

February 13, 1986

CUTTING THE DEFICIT BY SELLING FEDERAL POWER MARKETING ADMINISTRATIONS

INTRODUCTION

Among the most farsighted items in President Reagan's FY 1987 budget is the proposal to sell the Power Marketing Administrations (PMAs). These federally owned installations generate and sell electric power in 26 states. The sale of the five PMAs could earn the U.S. Treasury over \$62 billion--a significant down payment toward eliminating the federal deficit by 1991, the goal of the Gramm-Rudman legislation. If the Tennessee Valley Authority were sold as well, the figure could exceed \$100 billion--even after all outstanding debts from revenue bonds were paid.

In addition to the revenue this privatization would generate, the consumers served by the PMAs stand to reap significant long-term benefits from the greater efficiency and accountability that would result from placing these facilities in private hands. A number of problems, however, stand in the way of the sale. For one thing, setting a value on the assets is no easy task. The Administration's budget seriously underestimates the potential sale revenue by basing its valuation on the original cost rather than the current cost of constructing comparable facilities. For another, the sale strategy must ensure that nonelectricity-related responsibilities of the PMAs continue to be fulfilled. PMA consumers and employees, moreover, must be assured that they will not be adversely affected by privatization. And the mechanics of the sale need to be carefully designed.

To solve these problems, the Reagan Administration need not reinvent the wheel. Instead it can draw on the experience of Britain's privatization program. The U.S. should sell each PMA through a stock offering, with special arrangements for employee and customer purchasers. By giving PMA employees and customers the incentive to purchase stock, a strong coalition would emerge to support the sale. Support soon would come also from the millions of

consumers who found themselves better served by the newly privatized corporations than they were by the federal PMAs.

WHY THE FEDERAL GOVERNMENT GENERATES ELECTRICITY

The federal government just about stumbled into the business of generating electricity. The 1902 Reclamation Act had authorized the Department of the Interior to build irrigation projects in the western states. Congress soon recognized that the dams built for irrigation projects also could generate power. As a result, Congress in 1906 authorized the Department of the Interior to market the power produced by federal dams. In addition, the 1906 law also established two key principles that were followed in future water power projects. First, municipal governments were to be given a preference in purchasing federal power. And second, the revenues from the sale of the power were to be used to repay the construction costs of the dams and other facilities. Although the 1906 law established a federal role in electricity generation, this still was considered secondary to the more basic concern of providing water to help irrigate the west. During World War I, federal interest in power generation increased because of the need to produce munitions. Still, the federal government's reclamation activities made only a minor contribution to the nation's electricity production during the first third of the century.

Even by 1933, the federal share of U.S. electric power production was just 0.5 percent of the total. But first with the New Deal and its emphasis on job creation and then with America's entry into World War II, federal power production--especially hydroelectric power--increased dramatically. In 1932, Franklin Roosevelt's New Deal proposed the creation of the Tennessee Valley Authority (TVA) to operate the dam and munitions facilities built at Muscle Shoals, Alabama, for the War Department under a 1916 law and to act as a regional planning and development agency. Established in 1933, TVA was granted broad authority for flood control and regional development. It was given the right to build and operate dams, electric transmission lines, and power plants anywhere along the 650-mile Tennessee River. Two years later, a similar entity was proposed for the area encompassing the Pacific Northwest's Columbia River Valley. After some modification, this resulted in 1937 in the creation of the first true power marketing administration: the Bonneville Power Administration.

The BPA was authorized to build transmission lines, market power, and propose rates, but the U.S. Army Corps of Engineers and the Bureau of Reclamation were to build and operate the dams that generated the electricity. This model subsequently was used for all other PMAs. During World War II, both BPA and TVA grew rapidly, and a third electricity generating entity, the Southwestern Power Administration,

was created in 1943. By 1945, the federal government owned 13 percent of the nation's total power generating capacity and 31 percent of its hydroelectric capacity.

