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Power Marketing Administrations: Proposals for Market-Based Rates

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-name redacted-
Analyst in Energy and Environmental Policy
Resources, Science, and Industry Division

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Summary

The federal government operates four agencies created to market power generated at federally constructed multi-purpose dams. The four power marketing administrations — Bonneville Power Administration (BPA), Southeastern Power Administration (SEPA), Southwestern Power Administration (SWPA), and Western Area Power Administration (WAPA) — sell power to publicly or cooperatively owned utilities at rates based on their costs. These costs are specified in legislation and include the government's cost of operating hydropower facilities, a portion of the construction costs, and interest payments on unpaid debt. With costs so defined, interest rates generally below the government's current cost of borrowing, and low hydropower production costs, PMAs sell power below prevailing wholesale market rates, an activity designed to encourage regional economic development. Proposals to restrict or end this federal activity have been made over the last 20 years, and the President's FY2006 budget proposal raises these issues for the 109th Congress. This budget states that the "Administration will propose legislation to bring PMA electricity rates closer to the average market rates throughout the country."

Increasing PMA prices to market rates would generate both costs and benefits. Supporters argue that it would correct price signals, encourage conservation, and increase returns to the Treasury. However, this proposal would increase costs for consumers of PMA power and could have further ramifications for jobs and tax revenues. The Pacific Northwest, which receives 40% of its power from BPA, would likely see the largest economic effects.

This report provides background information on PMAs' budgets and rates, and briefly discusses the President's proposal. It will be updated as events warrant.

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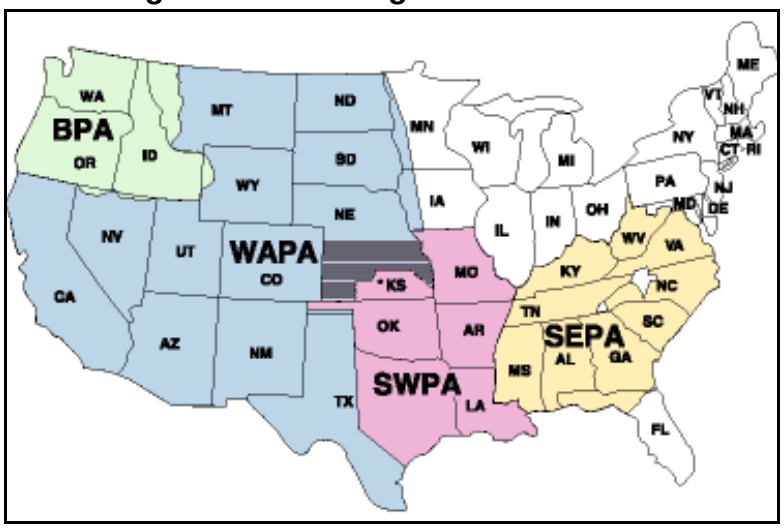
Background

The four federal power marketing administrations (PMAs) — Bonneville Power Administration (BPA), Southeastern Power Administration (SEPA), Southwestern Power Administration (SWPA), and Western Area Power Administration (WAPA) — are separate and distinct entities within the Department of Energy (DOE).[1] The PMAs' mission is to market power generated at federal multi-purpose water projects "at the lowest possible rates to consumers consistent with sound business principles."[2] Their primary customers are publicly or cooperatively owned utilities in 33 states. (See **Figure 1**.)

Figure 1. PMA Regional Boundaries



Source: Western Area Power Administration, available Feb. 28, 2005, at [http://www.wapa.gov/geninfo/mappma.htm].

On average, PMA power is among the lowest-priced electricity available in the country. In FY2004, the PMAs' average revenue per kilowatt-hour ranged from 2

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[1]The PMAs were transferred from the Department of the Interior to the Department of Energy through the Department of Energy Organization Act of 1977, P.L.95-91 (1977); this act also established WAPA. The other PMAs were established between 1937 and 1950.

