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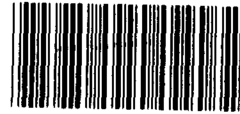

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Lessons Learned About Evaluation of Federal Asset Sale Proposals

Statement for the Record of
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Division

Before the
Subcommittee on Water, Power and Offshore
Energy Resources
House Committee on Interior and Insular Affairs

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Mr. Chairman and Members of the Subcommittee:

We are pleased to submit a statement for the record on lessons learned from past GAO analyses of proposals to sell federal government physical assets. In recent years, concerns about the federal budget deficit and interest in privatization have drawn attention to this practice. GAO has written numerous reports and testified on several occasions on specific asset sale proposals. Sale proposals we analyzed for the Congress include those for the Naval Petroleum Reserve at Elk Hills, California, the Great Plains coal gasification project in North Dakota, the Alaska Power Administration, and Washington National and Washington Dulles International Airports. The attachments to this statement summarize our work on these proposed sales and present a bibliography of GAO reports and testimonies related to them.

As you know, we have not been requested to carry out, nor have we initiated, any evaluation of the proposal contained in H.R. 1611 to transfer ownership of specific water supply facilities of the Solano Reclamation Project that is the principal focus of this hearing. Accordingly, in developing our statement, we have emphasized what we believe to be, in general, the most important lessons from our previous work rather than the implications of these lessons for an evaluation of the Solano proposal. Although each proposal to sell government assets raises distinct issues for evaluation, our past work clearly points to several important considerations in evaluating any asset sale.

Some of the considerations we believe most important based on our work are as follows:

-- The federal government should generally receive fair market value when it sells, exchanges, or leases assets.

-- The government should account for the timing of payments it will receive and the tax implications of a proposed sale in calculating fiscal implications.

-- The government should compare the government's expected value from selling an asset with its expected value from retaining it.

-- The government should perform sensitivity analysis because of inherent uncertainty in estimating future cash flows that serve as the basis for asset valuation.

The remainder of my statement will expand on these points.

GAO SUPPORTS FAIR MARKET VALUE CONCEPT

In general, GAO believes that the government should receive fair market value when it sells, exchanges, or leases assets under government control. Receiving fair market value is important both to protect the government's fiscal interests and to promote economic efficiency. This position is consistent with OMB Circular A-25 issued in September, 1959, as well as with other guidance.

Two commonly used methods for determining fair market value are competitive bidding and inference from sales of comparable assets. The government should generally encourage the maximum competition possible, through means such as widespread advertising of upcoming sales. Certain measures, however, make it less likely that the government will receive fair market values--for example, sale provisions that restrict the number of eligible bidders, like those included in the proposal to sell the Alaska Power Administration. Such measures should be adopted only if there are very strong overriding considerations. When the asset being sold has few, if any, comparable sales on which a price can be based and

only one bidder is likely, it is particularly difficult to ensure that the government receives fair market value.

In line with this view, we recommended in our work on the Naval Petroleum Reserve that the Department of Energy make available to all potential bidders the maximum amount of data it possessed on that oil field; the goal was to minimize any advantages that Chevron may have over other potential bidders because of its partial ownership of that reserve.

In estimating the fair market value of an asset being considered for sale, the government should take into account that the prices the purchaser can charge for the services the asset produces may be regulated. For example, states typically regulate electric power rates; the fair market value of a federally owned power project is therefore limited by the extent to which states would allow a purchaser to raise its rates following purchase. As another example, the proposal for selling the Washington area airports that we reviewed contained a provision that would restrict revenues generated by the airport--landing fees, concession fees, etc.--to a level just sufficient to cover current and anticipated capital and operating costs. Furthermore, a similar restriction applies to all public airports receiving federal grants. These earning restrictions, as well as requirements that the airports continue to be used as airports, would be expected to limit the airports' fair market values.

Another issue of potential importance is that unresolved claims, such as ownership issues, have the potential for litigation and can reduce the market value of an asset being sold. Issues of this type have arisen in connection with the Naval Petroleum Reserve. Resolving such issues before offering an asset for sale may be necessary to mitigate the anxiety potential bidders may have that might influence the amount they bid.

