

Budget and Financial Management Improvements to the Nuclear Waste Fund (NWF)

**Background Report to the Blue Ribbon Commission
on America's Nuclear Future**

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EXECUTIVE SUMMARY

The paper discusses issues and options for improving the budgeting and financial management of the Nuclear Waste Fund (NWF). The issues and options would facilitate implementation of any changes in program scope and content, or any changes in organization and management structure. .

The three issues for possible administrative action include:

1. Instituting financial management enhancements to foster multi-year budgeting and appropriations; combined accrual and cash budgeting; and separate capital budgeting;
2. Applying the dual accrual/cash accounting and budgeting process for collecting the annual 1 mil (0.1 cents) per kWh annual fee, with the timing of cash collections linked to appropriations and outlays; and
3. Administratively reclassifying the NWF annual fees as budget offsetting collections, so that funds appropriated are the used/spent nuclear fuel management can be scored on a net zero basis for purposes of compliance with Congressional spending caps.

These actions can be implemented by DOE through regulatory and administrative measures, with appropriate approval by OMB and Congressional concurrence. These changes can be implemented within a matter of months – no more than 1 year. These actions would not be subject to Congressional Pay-As-You-Go (PAYGO) requirements. Administrative reclassification of NWF receipts as offsetting collections would require concurrence of the House and Senate Budget Committees and the Congressional Budget Office (CBO).

The three issues for consideration for possible legislative action include:

1. Designating the NWF in statute as a trust fund, in order to clearly restate Congressional intent and strengthen the parallel principles that NWF fees will be used for their intended purpose and that taxpayer funds will not be used to subsidize used/spent nuclear fuel management activities;
2. Legislatively restructuring the NWF as a revolving fund, so that funds can be expended for approved purposes without need for further appropriations; and
3. Establishing new oversight and accountability mechanisms to replace the annual appropriations process. These could include Congressional approval of mission plans and separate approval and oversight provisions for capital and operating budgets.

These measures are not necessarily stand alone, but rather would appropriately be considered as part of a broader legislative package consisting of new program requirements as well as

possible changes in organization and management of any restructured program. Legislative changes would be subject to Congressional PAYGO requirements, as well as Congressional Budget Act point-of-order considerations. The PAYGO cost of the possible legislative changes would depend upon the scope and schedule of the used/spent nuclear fuel management authorized in the legislation. The PAYGO cost would be based on the projected spending levels over the initial year, the first 5-years and the second 5-year period from the date of the fiscal year when the legislation is before Congress.

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1.0 INTRODUCTION

The NWF currently holds a surplus balance of over \$24 billion, increasing at a rate of about \$2 billion per year. Annual fees provide about \$0.8 billion per year; interest on the fund balance is credited at a rate of over \$1 billion annually.

1.1 PURPOSE AND OBJECTIVES

The purpose of this paper is to present a set of issues and options for improving the effectiveness of the budgeting and financial management of the NWF.

The issues and options are designed to support the following objectives:

1. provide greater *financial certainty* that the program can meet its statutory and contractual obligations;
2. increase *transparency* by providing a comprehensive budgetary presentation of fee receipts, spending and liability;
3. enhance *accountability*, by requiring business-like financial reporting and maintaining Executive Branch and Congressional oversight (albeit in different form);
4. ensure that the NWF *receipts are used for their intended purpose* and not merely a supplemental revenue-raising measure to reduce the federal budget deficit; and
5. unify the federal budgetary transactions related to used/spent fuel in the NWF, so that the *federal budget footprint of the used/spent nuclear fuel program is presented on a net basis*.

1.2 SCOPE AND ASSUMPTIONS

The scope of this paper is focused on budget process and financial management issues, and not on policy and program design. It is intended to complement and support any discussion of the nature of a restructured program for used/spent nuclear fuel management, including possible new organizational and management structures. Simply stated, this paper is agnostic with respect to:

- the scope of a future used/spent fuel management program;
- the form of organizational management;¹ and
- the level of the NWF fee and the process for modifying the fee.²

The financial management issues and options described in this paper would facilitate the success of any future program and management structure.

¹ Selecting a new organizational structure, such as a government corporation, does not automatically convey a specific set of financial management authorities – they must be specifically articulated.

² The Nuclear Waste Policy Act (NWPA) of 1982 set the fee at 1 mill per kWh. The Act requires the Secretary to assess annually the adequacy of the 1 mill fee to cover the cost of the program. DOE has adopted the Total System Life Cycle Cost method to determine fee adequacy. The NWPA also established a process whereby the Secretary could propose a change in the fee, subject to veto by either House of Congress. In *Immigration and Naturalization Service v. Chadha* (June 23, 1982), the Supreme Court ruled that legislative processes that relied upon a one-house veto of Executive Branch actions to be unconstitutional. Consequently, and change in the fee proposed by the Secretary would take effect unless disapproved by both houses of Congress.