[2]Flood Control Act of 1944, P.L. 78-534, § 5 (Dec. 22, 1944).

to 2.9 cents per kilowatt hour (¢/kWh).[3] In comparison, in 2003 (the most recent year for which data are available), average wholesale prices for non-federal power were 4.0 ¢/kWh[4] and retail prices[5] were 7.42 ¢/kWh. Compared with the prevailing market rate for electricity, access to federal hydropower represents a significant cost advantage. This suggests that the PMAs have been very successful in their mission to provide federal power at the lowest possible cost to customers. However, it also suggests that, all other things equal, PMA power would remain a competitive source of electricity even if rates were raised significantly.

Over the past 20 years, Congress has repeatedly debated proposals to privatize the PMAs or alter their rate structure. While most of these proposals have not become law, Congress passed legislation in 1995 to sell the Alaska Power Administration.[6] The President's FY2006 budget request indicates that the Administration will "propose legislation to bring PMA electricity rates closer to the average market rates throughout the country."[7] Prior to discussing the pros and cons of such a proposal, the following two sections provide further background on PMAs' budgets and rates.

Budgetary Context

With the exception of BPA, PMAs deposit their revenues in the U.S. Treasury and are funded through annual appropriations. On average, the PMAs deposit substantially more money into the Treasury than they receive in appropriations. (See **Table 1**.) However, some of this money is appropriated to the federal dam-owning agencies for annual and long-term expenditures attributable to their power production activities.[8] The remaining deposits represent debt payments and interest owed to the Treasury.

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[3]Excluding BPA, the rates were calculated by dividing each PMA's total revenue by the total electricity available for marketing. *U.S. Department of Energy, FY2005 Congressional Budget Request, Power Marketing Administrations* (Feb. 2004). During the first half of FY2004, BPA had an average priority firm rate of 2.9 ¢/kWh. BPA facts available online at [http://www.bpa.gov/corporate/about_BPA/Facts/page5.cfm] on Mar. 4, 2005.

[4]U.S. Dept. of Energy, *Annual Report of Electric Utilities*, Form EIA-861 (2003).

[5]U.S. Dept. of Energy, Energy Information Administration, *Electric Power Annual 2003*, DOE/EIA-0348 (Dec. 2004), p. 44.

[6]Alaska Power Administration Asset Sale and Termination Act, P.L. 104-58 (Nov. 28, 1995).

[7]*U.S. Department of Energy, FY2006 Budget Summary* (Feb. 2005), p. 116. Hereafter referred to as *FY2006 DOE Budget Summary*.

[8]The Administration included a reclassification of PMA receipts as offsetting collections as part of its FY2006 request. That is, the Corps expected $181 million in operation and maintenance (O&M) activities at selected projects shall be reimbursed from PMA electricity receipts, as a credit to the Corps O&M account, rather than these receipts being placed in the Treasury and appropriations used to cover the Corps expenses, as has been the historic practice. If offsetting collections go into effect, the difference between new budget authority and Treasury deposits will decrease.

Table 1. PMA Appropriations and Receipts, FY2005

PMA	New Budget Authority	Treasury Deposits
SEPA	$5,158,000	$174,493,000
SWPA	$29,117,000	$100,700,000
WAPA	$171,715,000	$273,404,000

Source: *Department of Energy FY2006 Congressional Budget Request, Power Marketing Administrations* (Feb. 2005). "Treasury Deposits" are the total proprietary receipts, and equal gross revenues minus offsetting collections.

The fourth PMA, BPA, has been self-financed since enactment of the Federal Columbia River Transmission System Act in 1974.[9] While BPA does not receive appropriations, it does have permanent Treasury borrowing authority of $4.45 billion. At the end of FY2004, BPA had used $2.9 billion of this authority.