CONSIDERATIONS IN EVALUATING BIDS

It is a complex matter to evaluate the total fiscal implications for the federal government of bids received to purchase assets. In particular, the government must take care in accounting for differences in the timing of payments it will receive as well as for the sale's tax implications.

In some asset sales, the bids received may specify that the federal government will receive only a portion of the purchase price right away.[1] In the Great Plains sale, for example, a substantial portion of the winning bid submitted by Basin Electric Power Cooperative consisted of revenue the government would receive over a period of years, with the exact amount based on revenues that Basin would receive from operating the plant. A valuable tool for evaluating bids of this type is present value analysis, which converts cash outlays and receipts that occur at different times into comparable form--their present value equivalent. Therefore, to calculate the present value of the revenue the government could expect to receive from selling Great Plains to Basin, it was necessary to discount the expected future stream of revenue by an appropriate interest, or discount, rate. Selecting an appropriate interest rate for discounting in making present value calculations has been the subject of much debate. Historically, GAO uses the average yield on outstanding marketable Treasury obligations that have remaining maturities comparable to the period of analysis in calculating present values. We also support testing the sensitivity of our calculations to our choice of discount rate by using other rates as well, as I will discuss below.

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[1]This type of payment method can often increase the expected revenue the government will receive; the ability to shift some of their risk to the government may cause purchasers to raise the expected values of their bids.

In our opinion, it is appropriate to view the fiscal effects of asset sales, as well as other government financial transactions, from the government's perspective as a whole rather than from the perspective of the agency selling the asset. As a result, tax implications are very important in determining the total fiscal effect of a sale.

One tax issue that sometimes arises concerns corporate income taxes that would be due on income a corporation might earn from an asset it purchases from the federal government. Including these taxes in the government's estimated revenues from selling an asset may overstate the government's expected financial gain, at least in some cases, and may unnecessarily favor selling to a tax-paying rather than local government entity. If the corporation had not made the purchase but instead had invested the purchase funds elsewhere, it might have earned a similar rate of return and incurred a similar tax liability. Therefore, the taxes due on income earned by the purchased asset may not represent an equivalent net increase in government tax revenues.

A second issue concerns tax credits that, unless waived, might accrue to the purchaser of a government asset and that might be used by a purchaser to reduce its expected tax liability. Tax credits were a major issue in the Great Plains sale. The availability of tax credits will raise purchasers' bids by an amount roughly equivalent to the tax credits purchasers expect to use. As a result, in calculating the total fiscal effect of a sale on the government, the value of an offer should be reduced by the present value of the tax credits the prospective buyer is expected to use. However, if a prospective buyer waives tax credits that may be available to it, as happened when Basin Electric Power Cooperative purchased the Great Plains project, no upward adjustment to the buyer's offer is necessary. The waiver does not increase the flow of funds to the government beyond what the government will receive in direct payment from the purchaser

because, in this case, the credits will not be used whether or not the asset is sold.

SALE VALUE SHOULD BE COMPARED WITH RETENTION VALUE

A complete evaluation of a proposal to sell a federal asset should include a comparison between the government's expected value from selling that asset and the government's expected value from retaining it. Without knowing the retention value it is not possible to know whether the government would be made financially better or worse off by selling the asset.

In calculating the retention value, the government should use assumptions that would apply under continued government ownership. These assumptions may relate to production levels, expected future prices, and discount rates, among other things. They may be different from assumptions that private sector bidders might make in preparing their bids. The government should be sure to also consider salvage value in calculating retention value.

Although calculating retention values is very important, we do not mean that the government should sell an asset only when its sale value exceeds its retention value. However, before the Congress approves an asset sale it should be aware of the financial consequences.

SENSITIVITY ANALYSIS SHOULD BE PERFORMED

Sensitivity analysis is a valuable technique for addressing uncertainty in estimating the future cash flows that serve as the basis for asset valuation. Uncertainty is inherent in estimating these flows. For many government assets that might be considered for sale, the uncertainty of future cash flows creates uncertainty in both the asset's estimated retention value and its likely value to a purchaser. For example, uncertainty about the value of the

Elk Hills Naval Petroleum Reserve arises from uncertainty about the reserve's size, the level and timing of future oil production, and the future price path of oil. Additional uncertainty arises in calculating present values because of different judgments about the appropriate discount rate for such calculations.

