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UPDATE ON FEDERAL TAXATION OF GEOTHERMAL ENERGY

Sharon C. Wagner and Charles Stepkin

O'Brien and Hallisey
One California Street, San Francisco, Ca. 94111

ABSTRACT

We are presenting a brief overview and update of federal taxation of geothermal energy. In our oral presentation at the Technical Session we will discuss how these tax laws interrelate and apply to a variety of taxpayers.

UPDATE ON FEDERAL TAXATION OF GEOTHERMAL ENERGY

Prior to the passage of the Energy Tax Act of 1978, 1/ the federal tax treatment of geothermal resources was based mainly on judicial decisions, not statutory authority. The 1978 Act eliminated most of the uncertainties of tax treatment of geothermal exploration and development. The Act's definition of geothermal deposits - "a geothermal reservoir consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure)" 2/- is broad enough to include all known forms of geothermal energy including steam, hot water or brines, or dry hot rocks. The reservoir must be located within the United States or a possession. The Act changed three areas of taxation as applied to geothermal resources: intangible drilling costs, depletion, and tax credits.

I. INTANGIBLE DRILLING COSTS

A. Option to Deduct Intangible Drilling Costs

Section 263(c) of the IRC now allows a taxpayer the option to deduct as expenses intangible drilling costs (called "intangibles" or IDCs). 3/ The costs of drilling and completing a geothermal well are divided for tax purposes into two classes: intangible drilling costs and equipment costs. The equipment costs must be capitalized and "recovered" through depreciation or depletion. Intangible

drilling costs may be treated in two ways. 4/ They may be deducted as expenses (in tax terminology they may be expensed) in the year in which they are incurred or they may be capitalized and deducted over a certain period of time as depreciation or depletion. 5/

The taxpayer must make his election to expense or to capitalize intangibles in his first taxable year in which he incurs such costs. $\underline{6}$ / Once the election is made, the taxpayer must treat expenditures on all geothermal properties in the same manner for all future years. 7/ However, if the taxpayer elects to capitalize his intangibles, he is granted a second election or dry or unproductive wells. 8/ For example, if Taxpayer (T) 9/ has spent \$50,000 on intangible costs, T may claim as a deduction on his income tax return \$50.000. But if T decides to capitalize intangible drilling costs T will not take a \$50,000 deduction for the tax year, but instead will deduct this amount over a given period of time as depreciation or depletion.

The costs incurred in drilling a nonproductive well may be deducted by the taxpayer as an ordinary loss provided a proper election is made. If a clear election is not made, such costs can be recovered only through depreciation and depletion.

Taxpayers who decide to expense intangibles, however, will be subject to the following: the minimum tax, a limitation on deductions to the amount "at risk" and recapture.

B. Preference Income-Minimum Tax

Some types of income are given preferential treatment by special provisions of the tax law. A minimum tax applies to a number of items that are considered to be of a tax preference nature. These types of income include income offset by depletion and intangible drilling costs. The tax is computed by totaling all of the items of tax preference, then reducing this

amount by the greater of \$10,000 or one-half the taxpayer's regular income tax after reduction by credits. A flat 15% rate is then applied against the balance.

"excess taxpayer has intangible drilling costs" that exceed net geothermal income, he will have preference subject to the minimum tax. Intangible drilling costs which are deducted in any given tax year constitute a preference item to the extent that such costs are greater than the sum of (1) the amount allowable if the costs had been capitalized straight-line recovery of the intangibles had been used and (2) the net income for the tax year from the geothermal property. This preference does not apply to nonproductive wells. Special rules apply to corporations in computing their minimum in particular excess intangible drilling costs are not a preference item for a regular corporation.

The preference amount with respect to the depletion deduction is the excess of the depletion deduction over the adjusted basis of the property at the end of the year (determined without regard to the depletion deduction for the year).

In effect what this provision does is to lessen the benefit of percentage depletion and the option to expense intangible drilling costs. Few taxpayers now have geothermal income and if they chose to expense intangibles, they will have preference income.

C. Losses Limited to Amount at Risk

The 1976 Tax Reform Act limited the tax benefits available to persons engaging in oil and gas operations. These same limitations with some changes were extended to geothermal operations by the 1978 Energy Tax Act.