In 1949, Congress approved a Tennessee Valley Authority request to build a coal-fired electric plant in Johnsonville, Tennessee, justifying construction as part of TVA's "public utility responsibility." The following year, Congress authorized the creation of a third PMA, the Southeastern Power Marketing Administration. A fourth was added for Alaska in 1967, and a fifth in 1977--the Western Area Power Administration--which assumed all power marketing functions of the Bureau of Reclamation. Throughout the 1950s, TVA continued to expand its non-hydroelectric generating capacity, making it one of the nation's largest utilities. This expansion was aided by a 1959 law authorizing TVA to issue revenue bonds, effectively freeing its construction program from the constraints of the congressional budget process. In 1974, the Bonneville Power Administration in the upper northwest received a similar authorization.

By 1984, the five Power Marketing Administrations and the Tennessee Valley Authority accounted for 9.5 percent of the nation's electrical capacity with some 174 plants in operation. Their electricity flowed through 49,300 miles of federally owned transmission lines and required 39,000 employees to maintain and operate the system. Only the Tennessee Valley Authority and Alaska Power Authority actually operate their own power plants. The other four PMAs merely market power produced by federal dams.

The wholesale price of federal power is about one-third cheaper than that available from private sources. But this is an average figure, which is misleading. Customers of Bonneville Power, for instance, pay only about 30 percent of the national average for their electricity, while power purchased from TVA costs about 20 percent more than the national average.

What customers of federal power pay for electricity, however, is not an accurate reflection of its cost. In the case of Bonneville Power, for example, the cheap power its customers enjoy is made possible by the fact that it has failed to meet its responsibility for repaying the federal government on time for the construction and operating costs of the dams and facilities it operates. Although established in 1937, BPA has repaid only 8 percent of the taxpayers' investment. Moreover, even the small payments that have been made have not kept pace with new taxpayer investments to maintain and upgrade BPA's power generation and transmission system. In 1985, for instance, BPA revenues provided for a \$226 million payment on the taxpayer's capital investment in its facilities, but some \$394 million in new taxpayer outlays were required to upgrade and maintain the BPA system. Therefore, while PMA customers often are getting a bargain, they are doing so because of multi-billion dollar subsidies financed at taxpayer expense.

Proposals to privatize the PMAs and get the federal government out of the electric power business would not reverse a deeply rooted congressional policy. At no point did Congress ever intend to create a vast federally controlled electric utility. Congress's primary concerns have been irrigation projects for the west, munitions production during the First World War, job creation during the Great Depression, or flood control along the Mississippi River. Privatization, therefore, would allow the power facilities to be shifted to where they have belonged from the start and where they can be managed best--in the private sector. Achieving this requires a fair and equitable divestiture, which gives the taxpayer a reasonable return on the investment made on his behalf when Washington constructed the PMAs. To do so requires answers to two critical questions: How can the fair market value of the salable assets be determined, and what can actually be sold?

ESTABLISHING THE VALUE AND NATURE OF ASSETS

Splitting PMA Functions

The fact that the five Power Marketing Administrations and the Tennessee Valley Authority are outgrowths of federal programs established for purposes other than the generation of electric power adds to the complexity of privatizing these assets. It means, for example, that the federal government should retain control of some of the assets currently operated by the PMAs and TVA for the purposes of irrigation or flood control, such as dams, even if it sells the right to market the power the dams generate. There is ample precedent for such splitting of functions. Example: under the Bonneville Project Act of 1937, the U.S. Army Corps of Engineers was assigned responsibility for building and operating dams, while the Bonneville Power Administration was charged with building and operating electric power transmission lines and with marketing the power produced by the dams. Potential private buyers, of course, will be interested in the power produced, not necessarily the facility actually producing the power.

Avoided Cost

The key to establishing the value of the salable assets is assigning a value to the right to power. There is a precedent for such calculations in recent federal and state regulations governing the sale to private utilities of power produced through alternative energy sources. These regulations hinge on the principle of "avoided cost." Under this principle, the value of power purchased from an outside source is determined by estimating how much it would have cost the purchaser to produce that power using a conventional electric generation plant. For example, if it cost a utility 5 cents per

kilowatt hour to produce electricity with its large coal or nuclear-fired steam plants, then it would pay 5 cents per kwh for power purchased from an alternative energy source. This per-unit cost stems in part from the construction cost of the alternative source. Thus the value of an existing generating facility can be estimated in terms of the construction cost per kwh of providing the power with a new facility. The rationale for this calculation is simple: by purchasing the power from the outside source, the utility avoided expending the funds necessary to build such a new generation facility--hence the term "avoided cost."