By using sensitivity analysis, analysts can evaluate the extent to which their estimates might be altered by using different assumptions. To apply sensitivity analysis in calculating retention value, for example, we would first calculate an estimated value based on our best estimate of the future values of economic variables--such as the price of oil--and then use what we believe to be the most appropriate discount rate. We would then test the sensitivity of our retention estimate to our assumed values by using alternative assumptions about future values of economic variables (including the discount rate) to make additional retention value estimates. This analysis would show which assumptions have the greatest influence on our retention value estimate.

In comparing an asset's retention and bid values, we would conduct similar sensitivity analysis of the bid's value to the government. This analysis would allow comparison of the retention and sale values under several sets of plausible assumptions about the values of key economic variables. If the difference in retention and bid values is similar under these different assumptions, then we can be more confident that we correctly understand the fiscal implications of the proposed sale.

NAVAL PETROLEUM RESERVE

BACKGROUND

The Naval Petroleum Reserve at Elk Hills, California (NPR-1), is the eighth largest domestic producing oil field. The field is jointly owned by the federal government (about 78 percent) and Chevron U.S.A., Inc. (about 22 percent), and the two owners participate in the operation of NPR-1 through a unit agreement that specifies how production and expenses are shared.

In fiscal years 1986 and 1987, the administration proposed to sell NPR-1 and Naval Petroleum Reserve No. 3 (NPR-3), located in Natrona County, Wyoming, to help reduce the federal deficit among other reasons. A third proposal in fiscal year 1988 cited as a purpose of the sale the need to eliminate nonessential federal activities by turning them over to the private sector. The administration's latest sale proposal was made in February 1989 and restates the administration's 1988 policy.

In August 1988, we issued a report to the Chairman, Subcommittee on Energy and Power, House Committee on Energy and Commerce,[1] that examined Department of Energy's (DOE) report to the Congress on the divestiture of NPR-1, the larger of the two reserves.[2] We concluded that DOE's divestiture report did not provide enough information to justify selling NPR-1.

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[1]Naval Petroleum Reserve No. 1: Examination of DOE's Report on Divestiture (GAO/RCED-88-151, Aug. 25, 1988). We also issued two earlier reports on the sale of NPR-1, Naval Petroleum Reserve-1: Government and Industry Comments on Selling the Reserve (GAO/RCED-88-43FS, Nov. 23, 1987) and Naval Petroleum Reserve No. 1: Efforts to Sell the Reserve (GAO/RCED-88-198, July 28, 1988).

[2] NPR-3 was not included in our examination because its estimated remaining reserves are small.

ISSUES ADDRESSED IN GAO'S REPORT

The issues discussed in our August 1988 report on the sale of NPR-1 were the methodology and data used to estimate NPR-1's value, public policy concerns, and DOE's marketing plan.

Methodology and Data

Our report stated that DOE had not provided adequate information on the government's ownership interest in NPR-1 because of the methodology it followed. DOE estimated NPR-1's value from the industry's perspective rather than from the government's. DOE should have determined the value of NPR-1 to the government under continued ownership using its own production schedules, price forecasts, operating costs, and discount rate and then fully tested the sensitivity of that value to differing industry assumptions about these factors. In our opinion, this approach would have provided decisionmakers with a better basis for assessing the desirability of selling NPR-1 because it would have offered an independent assessment of its value to the government as a benchmark for comparative purposes.

The report also discussed factors that affect the value of the estimated proceeds from the sale of NPR-1, including production scheduling, tax issues, oil prices, and rates of return (discount rates). Among other things our report found that:

-- DOE carried out its analyses even though, according to the divestiture report, DOE did not have up-to-date reserve reports, such as estimated original oil-in-place, remaining recoverable reserves, and the timing and volume of future production at NPR-1--all key variables in valuing the reserve and computing the sales proceeds.