Cost-Based Rates

Treasury receipts are based primarily on customers' rate payments. It has been the policy of the federal government to market PMA power at cost-based rates. The PMAs are generally required to set these rates sufficiently high to recover specified annual costs and repay, with interest (generally below the government's cost of borrowing), all reimbursable federal investments (as specified by authorizing legislation). For example, these rates must cover operation and maintenance (O&M) costs, interest costs, and the cost of power purchased from other utilities for resale. The rates must also be sufficient to repay debt, including appropriations used to construct the PMAs' generation and transmission facilities, and to recover other agencies' power-related expenses — including O&M costs, interest costs, and debt repayment. BPA's rates must also cover non-federal bonds for Energy Northwest[10] nuclear plants, and measures to protect fish and wildlife.[11] In addition, Congress has required that power rates cover some non-power costs; for example, BPA and WAPA customers pay certain irrigation expenses.

While PMAs are generally required to set rates that recover their costs, a 1998 report by the General Accounting Office (GAO, now the Government Accountability Office) found "un-recovered power-related costs related to (1) Civil Service Retirement System (CSRS) pensions and post retirement health benefits, (2) life insurance benefits, (3) workers compensation benefits for Corps employees at

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[9]Federal Columbia River System Transmission Act, P.L. 93-454 (1974).

[10]Energy Northwest is a joint operating agency composed of 19 member utilities in the Northwest. BPA contracted for generating capability from Energy Northwest nuclear power plants. This contract included provisions for BPA to pay debt service whether or not the projects were completed.

[11]General Accounting Office, *Power Marketing Administrations: Their Rate Setting Practices Compared With Those of Nonfederal Utilities*, GAO/AIMD-00-114 (Mar. 2000), p. 9.

projects marketed by Southeastern, and (4) interest on some of the federal appropriations used to construct certain projects."[12] While GAO did not estimate the value of all under-recovered costs, it did estimate that unrecovered costs associated with CSRS benefits for PMA employees were $192 million (1996 dollars) for FY1992 through FY1996.[13] However, the PMAs are now recovering this cost and are working toward recovering other costs identified by the GAO.

The President's Budget Request

The President's FY2006 budget request indicates that the Administration will "propose legislation to bring PMA electricity rates closer to the average market rates throughout the country."[14] While legislation to implement this change has not been introduced in the 109th Congress, the Administration suggests that such legislation could require PMAs to increase their rates 20% per year until they reach market rates. Additional information on the proposal has not yet been provided. However, multiple bills to establish market-based rates — including H.R.1486 and S.161 in the 106th Congress — have been introduced in previous years.

Benefits of Market Rates

Proponents of the rate increase argue that it could correct market signals and maximize returns on the federal investment. These factors are described below.

Market Signals. As described above, PMAs' cost-based rates are much lower than market averages. On a cost basis, the PMAs have some cost advantages compared to other utilities. One of these advantages is that they market low-cost hydropower (no fuel cost). Operating expenses for hydropower average 0.75 ¢/kWh compared to 1.87 ¢/kWh for nuclear, 2.26 ¢/kWh for fossil steam, and 4.89 ¢/kWh for gas turbine plants.[15] In addition, the PMAs are generally not required to pay taxes or to generate a return for investors.[16] These factors keep PMA rates well below market rates. Proponents of the increase argue that the low cost of PMA power distorts the signals consumers receive regarding the true value of power, and that increasing the price of PMA power would reduce or eliminate this distortion and prompt consumers to decrease their electricity consumption.

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[12]General Accounting Office, *Power Marketing Administrations: Repayment of Power Costs Needs Closer Monitoring*, GAO/AIMD-98-164 (June 1998), p. 2.

[13]Ibid.

[14]*FY2006, DOE Budget Summary*, p. 116.

[15]U.S. Dept. of Energy, Energy Information Administration, *Electric Power Annual 2003* (Dec. 2004), p. 49.

[16]GAO/AIMD-00-114, p. 6.