2.0 DISCUSSION OF NWF FUNDING ISSUES

The NWF currently holds a surplus balance of over \$24 billion, increasing at a rate of about \$2 billion per year. Current budget structures and procedures preclude the effective and efficient use of these resources. These procedural budgetary constraints have significant legal and programmatic ramifications.

There has been a widespread and long-standing recognition of the need for changes in the current structure, and there have been numerous proposals to modify the current arrangements. (See Appendix A for a summary of past proposals).

2.1 ORIGINAL INTENT OF THE NWF

The Nuclear Waste Policy Act (NWPA) of 1982 (P.L. 97-425) established a special self-financing mechanism for the nation's commercial nuclear waste management program. The financing mechanism that ultimately emerged from the legislative process³ had several key characteristics:

- the principle of full cost recovery from nuclear utilities for the cost of the commercial waste management program;⁴
- the establishment of a special fund, the Nuclear Waste Fund, to hold all financial transactions for the commercial waste management program;
- a budgeting process that called for submission of a budget to the Office of Management (OMB) triennially (and not annually);
- a requirement that expenditures from the Fund be "...subject to appropriations which shall remain available until expended. Appropriations shall be subject to triennial authorization." (This provision also was specifically designated as a triennial rather than annual requirement).
- a requirement that receipts and expenditures of the Fund shall be exempt from apportionment⁵ by OMB;

³ The legislative history of the Act involved action by three separate committees in the Senate and six separate committees in the House. The final legislation represented the final product drawn from five separate predecessor bills, including S. 1662, H.R. 5016, H.R. 3809, H.R. 6598 and H.R. 7187

⁴ The Act also authorized, but did not require, DOE to manage commercial nuclear used/spent fuel and high level waste from national security programs as a single national program.

⁵ Apportionment is a form of authorization from OMB that enables federal agencies to receive warrants from the Treasury needed to support obligation and outlays of funds. Apportionment can affect the timing of the obligation of appropriated funds.

- a requirement that nuclear utilities would pay fees into the Fund, consisting of a one-time fee for spent/used fuel generated prior to enactment of the Act, plus a annual fee initially set at 1 mill (\$0.001) per kWh.
- an adjustment mechanism to enable the Secretary to adjust the fee to ensure full cost recovery, subject to one-house veto; and
- a provision to authorize the Secretary to borrow funds from the Treasury to cover any short-term shortfalls in the Fund, along with a provision to enable the Secretary to invest surplus balances in special Treasury securities which would accrue interest.

The legislative history is replete with references to the NWF as a “Trust Fund” that would provide as assured source of funding for the program, insulated from the volatility of the federal budget process. As the Senate floor manager stated, “This funding mechanism would provide an assured source of funds to carry out the programs and would eliminate not only annual budgetary perturbations in an ever more constrained Federal budget, but the too often repeated shifts of policy direction under succeeding administrations. The nuclear waste policy, programs and required financing would be statutorily fixed and quite predictable under this approach.”⁶

The Trust Fund concept had a dual purpose. It was intended to not only guarantee program performance but also to ensure that the taxpayers would not become liable for the cost of the program. During the House debate, Representative Udall, one of the co-sponsors of H.R. 7167, stated that a principal purpose of the funding scheme was to ensure “...that the Federal budget will not be burdened by repository program expenditures.”⁷

The funding provisions represented a compromise. One early version of the legislation would have established the Fund off-budget and exempt from appropriations.⁸ The final version of the bill attempted to achieve a balance – the Fund was placed on-budget and subject to appropriations, but the language related to triennial presentation of the budget to OMB and triennial authorization appeared intended to encourage multi-year or lump sum appropriations.

⁶ Statement of Senator James McClure (R-ID), Chair of the Senate Committee on Energy and Natural Resources and Senate floor manager of S. 1662, April 28, 1982

⁷ Congressional Record, House, September 30, 1982.

⁸ S. 2189, a predecessor bill that authorized a program for centralized interim storage reported from the Senate Committee on Energy and Natural Resources on January 3, 1980, provided for a fund that would be both exempt from appropriations and off-budget (i.e. exempt from the Congressional Budget Act and other government-wide budget procedural requirements).

2.2 FAILURE OF THE NWF TO FULFILL THE ORIGINAL INTENT

The actual experience with implementation of the NWF has been virtually opposite of the original Congressional intent.

