escalate to 54 per cent, if net production from Sohio's Prudhoe Bay fields reaches 600,000 b.d. by Jan. 1, 1978. For BP the merger was in part a means of gaining access to Alaskan oil.

Sohio is entitled to all oil production from its leases in the eastern portion of Prudhoe Bay up to 600,000 b.d., which will turn around Sohio's position as a crude oil-poor company. In 1975 Sohio produced 49,601 b.d., compared with its refinery needs of 364,436 b.d.

In 1976 Sohio estimated that its share of the total costs of developing the Prudhoe Bay field, building the TAP (of which it owns 33.34 per cent), providing tankers to carry Alaskan oil to U.S. ports, and constructing a pipeline to bring Alaskan oil to the Mideast will be approximately $5.5 billion. Various aspects of this ambitious plan are now threatened by Naderite legislation and other obstacles. A substantial part of the enormous investment is expected to come from external sources. Sohio's gross operating revenue in 1975 was $2.5 billion.

British Petroleum has undertaken a similarly ambitious program of developing new sources of crude in the North Sea. BP discovered the first commercial gas field and oil field under the North Sea in 1965 and 1970 respectively. BP has a 97 per cent interest in the Forties oil field, 110 miles off the coast of Scotland, which is being developed to produce 400,000 b.d. by mid-1977.

In 1975 the main source of BP's total 3,440 million b.d. production — down 1 million b.d. from 1974 — was Iran (1,700 million b.d.). Its shart of Kuwaiti production at 560, 000 was half of what it was in 1974. The sharp decline in Kuwaiti production was ordered by pro-U.S. "conservationists" in the Kuwaiti Parliament. Also hurting BP was the 1975 decision by the Kuwaiti government took over third party sales — production not used by BP and Gulf. Previously BP and Gulf had shared all Kuwaiti production.

Gulf: For Gulf the nationalization of its concessions in Kuwait and Venezuela have resulted in a redeployment of its capital and exploration efforts to the U.S. As a result of enormous investment in old wells (secondary and tertiary recovery methods) and acquisition of new oil and gas acreage on and offshore, Gulf had arrested the decline of its domestic production by late 1976 — while overall domestic production continued to decline.

Presently Gulf is the fifth largest domestic producer of crude oil and natural gas, with some 68 per cent of its income generated from domestic activities in 1975. Hence, Gulf's fierce opposition to the entitlements system, under which Gulf, with substantial access to price controlled domestic crude oil, has to subsidize Exxon, Texaco, and Mobil's imports of OPEC crude.

Gulf is presently operating in Angola again, under the same terms as when it suspended its operations during the civil war in December 1975. Gulf had wanted to stay in Angola during the civil war and go on paying royalties to the official government — the pro-Soviet MPLA, but was temporarily pressured into leaving by the U.S. State Department.

Gulf, in partnership with Royal Dutch Shell, has actively pursued development of nuclear power. Gulf's 100 million pound Mt. Taylor uranium deposit is presently being developed into the largest and deepest uranium mine in the U.S.

Other Companies in brief: Phillips Petroleum, one of first successful North Sea pioneers, now all but dominates the Norwegian North Sea. Wood, MacKensie, the Edinburg oil consultant, estimates that in 1977 Phillips' North Sea operations will bring the company $2.20 a share of 33 per cent of total earnings...

Also active in the North Sea are Getty-Skelly, Amerada Hess, and Occidental. According to Wood, MacKensie, Amerada Hess and Occidental will derive 20 per cent and more than 50 per cent respectively of their earnings from the North Sea in 1977.

Who Runs The 'Big Sisters'?

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Universities: Harvard, Princeton, Northwestern, University of Texas, University of California, Columbia, California Institute of Technology

Program for the Immediate Relief of the Natural Gas Crisis

James Schlesinger, now acting in his capacity as "Energy Czar" in the Carter Administration, has proposed emergency legislation to deal with the present critical natural gas shortage. This legislation will provide no significant relief for this shortage, and, in fact, is de signed to serve specific political ends — simply put, Schlesinger's proposals continue his self-admitted policy of lying when politically expedient (see Rand corporation report, No. P-3464, "Systems Analysis and the Political Process," June, 1967.) His bill calls for broad emergency Executive powers, which are designed to accomplish no more than forced conservation and redistribution of dwindling supplies, in a political context which amounts to militarization of energy production and distribution. Indeed, as Schlesinger himself has been forced to admit, the legislation is being proposed so that decree-powers can be placed in the hands of the Trilateral commission Administration; the campaign for war being proposed by the Trilateral commission is unthinkable without such domestic power. The critical question of increased gas production is not even being addressed.

It is *only* within the context of an intermediate-range nine to twelve month crash program of energy development that a competent solution and drilling, expanded importation arrangements (which involves both contracts and capital investment), and the initiation of a longer term energy research and development in nuclear (fission and fusion) energy production. The necessary premise for the right set of short-term emergency measures is therefore the extension of low-interest investment credit specifically geared to the realization of such a medium term program. Deregulation is no answer and contains no guarantee of increased production.

Emergency Measures

Once the incompetent premise of long-term fossil fuel conservation has been abandoned and an intermediate-range policy for necessary production increases has been adopted, the formulation of short-term crisis measures is relatively straightforward. At this point, we cannot hope to provide the quantity of gas necessary to make up for the whole three trillion cubic feet (TCF) originally expected shortfall of gas this winter. However, that is not necessary. The emergency measures are themselves being justified by the current *additional* shortfall which is approximately .7 TCF (for the six months of winter, assuming continued severe weather conditions.) This shortage can be dealt with in the following manner:

1. Full exploitation of all gas reserves now in storage.
2. Speed up of production from existing wells.
3. Import of marginally significant amounts of natural gas and liquified natural gas from Canada and Algeria.

Table One contains a summary of the possible gas available from these sources:

TABLE ONE

SOURCE	AMOUNT OF GAS AVAILABLE IN NEXT 60 DAYS
1. Exploitation of gas in storage: 20 per cent of 2.3 TCF base storage	.4 TCF
2. Maximum rate of pumping from present wells: 5 per cent of current production	.2 TCF
3. Importation:	
Canada	.1 TCF
Algeria	.1 TCF
TOTAL NATURAL GAS	.8 TCF

(Trillion Cubic Feet)

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1. Key to solution of the current crisis is the immediate, full exploitation of all existing stored gas reserves. Supplies in storage at the beginning of this year (from excess summer production) totaled more than 3.4 TCF. Of this, 1.1 TCF is working storage which is projected to be used over the duration of the winter. This leaves 2.3 TCF, which is called base storage. This gas provides a reserve which is used to keep pressure in the storage facilities, to push other (working) gas through the pipelines, etc. It is possible, with only small risk to these storage facilities, to draw about 20 per cent of this gas out of storage. Estimates of minimum necessary gas which must be kept in base storage are difficult to provide, but, none *exceed* 2.0 TCF. Thus, we can provide a substantial