Tangible Assets

Another problem in pricing the assets of the PMAs and TVA is calculating the value of their tangible facilities, such as steam and nuclear-fired electricity generating plants, that would be part of the sale. Within the federal government, such assets traditionally have been assigned values based on their "historic costs"--that is, their original cost. Although such a system might suffice for internal federal bookkeeping, historic cost valuations fail to take into account appreciation or depreciation since the construction of the facilities. More important, historic costs ignore the changed regulatory environment of the past decade, which has caused enormous increases in construction costs. Thus historic costs fail to recognize that the price tag of replacing an existing generating plant may be many times its original cost.

The President's FY 1987 budget estimates that selling the PMAs would cut the deficit by \$12.7 billion over the next five years. But this is based on historic costs accounting. Thus it seriously underestimates the potential revenue from the sale--the price that buyers are willing to pay is influenced by the current cost of building generating facilities, not the original cost of the equipment up for sale.

In place of historic costs, the value of the tangible assets of the PMAs and TVA could be calculated on the avoided cost basis. Even a relatively low avoided cost figure--say \$1,500 to \$2,000 per installed kilowatt of capacity--would more than repay the historic costs of the PMAs and TVA, retire existing debt, and cover other financial considerations affecting the sale.

HOW TO STRUCTURE THE SALE

Important lessons for structuring the sale of the PMAs and TVA can be learned from the British experience in privatization. One lesson is that reasonable concerns regarding the sale should be addressed. Among these:

1) Will reasonable rates for the current customers of the PMAs and TVA be maintained?

2) Will the assets be purchased by large privately held utilities, leading to an anti-competitive concentration in the utility market?

3) Will the taxpayer receive a fair return on his investment?

Since Margaret Thatcher became British Prime Minister in 1979, her Conservative government has sold approximately \$20 billion in assets to the private sector through the public sale of stock, including a government-owned oil company (Britoil) and the entire telephone system (British Telecom). These sales gave rise to the same concerns as those raised by the sale of PMAs. But by properly structuring the sale of the assets, the Thatcher government overcame public fears and won enthusiastic support for privatization. Central to the Thatcher plan were three tactics:

1) A corporation was formed out of each government asset, and stock in the corporation was sold on the stock market. Preference in stock purchases was given to current customers and the employees of the government-run concerns.

2) The government retained stock in its own hands for a period of time, so that the taxpayer benefited from any increase in the stock price after privatization.

3) A portion of the stock was made available to small investors at the original offering price, so that they too could benefit directly from any increase in value that came with privatization. They were also given incentives to hold onto their stock. This prevented the stock from becoming concentrated in few hands.

This strategy should be considered for selling the federal PMAs. A corporation could be created for each of the five PMAs and for the TVA. Each would hold title to the assets to be sold. The stock would be priced on an asset valuation based on \$2,000 per installed kilowatt of capacity or its equivalent. This would mean, for example, that the Bonneville Power Administration (BPA) would be assigned a value of approximately \$38.8 billion. A 51 percent controlling interest would be offered to the public on a per share price based on the valuation. Borrowing from Thatcher's successful approach, current BPA customers would be given the option of purchasing stock in proportion to their use of federal power.

A minimum of 10 percent of the stock would be reserved for small investors, such as current residential or small business customers served by BPA or BPA's employees. These buyers also would receive an option to purchase one additional share of stock for each three they had purchased in the original offering, provided that they held on to

their initial stock at least three years. This would give small stockholders an opportunity to have a significant voice in the new corporation's management. After the initial stock offering, the federal government would be able to sell its remaining 49 percent share whenever it felt the market was most attractive.

