres remain under lease (988 active leases).

Leasing rates of Federal lands under Forest Service jurisdiction, however, could become a matter of concern for future geothermal development (900,000 acres of Forest Lands

are in KGRA's; yet only 43,500 acres have been leased). We believe the Secretary of Agriculture needs to set a higher priority for leasing of promising Forest Service geothermal lands.

In addition, other lands on which leases have expired or have been relinquished are not being made available for non-competitive leases (over 1/2 million acres). This appears to be a management decision problem within the Interior Department.

INTERAGENCY STREAMLINING
TASK FORCE REPORT

The President, in his April 1977 energy message, directed the Departments of Interior and Agriculture to streamline their procedures for leasing and environmental reviews of geothermal resources. In response to this direction, an Interagency Streamlining Task Force was formed and, since its inception, has conducted a study of issues and problems suggested by Task Force members, industry representatives, and Government agencies. It has also held a series of public meetings to solicit suggestions and comments. The Task Force released its report in January 1979, which includes a comprehensive set of legislative, regulatory, and administrative remedies expected to improve Federal geothermal leasing procedures.

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The Interagency Geothermal Coordinating Council approved sixteen of the nineteen Task Force recommendations in January 1979. Both the Interagency Streamlining Task Force Report and

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the bills being introduced by Chairmen Udall/Santini and Congressman Symms propose recommendations and revisions to the Geothermal Steam Act of 1970 to remove unnecessary barriers to the development of geothermal resources. Although we have not fully reviewed these bills it seems that they incorporate, for the most part, the Task Force recommendations. Further, our analysis uncovered many of the same problems and suggested solutions as found in the Task Force Report. Therefore, we believe that the Task Force recommendations have merit and should be given close consideration.

PROPOSED OMNIBUS GEOTHERMAL LEGISLATION

The most significant changes to be found in both H.R. 4471 and Chairmen Udall's/Santini's bill appear to be the provisions for increasing the Federal acreage limits, setting time limits for leasing and permitting decisions, and authorizing phased leasing procedures.

Acreage limitation

Interior believes the present lessee acreage limitation of 20,480 acres per state may be low and supports an increase to 51,200 acres as proposed in H.R. 740. This of course differs from the proposal in Chairmen Udall's/Santini's bill of a combined oil, gas, and geothermal lease acreage per state of 266,560 acres and 248,000 acres in Congressman Symms' bill. DOE also does not consider it desirable to couple geothermal acreage limits with oil and gas limits, however, they do recommend an increase to 51,200 acres, but without any overall

(i.e. total) limit on developed plus undeveloped acreage. Although the proposed limit in Chairmen Udall's/Santini's bill might restrain large oil companies from monopolizing geothermal areas, Interior believes it could provide the opportunity for other parties to totally dominate geothermal leasing and development. DOE has testified that there is a reasonable mix of oil and non-oil companies leasing geothermal resources at present, and smaller acreage limits for oil companies would deter some of the more active developers in an industry already growing at too slow a pace.

We believe that while the present limitation of 20,480 acres per state might be unduly restrictive and an increase is needed, the provisions allowing the leasing of over 200,000 acres per state--as presently worded in both Chairmen Udall's/Santini's and Congressman Symms' bills--may be excessive for non-oil companies concentrating on geothermal development, while also inhibiting oil companies from further increasing their geothermal development if they have to do it at the expense of oil and gas development. Thus, we believe a combined total limitation for oil, gas, and geothermal development could hinder some of the exploration and development of geothermal resources. Due to the infancy of the geothermal industry and its technology, we believe that increasing the limitation to an overall 51,200 acres, as introduced in H.R. 740, would be appropriate.

Time limits for issuing leases and permits

Interior, Energy, and Agriculture have all suggested that the provisions for time limits on processing leases and permits should be established as goals or targets rather than fixed requirements, and that such goals should provide for decisions and not specifically lease or permit issuance. Interior suggested that environmental reviews could be terminated prematurely because of meeting an inflexible deadline. Agriculture argues that responsible agencies must have discretion to schedule actions and decisions according to local conditions and changing national goals.

