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CONGRESSIONAL RECORD—Extensions of Remarks

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EXTENSIONS OF REMARKS

CONGRESSMAN TONY P. HALL INTRODUCES BILL TO CLARIFY GEOTHERMAL ENERGY TAX CREDITS

HON. TONY P. HALL

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

Thursday, July 9, 1981

• Mr. HALL of Ohio. Mr. Speaker, today I am introducing a bill to clarify the definition of geothermal energy for tax credit purposes. I am pleased that my colleague, Congressman DON H. CLAUSEN, of California, is joining with me as the other original sponsor of this legislation.

Our bill basically contains three parts. The first would amend the definition of geothermal in the Energy Tax Act of 1978 to make it explicit that there is no temperature requirement for the geothermal tax credit for residences and commercial facilities. The second part would specify how the credit is to be determined when a residence or business has a system which uses both geothermal energy and another source not eligible for the credit. The final part of the bill makes it clear that the definition adjustments run with the life of the energy tax credits themselves, meaning that the changes would have a retroactive effect and would expire when the credits themselves expire.

The Energy Tax Act of 1978 provided for a tax credit of \$2,200 of the first \$10,000 spent for the installation of residential solar, wind, and geothermal energy equipment. A provision of the Crude Oil Windfall Profit Tax Act raised the maximum credit to \$4,000 or 40 percent of the first \$10,000 of eligible energy equipment. The Energy Tax Act also provided for a 10-percent tax credit for investment in solar, wind, and geothermal energy equipment used by businesses.

For tax purposes, the Energy Tax Act of 1978 defined geothermal energy in the following way:

The term "geothermal deposit" means a geothermal reservoir consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure).

The law set no temperature requirement in its definition of geothermal energy. Acting in good faith, many citizens invested in geothermal energy systems to tap shallow geothermal wells which they assumed would qualify for the credits.

The Internal Revenue Service proposed regulations to implement the tax credit provisions of the Energy Tax Act of 1978. In its proposed regulations, the IRS decided to set an arbitrary temperature requirement for eligibility for the geothermal tax credits.

I was among those who testified against this temperature requirement at an IRS public hearing in Washington on September 12, 1979.

Unfortunately, the IRS did not follow the recommendations that were made in opposition to a temperature requirement. In August 1980, the IRS issued final regulations concerning geothermal residential energy tax credits, and in January 1981, issued final regulations concerning geothermal commercial facility tax credits. For both sets of credits, the IRS required the geothermal source to have a temperature of more than 50° C. This means that citizens who installed geothermal systems that tap sources with a temperature below 50° C, would not qualify for the tax credits.

The Department of Energy and developers and users of geothermal energy have been opposed to the temperature limitation since the IRS regulations were proposed over 2 years ago. Most of the potential geothermal energy use in the eastern half of the United States would involve resources with a temperature of less than 50° C. The IRS limitation has the effect of eliminating a significant portion of the geothermal resources of the country.

The Miami Valley of Ohio is incredibly rich with underground rivers that make it an ideal place to utilize geothermal energy. These streams, which run below the Great Miami, the Stillwater, and the Mad Rivers, all converge on the center of Dayton, providing a nearly unlimited energy source for downtown buildings. Unlike the aquifers in some areas, Dayton's underground rivers are easy to tap because they are not blocked by bedrock. In addition, they are located at relatively shallow depths of 50 to 100 feet.

The 50° C. temperature requirement does not reflect congressional intent or scientific fact. Geothermal energy is the natural heat of the Earth. The heat in water, soil, or rock close to the surface of the Earth is derived from both solar and geothermal energy. Equipment that uses either solar or geothermal energy, or both, is eligible for the residential and business energy tax credits of the Energy Tax Act of 1978. Therefore, it should not matter whether the source of the heat in shallow water sources is geothermal or solar. Further, at depths of more than a few dozen feet, the heat is essentially entirely of geothermal origin.

I think it is important to point out that the technology is presently commercially available to take advantage of geothermal sources with a temperature below that set by the IRS. We are not talking about some untested energy source that will take years to develop and then put on the market. The equipment is there right now—we

only need to make it attractive and economical to use.

Energy from groundwater can be extracted through the use of currently marketed heat pumps, which operate according to the same basic principles at work in a refrigerator. The pump systems permit the temperature of the shallow geothermal water to be either raised or lowered for heating or cooling purposes.

Using groundwater, a heat pump system heats three to five times as efficiently as a fossil-fuel system, in terms of heat output per unit of energy put in. Although the heat pump is operated by electricity, the actual heating or cooling energy in a geothermal system is free and virtually unlimited.