-- DOE's divestiture analysis included an increase in federal tax revenues resulting from NPR-1's sale--implying that these taxes would be lost if NPR-1 were not sold. But DOE's analysis did not recognize the possibility that at least some of the expected tax increases may accrue to the government even without a sale. Our report noted that, if the private sector had the necessary funds to buy NPR-1 but did not, it was likely that these funds would be invested elsewhere with a commensurate rate of return and tax liability from the net profits of the alternative investment.

-- DOE's estimate of the possible sales proceeds was computed by using only one of the numerous oil price forecasts. In doing so, DOE's report did not adequately deal with the major uncertainties of oil prices, nor did it sufficiently explain why only one set of oil prices was used to estimate cash proceeds from a sale.

-- DOE believed that the appropriate discount rate for computing the value of NPR-1 if it was retained by the government should be the same as a private buyer's nominal discount rate. Under the assumption that the government will hold and continue to produce NPR-1, DOE's report should have shown what the net present value of NPR-1 would be using the government's borrowing rate as the discount rate. When such a discount rate is used, the value of NPR-1 to the government would be higher.

Public Policy Issues

Our report discussed both energy security and the socioeconomic implications of selling NPR-1 that were discussed in

DOE's divestiture report. Although the DOE report appropriately recognized the issues of interest to the Congress, the report did not always completely describe these issues. For example, DOE's divestiture report discounted Department of Defense needs for access to an oil reserve from a national security perspective, although DOE subsequently recognized that omission and participated in a multi-agency agreement for a Defense Petroleum Inventory that would substitute for NPR-1.

In addressing the socioeconomic implications of a sale, we questioned whether the objectives of protecting current NPR-1 customers could be achieved under DOE's marketing plan when it was possible that a single large company could successfully buy most, if not all, of NPR-1. We also noted that DOE's report did not discuss whether small and independent refiners could be expected to have sufficient funds to purchase ownership shares in NPR-1.

DOE's Marketing Plan

Our report addressed DOE's plan for marketing NPR-1. Among other things, we stated that

-- it was questionable whether the proposed marketing plan would promote sufficient competition and, as a result, maximize sales revenues.

-- Chevron's long-term association with NPR-1 and the fact that it had its own proprietary estimates and projections of the key valuation variables could give it an advantage that might be difficult for other potential bidders to overcome.

-- DOE's marketing plan did not evaluate the potential of leasing NPR-1 even though, in our view, leasing could offer

a way to protect the government's interest when there are uncertainties about future oil prices.

-- DOE's proposed approval of the sale did not appear to allow sufficient time to complete all tasks necessary to carry out the sale. While achieving a one-time budget deficit reduction may be one objective of divestiture, we stated that it should not be the driving force that dictates the sales date.

GREAT PLAINS COAL GASIFICATION PROJECT

BACKGROUND

The Great Plains coal gasification project was built by a partnership of five energy companies, at a cost of $2.1 billion, of which $1.5 billion was financed by a construction loan issued by the Federal Financing Bank and guaranteed by DOE. This project, located near Beulah, North Dakota, is the nation's only commercial-scale plant that produces pipeline quality synthetic natural gas from coal. Plant operations began in 1984, but in August 1985, the partnership terminated its participation in the project and defaulted on its DOE-guaranteed $1.5 billion loan. DOE assumed control of the project and subsequently obtained title. The plant operator continued to operate the project for DOE.

During the 3-1/4 years that the plant operated under DOE's control, it performed well, generally producing synthetic natural gas at levels above its design capacity. The gas is sold to four pipeline companies under 25-year contracts that contain pricing formulas. However, the project had high sulfur emissions. Under DOE's control, the project's revenues exceeded its expenses (excluding plant depreciation) by about $110.3 million, and the project's cash balance increased from $1.4 million to $137.8 million.

DOE's divestiture process took nearly 3 years after DOE solicited statements of interest in acquiring the plant from the public and private sectors. It involved the marketing efforts of Shearson Lehman Hutton, Inc., congressional oversight, and discussions with 17 prospective buyers. Nine companies submitted firm offers in March and April 1988. After extensive negotiations, DOE announced in August 1988 that it had selected Basin Electric Power Cooperative as the buyer because Basin had agreed to waive

production tax credits, made the highest offer, and had the strongest commitment for long-term plant operations. DOE estimated that Basin Electric's offer had a net present value of about $600 million. The sale closing took place on October 31, 1988. Because the sale terms are complex and involve revenue sharing formulas, it may be many years before the total proceeds to the government from the sale are known.