The program was implemented through annual appropriations rather than the triennial budgets called for in the Act. Annual funding levels have been volatile and unpredictable, rather than assured and predictable (the figure in Appendix B documents this experience);

Utility fee revenues have been allowed to accumulate in the Treasury, while increasing amounts of taxpayer general funds are being used to pay the cost of penalties for the government's partial breach of contracts. The Treasury is currently holding over \$24 billion of fees and accrued interest, increasing at a rate of \$2 billion annually. At the same time, taxpayers have spent about \$1 billion on litigation settlements, with future taxpayer liability of \$15 billion if the government begins used/spent nuclear fuel acceptance by 2020, increasing by at least \$0.5 billion for each additional year of delay.

Rather than insulating the NWF from policy and political volatility, the annual appropriations process has become the principal vehicle for affecting changes in policy. The two principal Congressional actions affecting the proposed repository at Yucca Mountain have been made in budget and appropriations bills: (1) the initial decision to limit characterization activities to only Yucca Mountain as the candidate site for the first repository was included in the 1987 Budget Reconciliation Act (Subtitle A of Title V); and (2) the decision to terminate DOE activities in defense of the license application to the NRC for the Yucca Mountain Repository was codified in the FY 2011 Continuing Resolution.

The divergence between original design and actual performance is to a large extent (but not entirely) due to changes in the federal budget process. The progression of new federal budget requirements, beginning with the Gramm-Rudman-Hollings Act, is summarized in Appendix C. The evolution of budgetary controls over the NWF has led to a situation where the current budget structure for the NWF is inadequate to meeting the government's legal obligations.

2.3 LACK OF FUNDING ASSURANCE TO MEET USED/SPENT NUCLEAR FUEL OBLIGATIONS

The standard contracts between DOE and nuclear utilities authorized by the NWPA created a binding legal obligation on the federal government that is conditioned only upon the payment of fees by nuclear utilities. The government's legal obligation is not matched with a commensurate degree of funding commitment.

The binding nature of the government's contractual obligation to dispose nuclear waste has been upheld by the federal courts.⁹ The recent court cases are backed up by a long history of case law regarding contractual obligations of the federal government, even in times of severe economic and budget crises.¹⁰

The fees have no other reason for existence other than to pay for the execution of the contracts.¹¹ In a 2005 statement before a House of Representatives hearing, then Under Secretary Robert Card stated that: "The fact that this fee is a quid pro quo payment in advance for a contractually required service to be performed by the federal government – a legal obligation affirmed by the federal courts – sets it apart from most other federal user charges and taxes and justifies special consideration in the budget process."¹²

⁹ The issue of the U.S Government's contractual obligations has been the subject of litigation for over 15 years. On July 23, 1996, the U.S. Court of Appeals ruled that the NWPA and the standard contracts created an unconditional obligation on the U.S Government, reciprocal to the utilities' obligation to pay, to start disposing of used/spent nuclear fuel no later than January 31, 1998. DOE and Justice appealed the decision. In November 1998, the U.S. Supreme Court refused to grant certiorari, allowing the Appeals Court decision to stand. Current litigation is focused on the determination of the amount of damages that the U.S. Government is liable for.

¹⁰ For example, in *Lynch v. United States*, 292 U.S. 571, 580 (1934), the Supreme Court concluded: "No doubt there was in March, 1933, great need of economy. In the administration of all government business economy had become urgent because of lessened revenues and the heavy obligations to be issued in the hope of relieving widespread distress. Congress was free to reduce gratuities deemed excessive. But Congress was without power to reduce expenditures by abrogating contractual obligations of the United States. To abrogate contracts, in the attempt to lessen government expenditure, would not be the practice of economy, but an act of repudiation."

¹¹ In the absence of a statutory requirement for a used/spent nuclear fuel management program, there would be no justification for the government to impose a used/spent nuclear fuel fee on nuclear utilities. In other federal programs with dedicated revenue sources, such as the Land and Water Conservation Fund, the imposition of fees (i.e. oil and gas royalties) by the government is justified for other policy reasons, with no contractual linkage to whether the receipts are used for land and water conservation activities. In this circumstance, the government would continue to collect receipts even if the spending purpose no longer existed. Furthermore, expenditure of receipts earmarked to the Land and Water Conservation Fund is a discretionary activity, and thus it is appropriate for Congress to make such expenditures subject to annual appropriations..

¹² Statement of Under Secretary of Energy Robert H. Card, before the Sub-committee on Energy and Air Quality, Committee on Energy and Commerce, March 25, 2004.