Under normal circumstances, we would probably concur with Interior's and Agriculture's reasoning. However, these are not normal circumstances, and Interior and Agriculture need to recognize it.

The Secretary of Treasury early this year, for the second time since 1975, under the authority of Section 232 of the Trade Expansion Act, found that the nation was importing oil in such quantities and under such circumstances so as to threaten to impair the national security. The Congress, in the DOE Organization Act of 1977, found that the increasing dependence on foreign energy supplies presents a serious threat to the national security of the United States and called for an energy program to meet our future needs to eliminate that threat.

We do not believe, of course, that the geothermal resource of and by itself will eliminate our over dependence on imported oil, however, it is clear that Interior and Agriculture should consider the national security issue when they schedule their funds and resources on energy programs which are part of the nation's overall energy plan. Geothermal resources are part of that plan.

H.R. 4471 allows one year for all action to be completed on a geothermal lease application. Chairmen Udall's/Santini's bill allows up to three years. For Interior and Agriculture to argue that environmental reviews could be terminated prematurely under these time frames does not, we feel, give credit for their potential to act.

For example, the land managers have learned a considerable amount about geothermal resource leasing since the Act was passed about nine years ago, and over 2 1/2 million acres and over a 1,000 leases later. The land managers have learned a lot about the other resource values on the public lands, after tens of years of resource inventorying through Interior's management framework planning and Agriculture's forest management planning systems. And, the land managers have gained considerable experience working on environmental stipulations and reclamation requirements under the authority of NEPA and other environmental legislation the past ten years or so.

It, therefore, seems that Interior and Agriculture are shortchanging their ability to effectively act under tight timeframes, especially when their top management can exercise their responsibility to give priority to programs which respond to national security threat issues.

In summary Mr. Chairman, we would generally agree that time limits in the energy regulatory process may increasingly be needed as part of the regulatory reform process. However, the Committee may want to consider very carefully the clauses which address what happens when delays occur beyond the set time limits. Currently, H.R. 4471 generally negates the time limit requirement by merely extending the term of the lease equivalent to the time delay and by removing the obligation of the lessee to pay the annual rental.

Chairmen Udall's/Santini's bill is generally silent on what happens when the time frames are exceeded by the Government. Only with permit applications to conduct exploration and development activities are they "deemed to be approved as submitted" if no action is taken by the Government within the time limits. The Committee may wish to carefully consider using this latter clause to provide "teeth" to the other time limit requirements.

"Staged or phased" leasing

There has been considerable attention given to the concept of "staged or phased" leasing which would allow the separation

of exploration rights and development rights, thereby staging the environmental review process. It is argued that this would allow the land management agencies to issue exploration rights much faster if they knew they had another opportunity for environmental reviews should the developer find an economic resource.

Both Interior and Agriculture support the concept of "staged or phased" leasing and both have testified that they believe this feature can be implemented administratively. Interior believes that the authority for phased leasing currently exists under the Geothermal Steam Act of 1970 but both Departments do not object to explicit statutory authority for staged leasing procedures.

We would agree with the concept of phased leasing if, in fact, it would speed up the process--and we believe it could in some instances. We would point out, however, that it could also retard geothermal development. For example, some companies probably would accept a permit under a phased approach with the assumption that they would be able to comply with whatever environmental stipulations are necessary. Other investors might not be so willing to buy the "pig-in-the-poke" arrangement, or the amount of their investment might not be as large as otherwise might be the case. Either of the latter instances could work against expeditious geothermal development.

Other leasing provisions

Another provision in Chairmen Udall's/Santini's bill would limit future known geothermal resource areas (KGRA's) to an area in which a well has been drilled and demonstrated to be capable of producing geothermal resources suitable for the production of electric power in commercial quantities. Interior believes this definition needs to be more inclusive while DOE recommends limiting new KGRAs to resources with temperatures which represent a reasonable lower limit for use in electric power generation. Although most of the KGRA's in this country have been so designated and--considering current technology--few others remain, we believe that the prudent man approach to a KGRA designation as proposed in Chairmen Udall's/Santini's bill is appropriate.