Before passage of the 1976 Act a taxpayer could take deductions up to the amount of his cost (or "basis") in a business or investment venture. But the basis of a taxpayer often included expenditures financed by nonrecourse loans for which the taxpayer had no personal liability (i.e., he had nothing "at risk" because of the way the loan was made to him or to an investment group). Such leveraged nonrecourse loans were often employed by investors to finance drilling and development costs of oil and gas activities. Since a taxpayer could elect to expense intangible drilling costs, he could take deductions far in excess of his own actual investment. This kind of investment was desirable for a high bracket taxpayer because the large deductions for intangibles could be used to offset income earned from other sources.

The taxpayer's total deduction in a given venture cannot exceed the total amount the taxpayer has $\underline{\text{at risk}}$. A loss is the excess of the allowable deductions allocable to a particular activity over the income derived from the activity during the taxable year, and thus includes deductions taken for intangibles. In addition, previously allowed losses must be recaptured when the taxpayer's "at risk" amount is reduced below zero, but only to the extent of the excess of the losses previously allowed in a particular "at risk" activity over any amounts previously recaptured. Recaptured losses may be deductible in a later year if the amount "at risk" is later increased. The practical effect of these "at risk" provisions is to eliminate the use of nonrecourse financing to increase available deductions.

Recapture of Expensed Intangible Costs As Ordinary Income on Disposition of Geothermal Property

Probably the most far-reaching change of the 1976 Tax Reform Act affecting taxpayers is the requirement that upon the disposition of oil and gas property taxpayers are required to recapture all or some part of any expensed intangible costs as ordinary income if the property is disposed of at a gain. These recapture provisions now extend to intangible drilling costs expensed in connection with geothermal deposits. This recapture provision applies only to intangibles which the taxpayer elects to expense in the year in which they were incurred and does not apply to intangibles which were <u>capitalized</u>. The amount recaptured and taxed as ordinary income is the amount that the intangibles deducted exceed that which would have been allowed had the intangibles been capitalized and amortized on a straight-line basis from the time the property went into production, but not to exceed the amount of the gain.

II. PERCENTAGE DEPLETION

The IRC provides two methods of computing a depleton allowance: cost depletion and percentage depletion. Cost depletion provides for a deduction for the taxpayer's basis (cost) in the property. On the other hand, percentage depletion is a statutory concept that provides for a deduction of specified percentages of the gross income from the property. A taxpayer is required to compute depletion both ways and to claim the larger of the two amounts, on a property by property basis.

The percentage depletion allowance reduces the taxpayer's basis in a property but the total amount taken as a depletion allowance is not limited to the taxpayer's basis. Even though cost

depletion will be zero (for example, T deducts \$5,000 per year for five years for a total of \$25,000 - the amount of his original investment), the taxpayer may continue to claim a percentage depletion based on gross income from the property. 10/

Section 403 of the 1978 Energy Tax Act granted percentage depletion on income from geothermal deposits. The rate through 1980 is 22%. It decreases by 2% yearly until 1983 and thereafter the rate is 15%. This percentage depletion allowance is much more favorable than the one allowed oil and gas. It is not limited in any way to a specified amount of production. It has no 65% of taxable income limitation nor is it independent producers. restricted to However, the percentage depletion deduction in any year cannot exceed 50% of the taxable income from the property and is subject to the minimum tax-preference income rules. 11/

Two problems have developed with respect to percentage depletion for directuse applications of geothermal resources. First, neither Section 613(c) of the code nor its accompanying regulations define "gross income" for the geothermal property. Treas. Reg. Section 1.613-3(a) defines gross income for oil and gas property and Treas. Reg. Section 1.613-4 defines gross income for "other minerals". Secondly, there is some question about the availability of for percentage depletion deduction geothermal resources consumed the producer of such resource.

III. TAX CREDITS

A. Residential Energy Credit

IRC Section 44(C) provides for a nonrefundable tax credit for certain expenditures incurred for equipment which uses geothermal energy (deemed a "renewable energy source") in a taxpayer's principal residence in the United States. equipment must be new and must meet certain performance and quality standards; it must reasonably be expected to remain production for five years. The credit for tax years beginning after 1979 is 40 percent of the first \$10,000 invested with a maximum credit of \$4000. The credit may be carried over to future years for equipment purchased after April 20, 1977 and before January 1, 1986.