3.0 ISSUES AND OPTIONS FOR POSSIBLE ADMINISTRATIVE ACTION

3.1 ISSUE #1: BUSINESS-LIKE BUDGETING AND FINANCIAL MANAGEMENT IMPROVEMENTS

Management of the used/spent fuel from commercial reactors is a business-like activity. Because of the very long time frames in permanent disposal of used/spent fuel, Congress decided in 1982 that the federal government would take management responsibility for used/spent fuel, but require the generators of the used/spent fuel to pay the full cost for this service. Thus, management of used/spent fuel should be viewed as a business-like rather than inherently government function, such as national defense or highway maintenance.

The NWPA authorized a new program office within DOE, the Office of Civilian Radioactive Waste Management (OCRWM), with responsibility for program implementation. OCRWM adopted a number of business-like practices intended to promote accountability and achieve transparency, including:

- publication of an annual financial statement, including a statement of assets and liabilities (the report was published as part of the annual program report, and the financial information was also incorporated into the Department of Energy annual financial statement);¹
- an annual financial audit by an independent auditing firm, KPMG;
- development and submission to Congress of a Mission Plan in 1985 (with amendments in 1987 and 1988) with a long-term program scope and schedule;
- as required by the 1982 Act, an annual assessment of adequacy of the used/spent nuclear fuel annual fees;¹³
- development and submission to OMB of a capital asset plan in 2002, following Congressional approval of the Yucca Mountain site for a permanent waste repository.

Although these practices were beneficial, they were not adequate to support the achievement of the statutory program requirements. There were three areas where past practices fell short.

¹³ The fee adequacy analysis is based on a periodic re-estimate of the total system life cycle cost (TSLCC) of the program. The DOE OCRWM developed and published in the Federal Register in 1987 a methodology for the total system life cycle cost estimate. The most recent TSLCC estimate, published in July 2008, totaled \$96.2 billion (in 2007 dollars), of which \$13.5 billion was incurred from 1983-2006 and the remaining \$82.6 billion to be incurred from 2007-2133.

3.1.1 Multi-year Budgets and appropriations

Although required by the Act, the program did not submit budgets triennially, and did not seek appropriations consistent with triennial authorization. Instead, the program followed the practice of annual budget requests and annual appropriations as practiced for all other DOE discretionary programs.

OMB budget guidance for funding capital assets requires that “Agencies should request budget authority sufficient to complete a useful segment of a project (or the entire project, if it is not divisible into useful segments). Full funding must be appropriated before any obligations for the useful segment (or project) may be incurred.”¹⁴ Despite the OMB guidance, DOE budgets for the NWF on an annual, incremental basis, similar to the budgetary treatment applied to DOE research and development and other programs. Neither OMB nor the appropriations committees has directed DOE to change this practice.

Annual incremental budgeting for major, multi-year capital expenditures increases the risk of cost escalation and schedule delays. This phenomenon has been cited a major issue in GAO reviews of DOE major capital acquisitions.¹⁵

3.1.2 Accrual Budgeting and Balance Sheet Presentation

The disposition of used/spent nuclear fuel is a business-type enterprise. Business accounting practices are required to present fairly the financial position of a business enterprise to current and potential equity holders, creditors, third-party analysts and other interested parties. To do so, a business enterprise presents three sets of financial perspectives:

- a *balance sheet* statement of assets and liabilities, which provides a picture of the current *stock or status* of the enterprise;
- an *income statement* of revenues and expenses, which measures annual business *flow* affecting change in the status of the enterprise; and
- a *statement of cash flows* representing sources and uses of cash on an annual basis.

¹⁴ U.S. Office of Management and Budget, Circular No. A-11, “Preparation of Budget Estimates,” Section 300.5, Planning, Budgeting, Acquisition, and Management of Capital Assets, and the “Capital Programming Guide,” Supplement to Circular No. A-11, Part 7, Section 1.7.2.2 Principles of Financing.

¹⁵ For example, see U.S. Governmental Accountability Office, “Further Actions Are Needed to Strengthen Contract Management for Major Projects,” GAO-05-123, March 2005; “Department of Energy: Opportunity to Improve Management of Major System Acquisitions,” RCED-97-17, November 1996; and “Department of Energy: Major Construction Projects Need A Consistent Approach for Assessing Technology Readiness,” GAO-07-336, March 2007.

DOE annual reports present information on all three perspectives, but all budget decision-making is based on the cash flow perspective, since the federal budget is predominantly based on cash accounting concepts. Focusing solely on cash flow budgeting is not optimal with respect to sound long-term business objectives.