Finally, we believe that the provisions that call for (1) alternative bidding systems in ten percent of the lease sales and (2) possible competitive leasing of non-KGRA lands following a public notice period, if applications are filed for the same land, need to be carefully reviewed. Both would seem to add additional time to the leasing process and, given the state of the art of geothermal resource development, would appear to be premature and not needed at this time to assure competition. Further, it appears that the requirement for a public notice period could encourage speculation.

Financial incentives and initiatives

I would like now to address my testimony to some of the financial incentives and initiatives proposed in these bills. As I mentioned earlier, geothermal development has proceeded at a slow pace. The two bills would provide several financial incentives and other initiatives to help accelerate the development of geothermal energy.

We agree with the objective of accelerating development of geothermal energy to help increase its supply contribution And since the primary reasons for the slowness in geothermal development appear to be technological and/or economic, we would generally favor financial incentives which would most directly overcome those constraints and thus promise the most development for the funds expended.

We believe that before any new incentives are enacted, DOE should make the Congress fully aware of the impact each incentive could have on all phases of geothermal development, and the estimated annual costs of each incentive. In this way, the Congress would be in a better position to judge and decide on which incentives or other initiatives are best for aiding geothermal development.

In this regard, we understand DOE is considering (1) the possible use of forgivable loans studying the feasibility

of direct use of geothermal energy for space heating and industrial and agricultural purposes, and (2) the use of cost-sharing grants to fund the drilling of geothermal wells for reservior confirmation. Before the forgivable loans legislative provision is considered by the Congress, we believe DOE should provide the Congress with an analysis of the impacts these different incentives could have on aiding and accelerating reservior confirmation, their estimated annual costs, and how the incentives tie in with DOE's existing geothermal loan guarantee program.

We would like to point out that the geothermal loan guarantee program, which was established in 1974 to encourage and assist the commercial development of geothermal resources, has had only limited participation and effect on accelerating geothermal development. Only four loan guarantees have been approved to date. DOE, however, expects increased interest in this program due to the tax incentives for geothermal energy provided in the Energy Tax Act of 1978, and amendments made to the loan guarantee program in 1978. We believe the limited participation in this program to date, however, indicates a need to carefully consider and design new incentives and initiatives so that that they can help geothermal development in the most effective and timely manner.

Other matters relating to financial incentives and initiatives

There are two other matters which we would like to comment on relating to the incentives and initiatives mentioned in these bills.

H.R. 4471 requires the Secretary of Energy to establish new procedures for processing of loan guarantee applications, and requires that all such applications be approved or disapproved within 4 months of the date of filing.

We have noted that the four loan guarantees approved to date required an average of 11 months from the date submitted to the date approved. These delays frustrate and discourage geothermal developers who have significant funds tied up in these applications and projects. Although some projects may require more time than other to review, DOE already recognizes this long review process as a problem and is working towards reducing its review time frames. We are not prepared at this time to say that 4 months is or is not the appropriate period but would suggest that DOE's current assessment be eyed very carefully to be sure no "fat" remains in the review process. We would generally agree that time limits in the energy regulatory process may increasingly be needed as part of the regulatory reform process.

H R. 4771 would also amend various provisions of the Energy Tax Act of 1978 for the purpose of removing discentives to geothermal development. One amendment would offer utilities an additional 10 percent investment tax credit for geothermal equipment. We understand that DOE and the Electric Power Research Institute favor such tax credits. Since most applications of geothermal energy involve an electric utility or a hot water distribution utility, it appears this credit could be a substantial incentive for utilities. However, if these tax credits end up being passed through to consumers by State regulatory commissions, we question whether they would act as an incentive to the public utilities. Before this provision is enacted, its impact on geothermal development needs to be considered.

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Mr. Chairman that concludes my prepared statement. We would pleased to answer any questions.