The advantage of the government retaining a portion of the stock was particularly clear in Britain, where the value of British Telecom shares jumped five-fold in just one year. As a result, the government will be able to realize a far greater revenue flow from the sale of the retained shares than it could have if all of the shares had been offered at once. In this way, the Thatcher government was able to let the taxpayer benefit from the appreciation in value that came with private management of the telephone system.

The revenues generated by a sale of the PMAs and TVA could be earmarked to reduce the federal deficit. Part of the revenues, however, could be used to repay to the Treasury the original cost of the facilities and to repay any outstanding debts and revenue bonds associated with the PMAs. In addition, a portion of the sale proceeds of the Bonneville Power Administration should be used to repay the indebtedness incurred by the default of the Washington Public Power Supply System (WPPS).

This approach is preferable to that of simply transferring all the sale proceeds to the Treasury. For example, by making good on the debts arising from the WPPS bond default (in which BPA played a major role by encouraging WPPS to overexpand and invest in unneeded nuclear capacity), the sale would end the WPPS litigation, and even though BPA is not solely responsible, a major legal confrontation could be avoided. Potential buyers of BPA stock thus would not be discouraged by the threat of legal action. Moreover, investors who purchased WPPS financial instruments in good faith, presuming that the government's word was its bond, would not suffer unfairly because government planners made bad decisions. Among the PMAs, only Bonneville is faced with such a liability.

Repayment of the revenue bonds issued by TVA and BPA would be wise for two reasons. First, these bonds are quasi-governmental financial instruments, while the new corporations created by the stock sales will be private entities. They thus should not enjoy the special tax preferences associated with a government-backed security. In addition, eliminating these debts would put the new corporations on sound financial footing, making the sale more attractive.

Repaying the historic cost of building the facilities may be purely symbolic, since the funds for this purpose would simply flow back into the federal Treasury. It is important nonetheless, since it would allow for a clean break with the past, emphasizing the private sector nature of the new corporations. It also would enable the

federal government to clear from its books all expenditures related to the sold assets.

TAXPAYER AND PMA CUSTOMER BENEFITS FROM THE SALE

Taxpayers and PMA customers would benefit enormously from privatization of the PMAs and TVA. Even after eliminating the remaining indebtedness and the WPPS obligations on defaulted bonds, more than \$35 billion would flow into the federal Treasury on the initial offering of 51 percent of the stock in the new companies, assuming the sale were based on \$2,000 per installed kilowatt--a reasonable figure. This is much more than the White House estimates, because of their inappropriate accounting approach. Total revenue to the federal Treasury, after debts were retired, would top \$100 billion when all the stock was sold, even assuming no increase in stock value from the initial offering price.

A \$35 billion stock offering would be much larger than any previous public offering. The current record is held by the British Telecom's \$5 billion privatization in 1984. The British stock exchange, which draws on an economy only one-tenth the size of the U.S. economy, took the British Telecom offering in stride. One reason for this was that payment for each stock certificate was phased over two years to ease the impact. The U.S. stock market, by adopting a similar strategy, ought to be able to absorb easily a \$35 billion stock offering.

A second benefit for the taxpayer would be that the profits of the new corporations would be subject to taxation, because the firms would be private rather than public entities. This would yield a continuous flow of new revenues to the federal government. Because each of the newly created utilities, moreover, would be debt free, they would be in a far better financial position than most private electric power companies. Thus, they likely would be able to finance any needed expansion through internally generated funds and keep customers rates low. In any event, since the customers would probably be a decisive force among the new firms' stockholders, the choice between low electric rates or high dividends would, in large part, be in the hands of electricity consumers.

CONCLUSION

Selling the PMAs, as the White House proposes, would significantly reduce the federal deficit and take the federal government out of the energy generation business--where it does not belong. Since the record shows that it was never the federal government's intent to become deeply involved in generating

electricity, there can be no legitimate objection to a withdrawal of the federal government from this inappropriate arena. And placing the ownership of these electric utilities into the hands of their customers and other private investors will make them far more accountable to the people they serve. If Congress is serious about cutting the federal deficit, it will consider seriously the sale of the PMAs and TVA to the private sector.

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