Management decision-making based on accrual accounting provides a better and more comprehensive perspective of multi-year issues relative to the used/spent nuclear fuel enterprise. For example, an income statement provides additional insight as to the timing of revenue and cost recognition, which are critically important to used/spent nuclear fuel management issues which are truly of a very long-term nature. A balance sheet perspective allows for a full comparison of the program assets and liabilities, including recognition of changes in longer-term contingent liabilities resulting from current action or inaction. An example of a possible balance sheet presentation of the used/spent nuclear fuel management program is outlined in Appendix D.

The current cash-based budgeting for the used/spent nuclear fuel management program does not reflect these perspectives. For example, under current budget presentations:

- the NWF budget presentation in the President's budget shows a fund balance of \$24 billion with no association with the magnitude of the government's liabilities for used/spent nuclear fuel disposition;
- the federal budget records annual cash receipts of nearly \$800 million per year, compared to zero appropriations levels in FY 2011 and proposed for FY 2012, contributing a net "profit" that is used to offset the federal budget deficit and reduce borrowing requirements from the public needed to service other government spending programs, giving rise to concerns that the fees are not being used for their intended purpose; and
- the annual federal budget records only the current year cash cost of the government's liabilities stemming from the partial breach of contract; further, the cash payments are not transparent, but rather are subsumed within the total outlays from the Claims and Judgments Fund.

There is increasing recognition of the benefits of applying business-type accrual accounting to government programs. Currently accrual accounting concepts are used in the budgeting for federal credit programs and federal retirement programs. A white paper prepared for the Committee for a Responsible Federal Budget noted that accrual accounting could be further expanded to other federal government activities including "...environmental cleanup costs, and

other contingent liabilities.”¹⁶ Disposition of used/spent nuclear fuel obviously fits this categorization.

3.1.3 Separation of Capital and Operating Budgets

Past budgets for the used/spent nuclear fuel program did not distinguish between capital investment and operating expenditures. The lack of transparency regarding capital investment requirements makes it more difficult for decision-makers to understand the budgetary trade-offs, especially the longer-term cost and schedule implications of decisions on current year budgets.

The practice of separate capital and operating budgets is virtually universal in the private sector and in state governments.¹⁷ OMB has sought to encourage improved decision-making on capital investments through guidelines on the development of capital assets plans, but as described above, current DOE programs, including the used/spent nuclear fuel management program, continue to be budgeted incrementally and annually.

At the government-wide level, the current federal budget framework of discretionary spending caps does not distinguish between capital and annual operating costs. Thus, capital investments with longer-term benefits must compete with operating budgets that have an immediate impact within the same budgetary targets.

The two principal DOE predecessor organizations – the Atomic Energy Commission and the Energy Research and Development Administration – sought to address the capital budgeting issue by maintaining separate appropriation accounts for capital equipment and construction projects. The separation of accounts provided transparency of capital investment requirements to policy-makers. Shortly after the establishment of the Department of Energy in 1978, the practice of separate appropriations accounts was abolished, and since FY 1979, DOE has combined annual operating expenses, capital equipment expenditures and major construction projects within the same programmatic appropriations accounts. While this change simplified budgeting and financial management, it significantly reduced transparency and increased the challenges to making efficient and effective capital budgeting decisions. Budgeting and appropriations for the combined accounts became increasingly subject to “level of effort” budgeting. Following enactment of the NWPA in 1982, the establishment of the budget account for the NWF followed the practice then in effect for other DOE appropriations accounts.

¹⁶ “Options to Reform the Budget Process,” Barry Anderson, Board Member, Committee for a Responsible Budget, November 2007.

¹⁷ For example, a 1999 study by the National Association of State Budget Officers found the practice of capital budgeting almost universal.

3.1.4 Issues for Possible BRC Consideration

The BRC may wish to consider options to recommend administrative improvements to the current budget and financial management practices for the used/spent nuclear fuel program to encourage:

- multi-year budgeting and appropriations, consistent with the statutory language of the NWPA;
- combined accrual/cash budgeting, with a clearer presentation of the implications of current decisions on longer-term asset and liabilities for the program (a specific case of applying accrual and cash budgeting concepts to the collection of the annual 1 mill fee is discussed in more detail in the next section of this paper); and
- separate capital and operating budgets, in order to better illustrate the nature of the longer-term implications of current budget decisions. Separate capital and operating budgets also could facilitate more tailored and effective oversight of the program (specific measures are discussed in Section 4.3 of this paper).