B. Additional Investment Tax Credit for Alternative Energy Property

In addition to the existing investment tax credit of 10 percent for businesses (IRC Section 46), there is also available a nonrefundable 15 percent investment tax credit for geothermal equipment which qualifies as either "alternative energy property" or "specially

defined energy property." "Alternative energy property" is defined as equipment "used to produce, distribute or use energy derived from a geothermal deposit...but only in the case of electricity generated by geothermal power up to (but not including) electrical transmission stage." "Specially defined energy property" is a list of enumerated items including a heat exchanger, etc., "the principal purpose of which is reducing the amount of energy consumed in any existing industrial or commercial process and which is installed in connection with an existing industrial or commercial facility." Public utilities cannot benefit to the extent of "alternative energy property" but can use the credit for "specially defined energy property."

The energy credit applies up to 100 percent of the taxpayer's tax liability, but it may be taken only after the "regular" investment credit is taken. However, the unused portion of the energy credit may be carried back 3 years and forward 15 years.

The 1981 Economic Recovery Tax Act (1) changed the concepts of "useful life" and the "percentage of investment" in the application of the investment tax credits, and (2) made the "at risk" rules applicable to the "regular" investment tax credit and the energy investment tax credit. if the qualifying the property purchased by the taxpayer has a useful life of 3 years, the taxpayer is entitled to a credit on 60 percent of the cost of the property. If the useful life is 5 years or more, then the credit may be calculated on 100 percent of the cost of the property. The "at risk" rules for the regular investment tax credit and the rules for the energy investment tax credit vary somewhat. In addition, the energy credit will be recaptured if the property is disposed of, ceases to be energy property, or ceases to be "at risk."

^{1/} Pub. L. No. 95-618, 92 Stat. 3174.

^{2/} I.R.C. Section 613 (e)(3).

^{3/} Reg. Section 1.612-5 defines intangible drilling costs as any cost incurred which in itself has no salvage value and which is "incident to and necessary for the drilling of wells and the preparation of wells for the production of geothermal steam or hot water." Such expenditures expressly include labor, fuel, repairs, hauling, and supplies that are used "(1) in the drilling, shooting and cleaning of wells, (2) in such clearing of ground, road making, surveying, and geological works as are necessary in preparation for the drilling of wells, and

(3) in the construction of such derricks, tanks, pipelines, and other physical structures as are necessary for the drillin of wells and the preparation of wells for the production of geothermal steam or hot water."

4/ A taxpayer may make one kind of election for his geothermal deposits and a different one for his oil and gas wells. For example, he could decide to expense intangibles for both geothermal and oil and gas properties or he could capitalize oil and gas and expense geothermal intangibles.

5/ Reg. Section 1.612-5, supra note 3, states that intangibles, if capitalized, are to be separated and recovered as depreciation or depletion. Intangibles not represented by physical (clearing property ground, draining, road making, surveying geological work, excavating, grading, and the drilling, shooting, and cleaning of wells) are to be recovered through depletion. But intangible expenditures represented by properties (wages, fuel, repairs, hauling, supplies, etc.) are to be recovered through depreciation.

6/ A taxpayer must make a clear election either to expense or to capitalize. If he does not, the IRS will hold that he elected to capitalize intangibles. It is best that if a taxpayer desires to expense intangibles, he include with his income tax return an express statement of electin to expense in accordance with the option.

7/ Reg. Section 1.612-5(d).

8/ But this second election need not be exercised until the first year in which a dry hole is drilled.

9/ The owner of the operating rights in a property who has the responsibility to develop the property is granted the option of expensing intangibles. But each taxpayer, regardless of his relationship to another taxpayer, is entitled to a separate election. Thus each partner in a partnership is entitled to a separate election. Trusts as separate taxpayers are entitled to an election regardless of the kind of election made by the beneficiaries.

10/ A depletion allowance is available only to the owner of an economic interest in that property. An owner of an economic interest can be an owner of mineral interests, royalties, working interests, overriding royalties, net profits interests or certain kinds of production payments. Note that the depletion allowance is available to holders of nonworking interests and is, therefore, available to taxpayers ineligible to expense IDCs.

11/ The excess of the depletion deduction over the adjusted basis of the property at the end of the year (determined without regard to the depletion deduction for the year) is what would be preference income.

Bibliography

Internal Revenue Code Sections 57,263, 465, 611, 612, 613, 1254 and accompanying Regulations.

Energy Tax Act of 1978.

Windfall Profit Tax Act of 1980.

Economic Recovery Tax Act of 1981.