Return on Federal Investment. The President's budget states that increasing PMAs' rates would generate $3.2 billion[17] in Treasury receipts over the next 5 years and 12.4 billion over 10 years. While there is general agreement that Treasury receipts would increase, there is likely to be disagreement regarding the size of this increase. For a number of years, the Congressional Budget Office's (CBO's) Budget Options Report has included its figure for Treasury receipts based on full implementation of market rates. In its FY2005 report, this figure was $1.9 billion over 10 years.[18] Therefore, it is likely that CBO, in its reassessment of the President's budget, will forecast significantly lower receipts than did the President's request. Aside from the rate of implementation (in the first year for CBO and 20% per year for the President's budget), officials at CBO indicate there are other differences leading to the variation in estimates. First, the President's figure assumes all of the revenue from a BPA rate increase will become Treasury receipts; CBO assumed that BPA will choose to spend that money through its revolving fund. Second, the President's figures assume a larger gap between cost-based and market-based rates than does the CBO figure.[19]

Drawbacks of Market-Based Rates

Opponents of proposals to increase PMAs' rates argue that providing low-cost power, to encourage regional economic development, remains an appropriate role for the federal government. Furthermore, they argue that the proposal would hurt individual electricity consumers and regional economies.

Increase in Consumer Prices. In general, increases in rates paid by publicly and cooperatively owned utilities are passed on to their customers. The size of consumer rate increases would be based in part on how legislation defines market rates and how much of a utility's power comes from the PMAs. With the exception of the Pacific Northwest, PMA power accounts for less than 5% of generation in other states served by PMAs. In 1999, a GAO assessment of the costs of fully implementing market-based rates for three of the four PMAs found that most end-use consumers would see relatively small rate increases (around 0.5 ¢/kWh).[20] As a percentage of energy prices, however, this is a real increase, and it could harm energy-intensive industries. BPA provides 40% of all power in the Northwest; thus the rate increases consumers would face in that region could be much more substantial.[21] Currently, studies of this option are limited by P.L. 101-101, which

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[17]Executive Office of the President, *Budget of the United States FY2006, Analytical Perspectives* (GPO, 2006), p. 239.

[18]Congressional Budget Office, *Budget Options for FY2005*, p. 84.

[19]According to CBO, it appears that the President's budget assumes a market price based on the spot market for electricity. CBO assumed a market rate for long-term contracts. Phone conversation with Lisa Driscoll, CBO, on Mar. 1, 2005.

[20]According to the GAO, most bills would increase by less than $1, but some would rise by as much as $25 per month. General Accounting Office, *Federal Power: PMA Rate Impacts, by Service Area*, GAO/RCED-99-55 (1999).

[21]The Northwest Power and Conservation Council estimates that a typical household's (continued...)

prohibits the use of federal appropriations to study the effects of increasing PMA prices to market rates.[22]

Regional Economic Effects. As with individual consumer effects, the regional implications of price increases are currently unknown and will depend on a number of factors, including a region's reliance on PMA power. By that standard, the Pacific Northwest would almost certainly be the hardest hit. While a detailed analysis has not been conducted, the Northwest Power and Conservation Council estimates that full implementation of the rate increase would increase annual electricity costs by $1.4 billion in the Northwest. Such an increase would directly hurt electric-intensive industries, such as aluminum production, and could also raise regional unemployment rates.

Discussion

While the Administration has not yet proposed legislation to implement this rate increase, proponents and opponents are already voicing their arguments. Federal encouragement of regional development was (and still is, in the view of many) an appropriate role for the federal government, particularly in rural areas where private incentives are lacking. For those whose economy and way of life are tied to this system, this market-pricing alternative is particularly distressing. Even so, in a time of tight federal budgets and energy supplies, certain taxpayer organizations, environmental groups, and private energy suppliers argue that the federal government should maximize returns from its investments in electricity supplies and should encourage electricity conservation by increasing rates.

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[21](...continued)
electricity bill would increase $24 per month once market rates are fully implemented. Northwest Power and Conservation Council, *Staff Discussion of the Effects of the Administration's Budget Proposals Requiring the Bonneville Power Administration to Sell at Market Rates* (2005).

[22]Energy and Water Development Appropriations Act of 1990, P.L. 101-101, §506.