3.2 ISSUE #2: COMBINED ACCRUAL AND CASH ACCOUNTING OF NWF ANNUAL FEES; MODIFICATION OF NWF FEE COLLECTIONS

The current 1 mill fee is increasingly viewed by many stakeholders as a governmental tax for revenue-raising purposes. This has led to new litigation to suspend fee payments entirely or to escrow the fee until such time as the federal government makes demonstrable progress in the performance of its obligations under the NWPA.

An alternative approach to more effectively manage the annual fee resources may be to administratively modify current budgeting and cash collection practices. Budgeting and managing the current 1 mill annual fees on both an accrual and cash basis could enable more effective resource utilization over the longer term, supporting the objectives stated in Section 1.2 of this paper.

3.2.1 Current NWF Fee Management Practices

The NWPA established the requirement that the cost of the used/spent nuclear fuel management program be fully recovered through fees. The Act set the initial fee at a level of 1 mill per kWh of nuclear electricity generated, commensurate with the rate of nuclear fuel burn-up and waste generation. Currently the fees are paid by nuclear utilities to the Treasury on a quarterly basis.

The Act required that the Secretary annually review and determine the adequacy of the fee, and established a process for the Secretary to modify the fee if necessary to ensure full cost recovery. The current DOE approach to determining fee adequacy is to estimate the total system life cycle cost (TSLCC) of the program, and then determine if the revenues from the current 1 mill fee, plus interest on unspent balances in the NWF, will generate sufficient cumulative receipts over time to cover program costs. The NWPA then requires the Secretary to adjust the fee if needed to ensure full recovery of the costs of the program. While the NWPA provides for a one-house veto of any fee change, a subsequent court decision ruled that the one-house veto provision is unconstitutional and that fee changes proposed by the Secretary will automatically go into effect (unless Congress passes legislation to prevent it).¹⁸

¹⁸ The DOE 2010 Fee determination letter stated: “The Eleventh Circuit in *Alabama Power* struck the “unless’ clause from the fee adjustment statutory provision as violative of the Supreme Court decision in *INS v. Chadha*, 462 U.S. 919 (1983). See *Alabama Power Co. v U.S. Department of Energy*, 307 F. 3d 1300 (2002). As a result, the statute that remains reads “the adjusted fee proposed by the Secretary shall be effective after a period of 90 days of continuous session have elapsed following the receipt of such transmittal [to Congress],” while the clause “unless during such 90-day period either House of Congress adopts a resolution disapproving the Secretary’s proposed adjustment...” was invalidated. “

Under a combination accrual/cash financial management system, the fees would continue to be accrued at the current rate of 1 mill per kWh as nuclear fuel is consumed. Cash collections can be timed to match cash spending requirements from the NWF.

The NWPA gives DOE broad discretion as to the process for collection of the fee. The Act provides that “the Secretary shall establish procedures for the collection and payment of the fees...” The current provisions are set forth in DOE regulations, 10 CFR Part 961, Article VII, “Fees and Terms of Payment.” This provision states that, for electricity generated and sold by the Purchaser’s civilian nuclear power reactor(s) on or after April 7, 1983 fees shall be paid quarterly by the Purchaser and must be received by DOE no later than close of the last business day of the month following the end of each assigned 3-month period. This provision has been included in the terms of the standard contracts.

The Secretary also has authority to set interest charges. The regulations on standard contracts specify that any unpaid portion of the quarterly fee payment shall accrue interest at a rate equal to the Treasury 90-day bill rate.

3.2.2 Options for Modification of NWF Fee Payment Schedule

The Secretary could, through administrative action, amend the current regulations to change the timing of payments as part of a change to an accrual/cash system for management of the fees.¹⁹ Two options are described below:

Option 1: The annual level of fee collections would be set on the basis of annual appropriations or outlay requirements. This would balance the rate of cash collections with the rate of spending, so that only the amounts needed to offset annual appropriations levels would be paid into the NWF in the year of accrual. The remaining balance would be retained by the nuclear utilities in company-held reserve accounts until later years when needed to offset appropriations. In fiscal years in which outlays exceed the level of annual accruals, the balance of the annual cash collection from the utilities would include payments from the company-held reserves.

The balances in the company-held reserves would be required to pay interest at least equal to the cost of Treasury borrowing.²⁰ DOE could prescribe requirements for the management of the

¹⁹ The precedent for establishing alternative payment terms was established in the same Part 961 regulations with respect to payment of the fees for used/spent nuclear fuel discharged from civilian nuclear power reactors prior to April 7, 1983 and in-core fuel as of that date. The regulations offered nuclear utilities three options for payment: (1) a payment schedule pro-rated over 40 quarters, with interest; (2) a single, lump sum payment any time prior to first delivery, with interest; or (3) payment in full by the later of June 30, 1985 or 2 years after execution of the standard contract, whichever comes later, without interest. These options were intended to provide payment flexibility to nuclear utilities that had accumulated large amounts of used/spent fuel prior to enactment of the NWPA, and were within the scope of the Secretary’s authority to set payment terms.

company-held reserves, analogous to the NRC requirements for companies to accumulate funds for final decontamination and decommissioning (D&D) of nuclear power plants.