According to the National Water Well Association, a groundwater heat pump system can pay for itself in 2 to 4 years, if a well is already in place. Even if a well must be drilled, the system will pay for itself in 4 to 8 years. The National Water Well Association further states that it is not aware of any groundwater heat pump system that has ever stopped running—even after more than 25 years of service.

Those of us who have been interested in promoting the more widespread application of geothermal energy had hoped that the IRS might be persuaded to change its position on the temperature requirement for the geothermal tax credits. The IRS has continued to hold the view that a minimum temperature rule is necessary in order to assure that energy from a geothermal source means energy derived from underground sources and not just heat associated with atmospheric temperature. In the opinion of the IRS, heat from low-temperature groundwater is solar heat, and not eligible for the geothermal tax credit. Since it is now unlikely that the IRS is going to change this view, my colleague from California and I are introducing a bill to clarify the definition of geothermal energy for tax credit purposes.

The IRS policy of disallowing the credit for systems which use both geothermal energy and another energy source also is inconsistent with the intent of Congress and ignores sound engineering practice in the use of geothermal energy.

Geothermal energy systems often include peaking systems fueled by fossil energy. The fossil energy will typically range from 3 percent or 4 percent to 20 percent of the annual total energy load. The extra wells, pipe, and pump capacity required for a geothermal system designed to be 100 percent geothermal on the few coldest days of the

probably from the work we did in Randy last year

• This "bullet" symbol identifies statements or insertions which are not spoken by the Member on the floor.

Legislation

Mike-

his deals w/ the IRS

D.F.

year would add too much to system cost to be attractive.

Geothermal resources in many instances may not be hot enough to fully satisfy a particular industrial process requirement, but by adding a few degrees to the heat from geothermal energy, it will often be possible to replace a large fraction of the oil or gas use in a plant or other facility. Further, many industrial processes involve several steps at different temperatures. Some of these steps can use geothermal heat, but others might require superheating. Under the IRS limitation, if such a system involved even a minimum addition of nongeothermal heat, the entire system would become ineligible for the tax credit. In effect, the IRS limitation encourages less efficient designs to take advantage of the tax credit. Certainly, this result is contrary to the intent of Congress in the Energy Tax Act of 1978.

In order to help rectify this problem, our bill specifies how the credit is to be determined when a residence or business has a system which uses both geothermal energy and another source not eligible for credit. Under the bill, all of the equipment comprising the system shall be eligible for the credit if, on a BTU basis, geothermal energy provides more than 80 percent of the energy in a typical year for which the system is designed. If less than 80 percent of the energy is supplied by geothermal energy, the credit shall apply to those portions of the system which produce, distribute or use energy which is more than 50 percent supplied by geothermal energy on an annual BTU basis.

It is important to emphasize that our bill does not create any new tax credits. It does not increase any present tax credits. What it does, instead, is make clear what the current law is and overturn the arbitrary restrictions imposed by the IRS. The objective of the technical corrections made by this bill is to make the present credits effective.

This legislation was drafted with the technical cooperation and assistance of the Department of Energy, which has publicly expressed its opposition to the IRS geothermal tax credit regulations. The Ohio Department of Energy also has taken the position that any Federal energy tax credits of this type should be applicable to all geothermal or hydrothermal sources regardless of their temperatures. The State of Ohio already has on the books a tax credit which is applicable to a hydrothermal source of any temperature when it is used for heating or cooling.

We need to remove the bureaucratic roadblock by the IRS which is preventing incentives to more widespread use of available geothermal technology. We should make it attractive for more homes and businesses to take advantage of the geothermal resources of this Nation. Truly, the ground on

which we stand holds part of the solution to our energy problems.

The gentleman from California and I urge our colleagues to cosponsor this bipartisan bill and to join with us in encouraging the House Ways and Means Committee to act favorably on it.

For the benefit of our colleagues, the full text of the bill follows:

H.R. —

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

SECTION 1. CLARIFICATION OF DEFINITION OF GEOTHERMAL ENERGY.

(a) GENERAL RULE.—Paragraph (3) of section 613(e) of the Internal Revenue Code of 1954 (defining geothermal deposit) is amended to read as follows:

“(3) GEOTHERMAL ENERGY DEFINED.—For purposes of paragraph (1), the term ‘geothermal energy’ means the natural heat of the earth (at any temperature) which is stored in rocks, an aqueous liquid or vapor (whether or not under pressure), or any other medium. A geothermal well shall in no case be treated as a gas well for purposes of this section or section 613A, and this section shall not apply to any geothermal property which is located outside the United States or its possessions.”

