relatively large water content of the rock, but in addition a very vast quantity of rock was crushed. This could be useful in mining and for the enhancement of the oil flow in large low-specific-yield formations.

In the peaceful use of nuclear explosives the fusion reaction is likely to play a prominent role for two reasons. One is that the fusion fuel is exceedingly cheap.

The other reason is that fusion reactions give rise to lesser radioactive contaminations. In fact, a careful planning of the fusion explosion can reduce the activity to a point where its effects are quite small compared to the effects from an equivalent fission reaction. This is particularly important in the earth-moving jobs designed to build harbors, canals, change the distribution of water, or lay bare mineral deposits.

It will be noticed that both the cheapness of the fuel and the reduction of radioactive contamination are the same factors which also play an important role in our future expectations concerning controlled fusion reactions.

There is no difficulty of principle in the release of large amounts of fusion energy underground; in the conversion of this energy into high pressure steam and in the use of this steam for the production of electricity. It is, however, important to find a cheap way of confining the explosion in order that the economical exploitation of explosive fusion energy for the production of electricity may become possible. It is not unreasonable to expect that explosive fusion energy can be harnessed for the production of electricity before the same feat can be accomplished in the controlled fusion process.

Even though the first application of thermonuclear power may be by using controlled explosions — and this would be a very great achievement indeed — in the long run the inherent advantages of controlled fusion in a steady-state system will probably dominate our planning for the far future.

In any case, I am convinced that the extraordinary and abundant power of fusion energy can be used in peaceful pursuits for the benefit of mankind. When this will be accomplished, it may well turn out to be one of the most important advances of our age.

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