This option:

- achieves a net zero annual cash flow to the Treasury, as actual cash collections would be set equal to annual appropriations and outlays;
- enables larger appropriation levels (i.e. appropriations in excess of \$0.8 billion) in future years to remain at a net zero level by drawing upon the company held reserves to pay the portion in excess of the annual accrual of approximately \$0.8 billion);
- increases the annual budget deficit by the amount of the deferred portion of the NWF fee, unless DOE is required to propose a budget offset;
- does not by itself provide increased certainty that adequate funds would be appropriated annually, since the current statutory requirement for appropriations remains unchanged (as discussed below, however, combining this approach with an administrative reclassification of the fee as an offsetting collection, described in section 3.3, would free the NWF appropriations up to the annual fee receipts from budgetary constraints on discretionary spending, since the net appropriation would be zero);
- requires no change to the current program methodology for TSLCC or fee adequacy;
- requires no change to current nuclear electricity rates charged to consumers;
- requires nuclear utilities to continue to collect the fee at a rate commensurate with the rate of nuclear electricity generation and used fuel liability; and
- requires mutual consent to an amendment in the standard contracts between DOE and the nuclear utilities.

²⁰ Energy Secretary Pena proposed a similar scheme in 1998, allowing the utilities to retain the amount of fees in excess of payments needed to cover appropriations. The utilities would be allowed to invest the reserves at “market rates of return,” but pay the government in the future the balance of the fees at the Treasury rate. The difference in interest would be retained by the utilities to offset the costs of delay in taking fuel by the statutory January 21, 1998 deadline. In return, the utilities would agree not to file claims or seek damages from DOE due to its delay in waste acceptance. Secretary Pena affirmed the legal basis of the proposal by stating that the “...the Department can accomplish [it] promptly within its current authority.” The proposal was universally rejected by the utilities because they did not want to give up rights to file claims against the government.

Option 2: The payment of the fee could be suspended indefinitely until such time as a new used/spent fuel program is put into place. Any annual appropriations in the interim period would be drawn from the current surplus balance in the NWF.²¹

This option:

- requires a new fee adequacy determination that a zero fee is adequate (at least in the near term), which in turn may require a new finding with respect to TSLCC (the Secretary's decision to terminate the Yucca Mountain repository leaves the program without a long term scope on which to estimate the TSLCC);
- does not change the appropriations process (NWF spending would continue to be subject to appropriations under current budget rules and procedures, with the appropriations charged against the NWF corpus). In particular, any NWF appropriations would continue to have to compete within the spending caps set for the Energy and Water Development appropriations bill;
- unlike Option 1, would not facilitate reclassification of the fee as an offsetting collection (as discussed in Section 3.3) and thus would not ease the ability of the program to obtain necessary appropriations within government-wide spending caps;
- would be viewed as a change in policy and not simply a financial management reform; and
- increases the annual budget deficit by \$0.8 billion.

3.2.3 Issues for Possible BRC Consideration

Consistent with a policy of applying business-like principles to financial management of the NWF, the BRC could consider a change in the policies for collection of the annual fee. The new policy would account for the NWF annual fees on both an accrual and cash basis.

Option 1, linking the cash collections of the fee to appropriations levels, would be more consistent with current law concepts.

²¹ There is precedent for this scenario from the experience with the EPA Superfund program. The fees paid into the Superfund program expired in 1995, and Congress continued to appropriate funds annually for the program from the surplus balance that had been accumulated. The balance of the Superfund was exhausted in 2003, after which time Congress appropriated funds from the General Fund of the Treasury. Because the Superfund receipts and appropriations are accounted for separately in the budget under different rules (similar to the NWF), the appropriations scoring of the EPA Superfund did not change based on the source of funds.

- From the nuclear utilities' perspective, they would accrue annual liability at a rate of 1 mill per kWh (as may be adjusted to reflect any future determination of fee adequacy) while cash payments from the utilities to the NWF would be based on the rate of NWF spending. Nuclear utilities would be required to hold reserves of uncollected fees as an account payable to the NWF
- From the government's perspective, the NWF would recognize annual revenues at a rate of 1 mill per kWh and annual cash collections equal to the level of annual appropriations. The balance would be recorded as an account receivable balance sheet. In years in which appropriations exceeded the annual accrual level, the increased cash payments would be recorded as a reduction in the level of accounts receivable. The accrued balance would be paid by the utilities to the government at a future date, determined on the basis of program funding requirements. The requirement for future payment would be implemented through an amendment to the DOE Part 961 Standard Contract Regulations, and in turn incorporated into amendments to the individual standard contracts. Because the change would ultimately need to be reflected in the standard contracts, the nuclear utilities would have to consent to the change.