ISSUES ADDRESSED IN GAO'S REPORTS AND TESTIMONY

In April 1988, we testified before the Subcommittee on Energy and Power, House Committee on Energy and Commerce, on the results of our comparative analyses of retaining and selling the Great Plains project.[3] Following the hearing, we issued a report to the Subcommittee Chairman, which recommended that DOE, in determining a fair price for the Great Plains project, consider the financial value of the project under continued federal ownership and the effect of production tax credits on the federal budget.[4]

Our testimony and report included cash-flow analyses showing the net revenues that the project could accumulate over its remaining 22-year operating life, the present value of the net revenues, and the estimated price at which the project would have to be sold for the government to be as financially well off from selling the project as it would be from retaining ownership. We also showed the effect that federal tax provisions would have on the federal budget if the project were sold for several different hypothetical prices.

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[3] Proposed Sale of the Great Plains Coal Gasification Project (GAO/T-RCED-88-34, Apr. 13, 1988).

[4] Synthetic Fuels: Comparative Analyses of Retaining and Selling the Great Plains Project (GAO/RCED-88-172, June 10, 1988).

In making our cash-flow analyses, we used the computer model that Shearson Lehman Hutton developed for estimating the project's market value. We also used long-term economic projections developed by two recognized econometric firms to analyze the project's outlook under public and private ownership. In making our present value analyses, we used the econometric firms' projected 20-year Treasury bond interest rates for bonds issued in 1988. GAO has historically used the yield on Treasury securities for this purpose. We also tested the sensitivity of our present value calculations by using a higher discount rate.

DOE implemented our recommendation by using our comparative analyses and making additional economic analyses, including an analysis of net cash flows under continued federal ownership. DOE used these analyses in negotiations with prospective purchasers. DOE also considered the extent to which prospective purchasers would use production tax credits.

In October 1988, we issued a report on our analysis of DOE's estimate of the value of Basin Electric's offer to purchase the Great Plains project.[5] We stated that DOE's $600 million net present value estimate of the purchase offer should have been reduced by about $397 million for the following reasons.

-- DOE included production tax credits (with an estimated present value of about $300 million) that Basin Electric agreed to waive. We pointed out that if a prospective buyer waives production tax credits, the buyer would make a lower sale offer adjusted for the value of the production tax credits that would not be used, and no further adjustment would be needed in determining the present value

[5] Synthetic Fuels: Analysis of DOE's Estimate of the Sale Value of the Great Plains Project (GAO/RCED-89-36, Oct. 21, 1988).

of the offer because there would be no increase in the revenue flow to the government.

-- DOE included project cash of $82 million, which consisted of $30 million that DOE expected to be returned to the government at the time of sale and $52 million representing the present value of the project cash reserve fund that DOE expected Basin Electric to return to the government within 10 years. These funds should not have been included as part of the sale value because they already belonged to DOE.

-- DOE did not reduce the value of the sale for the $15 million that DOE had agreed to contribute to the new owner for working capital to operate the project.

These exclusions would have reduced DOE's estimate of the net present value of Basin Electric's offer from $600 million to about $203 million. Using updated long-term energy price projections and discount rates, our analysis also showed that the adjusted net present value of Basin Electric's purchase offer exceeded the project's retention value.

In July 1989 we issued a report that provides an overview of DOE's ownership and divestiture of the project.[6] This report discusses the project's operations and financial performance during the 3-1/4 years that DOE owned and/or controlled the project. It also discusses the divestiture process, congressional oversight, terms and conditions of the sale agreement, the marketing firm fee, the effect that future energy prices could have on the project's financial condition, and federal monitoring responsibilities.

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[6]Synthetic Fuels: An Overview of DOE's Ownership and Divestiture of the Great Plains Project (GAO/RCED-89-153, July 14, 1989).