(b) CLARIFICATION OF APPLICATION OF BUSINESS CREDIT AND RESIDENTIAL CREDIT TO GEOTHERMAL PROPERTY.—

(1) Subparagraph (D) of section 44(c)(7) of such Code is amended by adding at the end thereof the following: “In the case of a system which uses both geothermal energy and an energy source not eligible for the credit under this section, all of the equipment comprising the system shall be eligible for the credit if, on a BTU basis, geothermal energy provides more than 80 percent of the energy in a typical year for which the system is designed. If less than 80 percent of the energy is supplied by geothermal energy, the credit shall apply to those portions of the system which produce, distribute, or use energy which is more than 50 percent supplied by geothermal energy (on an annual BTU basis).”

(2) Paragraph (3) of section 48(l) of such Code is amended by adding at the end thereof the following new subparagraph:

“(D) APPLICATION OF CREDIT TO EQUIPMENT WHICH USES BOTH GEOTHERMAL ENERGY AND ANOTHER ENERGY SOURCE.—In the case of a system which uses both geothermal energy and an energy source not eligible for the credit under this section, all of the equipment comprising the system shall be eligible for the credit if, on a BTU basis, geothermal energy provides more than 80 percent of the energy in a typical year for which the system is designed. If less than 80 percent of the energy is supplied by geothermal energy, the credit shall apply to those portions of the system which produce, distribute, or use energy which is more than 50 percent supplied by geothermal energy (on an annual BTU basis).”

(c) CONFORMING AMENDMENTS.—

(1) Clause (ii) of section 44(c)(2)(B) of such Code is amended by striking out “any geothermal deposit” and inserting in lieu thereof “geothermal energy”.

(2) Clause (i) of section 44(c)(5)(A) of such Code is amended by striking out “energy derived from the geothermal deposits” and inserting in lieu thereof “geothermal energy”.

(3) Clause (viii) of section 48(l)(3)(A) of such Code is amended by striking out “energy derived from a geothermal deposit”

and inserting in lieu thereof “geothermal energy”.

(4) Clause (ii) of section 57(a)(11)(D) of such Code is amended to read as follows: “(ii) all geothermal properties.”

(5) Subsection (c) of section 263 of such Code is amended by striking out “any geothermal deposit” and inserting in lieu thereof “geothermal energy”.

(6) Subparagraph (E) of section 465(c)(1) of such Code is amended by striking out “geothermal deposits” and inserting in lieu thereof “geothermal energy”.

(7) Paragraph (1) of section 613(c) of such Code is amended by striking out “geothermal deposit” and inserting in lieu thereof “geothermal well”.

(8) Subsection (e) of section 613 of such Code is amended—

(A) by striking out “deposits” each place it appears in paragraph (1) and inserting in lieu thereof “properties”, and

(B) by striking out “deposits” in the subsection heading and inserting in lieu thereof “PROPERTIES”.

(9) Subsection (b) of section 614 of such Code is amended—

(A) by striking out “geothermal deposits” in the text and inserting in lieu thereof “geothermal wells”, and

(B) by striking out “GEOTHERMAL DEPOSITS” in the subsection heading and inserting in lieu thereof “GEOTHERMAL WELLS”.

(10) Paragraph (1) of section 614(c) of such Code is amended by striking out “oil and gas wells and geothermal deposits” each place it appears and inserting in lieu thereof “oil, gas, and geothermal wells”.

(d) EFFECTIVE DATE.—Any amendment made by this section shall take effect as if it had been included in the provisions of the Energy Tax Act of 1978 to which such amendment relates.●

COMMEMORATION OF ST. SAVA DAY

HON. JAMES L. NELLIGAN

OF PENNSYLVANIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, July 9, 1981

● Mr. NELLIGAN. Mr. Speaker, I rise to commemorate St. Sava Day, June 28, which honors the founder of the Serbian Orthodox Church. Originally of noble ancestry, Sava migrated to Greece where he became a monk in the Eastern Orthodox Church. He later returned to Serbia to become the superior of the monastery of Studenitsa, which was the center of the emerging Serbian Orthodox Church.

St. Sava countered Serbian King Stephen II's support of Roman Catholicism and eventually, in 1219, succeeded in establishing the independent Serbian Orthodox Church within the realm of the Patriarch of Constantinople. St. Sava became the first orthodox archbishop of Serbia and initiated a cultural and ecclesiastical renaissance that included the establishment of schools and the beginnings of medieval Serbian literature.

Let us honor St. Sava, a man who was a champion of Serbia's religious and cultural heritage.●