1 July 1977, Volume 197, Number 4298 **SCIENCE**

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

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Coal: The New Swing Fuel?

For some time now, imported oil has been the country's "swing fuel": it supplies the extra unit of energy demanded. The Carter Energy Plan's goal of holding imports at 7—and possibly 6—million barrels per day would end this. With the decline in domestic oil and gas production and long lead times for nuclear capacity additions, the swing role would fall to coal. Achievement of the 1985 coal target thus becomes crucial to the Plan's success.

While different Administration documents contain or imply different tonnage figures, a target of 1250 million tons of coal mentioned in recent testimony before the Joint Economic Committee by Mr. Schlesinger seems closest to the Plan's arithmetic and thus a good starting point. However, the odds on reaching it in 1985 are long.

To begin with, the stipulated tonnage will include a greatly increased portion of western coal. Should these plans become reality (a low probability, as time deals unkindly with such expressions of intentions), the 1985 share from the Rocky Mountain and Northern Plains States would constitute no less than one-third of national output. Since the heat value of western coal ranges 20 to 25 percent below that of eastern coal, the average heat content of coal would decline from its present 23.5 to 22 million Btu per ton or less. By way of compensation, the import goal of 7 million barrels per day would have to rise by some 1.5 million barrels per day, or the coal target rise to over 1.3 billion tons.

The Energy Plan makes no mention of this factor. Further, the program advocates that *all* new coal-burning facilities use "best available technology"—that is, sulfur-reducing scrubbers. This would deprive western coal, which has a low sulfur content, of a crucial competitive advantage over eastern coal. The problem is sharpened by the fact that coal use by facilities other than utilities is envisaged to nearly triple and account for 38 percent of all coal use in 1985, but a higher cost for western coal would deter its use, add to the economic and logistic obstacles that expanded industrial coal use faces in any event, and greatly slow down conversion to coal.

Yet, reaching the 1985 coal output target rests heavily on rapid, large-scale growth in the surface-mining areas of the Rocky Mountain and Northern Plains States, where few but very large mines have been planned. Expansion in Montana, for example, involves only seven mines, with a projected output of 75 million tons, equivalent to 11 percent of total production. No such mines have existed in the past, nor are they feasible east of the Mississippi. Depriving low-sulfur coal of its advantage is tantamount to writing off rapid output expansion.

Finally, there is the long well-known catalog of obstacles interposed between plan and achievement: land use problems, water allocations, community perturbations, manpower problems, transportation inadequacies, federal leasing policies, states' prerogatives, Indian land issues. These are the problems least likely to be rapidly resolved by the workings of the marketplace. Yet the Plan's silence on policies designed to resolve them indicates that in this of all areas the Administration may intend to rely primarily on the market to call forth the targeted output. If so, the outlook is for a gaping hole in the 1985 energy balance, equivalent to perhaps 3 million barrels of oil per day.

All in all, the new swing fuel has a tough climb ahead, and so far the government's bag of tricks seems to contain none for coal. Coal expansion in 1976 may have been primarily "demand-limited," but at the levels contemplated for 1985, creating demand cannot be relied on to sweep away the obstacles to expansion on the Energy Plan's timetable. Far more drastic demand reduction, relaxation of the import goal, a stretching of the time horizon, or a combination of all three may be needed to correct for what right now seems a substantial overestimate of coal's contribution to meeting the projected energy demand.—HANS H. LANDSBERG, *Resources for the Future, 1755 Massachusetts Avenue, NW, Washington, D.C. 20036*