ALASKA POWER ADMINISTRATION

In March 1987, we sent a letter to the Secretary of the Department of Energy on the proposed sale of Alaska Power Administration (APA) assets.[7] APA is the smallest of the five federal power marketing administrations (PMA), has the fewest customers, and receives the lowest amount of revenue. APA manages and sells power from two hydroelectric projects--the Snettisham project which serves Juneau, and the Eklutna project which serves Anchorage. Two dams and generators make up the Snettisham project--Long Lake and Crater Lake--, which provides 70 percent of Juneau's power. Eklutna provides only 5 percent of the power needed by Anchorage. Together, these APA federal projects provide only 8 percent of the total amount of electrical power used by the state of Alaska.

Because the sale of these government assets may set important precedents for the divestiture the other four (and much larger) PMAs, our review focused on the agency's solicitation of bids for the projects, the methods used for pricing Alaska's federally-owned hydropower assets, and protection of ratepayer and taxpayer interests.

Our primary concern was that APA's planned approach to the divestiture appeared to emphasize the protection of current ratepayers, rather than to balance taxpayer and ratepayer interests. In the solicitation, APA planned to limit bidders to 1) electric utilities that currently purchased power from APA, 2) local municipalities, 3) the state of Alaska, or 4) a combination of these entities. APA's approach for establishing a minimum

[7] Review of Department of Energy's Efforts to Sell the Alaska Power Administration's Assets (Letter to Secretary of Energy John S. Herrington, Mar. 23, 1987).

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acceptable bid appeared to set as criteria only the minimum return to the taxpayer--an amount not less than the present value of future principal and interest payments that the Treasury would have received under continued federal ownership. The minimum acceptable bid does not consider the full potential value of APA assets to the purchaser (including continuing cash flow after the initial investment is liquidated or any residual value that the projects might retain), nor does it reflect all costs incurred by the federal government in constructing APA facilities. Our concern was that APA would receive few bids for each project, and these bids would approximate the minimum acceptable bid.

We are following up on this work and will complete a report on the actions APA has taken to complete divestiture of its assets, as requested by your Subcommittee and the Environment, Energy, and Natural Resources Subcommittee, House Committee on Government Operations. This report would coincide with APA's submission of the sales agreements which have been submitted to Congress for final approval.

NATIONAL AND DULLES AIRPORTS

BACKGROUND

Numerous commissions over 3 decades have identified ownership of Washington National and Washington Dulles International Airports as an appropriate local government responsibility. Public Law 99-591, enacted in October 1986, authorized the U.S. Department of Transportation to transfer the two airports to the Washington Metropolitan Airport Authority through a 50-year lease.[8]

The transfer price was developed as a rough estimate of the airports' combined value by the staff of the House Committee on Public Works and Transportation. Reportedly, the transfer price included, among other things, the amount of the government's investment yet to be recovered through airport revenues and the cost of the land and construction of the Dulles access road. The Authority will make its annual payments in constant 1987 dollars. The Authority also made a one-time payment to cover the unfunded pension liabilities for airport employees remaining in the Federal Retirement System.

ISSUES ADDRESSED IN GAO'S TESTIMONY

In July 1985, we testified before the Subcommittee on Governmental Efficiency and the District of Columbia, Senate Committee on Governmental Affairs, on alternative methods for valuing the two airports either separately or as a combined entity

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[8]Federal Assets: Information on Completed and Proposed Sales (GAO/RCED-88-214FS, Sept. 21, 1988).

if they were sold.[9] Our testimony, based on a limited review, covered three potential valuation objectives.

-- Obtain for the government the fair market value of the airports.

-- Recover what the airports cost the government.

-- Transfer the airports at no cost.

Our testimony discussed methods that supported each of the valuation objectives, sources for the methods that had been proposed or actually used, and observations on the pros and cons of applying the methods.

Fair Market Value Objective

Fair market value is the monetary value that the federal government could reasonably expect to receive for the airports in a sale between a willing buyer and a willing seller. Fair market value recognizes the productive nature of an airport and the potential buyer's judgment about future revenues and other benefits to be gained from ownership. It also recognizes the value to the federal government that could be gained by retaining ownership, or selling to the buyer who valued the airports the most highly.

Sellers often attempt before a sale to estimate the fair market value of an asset in order to establish a "reservation" price--a price below which they are unwilling to sell. Several traditional methods for making such estimates include

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[9]Alternative Methods for Determining a Value for National and Dulles Airports for Transfer to a Local Airport Authority ([GAO/T-RCED], July 10, 1985).

-- estimating the expected discounted future stream of earnings flowing from the airports for the remainder of their useful life,

-- analyzing market transactions involving similar airports, and

-- estimating the current replacement cost of the land and any building improvements at the airports.

Our testimony noted that establishing fair market value was complicated by restrictions on the airports, such as a proposed requirement that the airports continue to be used as airports and a requirement that earnings be just sufficient to cover current and anticipated capital and operating costs. We noted that if an open sale to the highest bidder were conducted and that bidder was a private operator, it would represent a major shift in the historical pattern of airport ownership and operation, because all major U.S. commercial airports were owned and operated by state or local governments or airport authorities.

The federal government could determine a fair market value for the airports by estimating the airports' future earnings and then calculating the present discounted value of those earnings, but the breakeven requirement on earnings produces a present discount value of zero, suggesting a zero value for the airports. Yet the airports must have more than a zero value, as evidenced by the expressed interest of potential purchasers--two governmental entities. A buyer should be willing to pay a positive price for the airports because the price the buyer pays would become part of the airports' capital costs, which can be recovered through revenues.

The present discounted value method could be modified to adjust for the effect of the earnings restriction. One method would be to estimate the increase in fees necessary to balance demand and supply and then discount the earnings from those fees to a present value. Such estimates can be difficult to make. However, one approach to making such estimates is to identify comparable airports and determine the fees charged at those airports to estimate the revenues that National and Dulles airports could generate. After subtracting each airport's costs from the estimated revenues, the estimated earnings could be discounted to form the basis of a transfer price. We noted that identifying comparable airports could be difficult.

Analyzing comparable transactions is another method of estimating market value, but we had been able to identify only two other transactions involving sales of airports comparable in size to National and Dulles, and those sales had taken place 8 and 13 years earlier. In one of the earlier airport sales, the replacement cost method was used by appraisers to establish value because the earnings restriction and lack of similar market transactions made the use of the other two traditional methods inappropriate. The President's Private Sector Survey on Cost Control (Grace Commission) used ratios and indexes to update earlier appraisal information on National and Dulles in estimating a sale price for the two airports.

Our testimony concluded that if the Congress wished to transfer the airports on a fair market value basis, two methods could be employed. Fair market value could be estimated by using either the modified discounted future earnings method or the replacement cost approach.

Cost Recovery Objective

We identified two methods to measure the cost of the airports:

-- the book value of the airports, and

-- the government's hypothetical indebtedness to itself for the airports.

"Book value" is the original purchase cost of the land, plant, and equipment of the airports less accumulated depreciation of the plant and equipment. One of the earlier airport transfers was based on book value plus an adjustment factor intended to reflect a "rate of return" to the original owner of the airport. Book value does not take into account the costs of operating a facility or the revenues it generates. "Hypothetical indebtedness" is the difference between federal appropriations from past years for capital and operating costs, and the fees and charges collected and deposited in the Treasury's General Fund; or, in other words, the federal government's investment in the facilities that has not been recovered through revenues.

We observed that some costs expended by the government on the airports had not been included in the hypothetical indebtedness. One example was the cost of land and the construction of the Dulles airport access road. The Federal Aviation Administration had excluded these costs on the basis that such costs would have been covered by federal grants if the airports had been public airports. Because we had not reviewed the appropriateness of the Administration's determinations on nonrecoverable costs, we suggested that the Congress might wish to conduct such a review if the hypothetical indebtedness method was selected the Congress might wish to conduct such a review.

Because National airport had collected revenues exceeding its recoverable costs, the hypothetical indebtedness method could result in National airport having no assigned value.

No-Cost Transfer Objective

We noted that the federal government had transferred former military airports to state and local governments at no cost. The Federal Property and Administrative Services Act of 1949 in combination with the Surplus Property Act of 1944 allows an agency to transfer any properties that it has determined are surplus to its needs and responsibilities. We expressed the view that it was not clear that National and Dulles airports could be designated surplus, so this approach might have limited applicability.

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