The method of holding the unpaid balance of accrued fees could be prescribed by DOE,²² or in the case of rate-based utilities, by DOE and the state public utility commissions. If the state commissions continue the current practice to allow nuclear utilities to pass through the fee in the cost of nuclear electricity as it is generated, then the nuclear utilities may be required to hold the balance of the fees in dedicated reserve funds. The current NRC requirements for nuclear utilities to accumulate reserve funds for future decontamination and decommissioning costs could serve as one possible model for the reserve funds for used/spent fuel disposal.

The budget scoring aspects of the changes is discussed further in Section 3.4 of this paper.

3.3 ISSUE #3: ADMINISTRATIVE BUDGET RECLASSIFICATION OF NWF RECEIPTS

The current budget accounting for the NWF does not score the transactions of the Fund on a net basis. Instead, receipts and spending are accounted separately, and subject to very different budgetary rules. Because the NWPA Act set the initial fee level of 1 mill per kWh in statute, while authorizing expenditures subject to appropriations, the OMB and CBO set up accounting structures for the NWF as if it were two separate accounts and not a single unified account. The

²² In the case of the one-time fees, DOE did not proscribe how utilities should account for unpaid fees, other than the requirement that fees would ultimately be paid with interest.

evolution of federal deficit reduction programs, such as budget sequestration, PAYGO and discretionary spending caps, further separated the accounting of receipts and spending in the budget, to the point where the annual appropriations process for the NWF is completely divorced from the collection of receipts. The evolution of these budgetary restrictions is described more fully in Appendix C.

3.3.1 Rationale for Current Budget Classification

For federal budget purposes, the NWF fees have been classified as “offsetting budget receipts.” The rationale for this classification was two-fold:

- The initial level of the fee was set in authorizing statute (i.e. 1 mill per kWh) and OMB and CBO typically classified fees set in authorizing statute as a mandatory fee. At the time of the original classification decision, any modification to the 1 mill fee was subject to one-House veto. After the *Chadha* and *Alabama Power* decisions, the fee could be modified administratively by Secretarial action without the need for legislation.
- The statute required that any modification be justified on the basis of total system life cycle costs, rather than annual appropriation levels. OMB and CBO generally classify such fees as offsetting collections if the annual fee receipts are directly linked to annual appropriations. A change in the accounting of the fees, linking the accrual of the fees to life-cycle program costs, while linking annual cash collections to annual appropriations, would provide a rationale for revising the budget classification.

3.3.2 Rationale for Reclassification of NWF Receipts

The change in the collection process of the NWF fees, so that the rate of collections by the federal government is based on appropriations and expenditures, provides a logical rationale to reclassify the budget accounting of the NWF receipts. Under current federal budget guidelines, fees can be classified as offsetting collections if they meet two broad tests.²³ With the proposed change in the payment process, the NWF fees would meet both tests.

- *The fees are part of a business-type arrangement.* This test is easily and clearly met. The provision of used/spent nuclear fuel management services is a commercial activity that Congress assigned to DOE in 1982; it is not an inherently governmental function.

²³ The general policy regarding offsetting collections dates back to the 1967 President’s Commission on Budget Concepts. Recommendation Number 11 stated that “Those receipts of the Government other than taxes which are enterprise or market-oriented should be treated as offset to expenditures to which they are related.” Current guidance is contained in OMB Circular No. A-25, “User Charges,” which states: “Proposals that allow agency retention of collections may be appropriate when a fee is levied in order to finance a service that is intended to be provided on a substantially self-sustaining basis and this is dependent upon adequate collections.”

Furthermore, under the statutory construct, the fees are imposed as part of the contractual agreement between the federal government and the nuclear utilities whereby DOE takes title to and disposes of the used/spent nuclear fuel in exchange for fee payments.

- *The level of the fee is controlled in the appropriations process.* Under current fee collection procedures, this criterion is not met. The annual fee (currently 1 mill per kWh) is set and collected on the basis of total system life cycle costs (rather than annual costs), independent of the level of annual appropriations from the NWF. However, under the possibility of an accrual/cash policy for managing NWF fees, the level of annual fee receipts (as distinct from annual accruals) would be set in appropriations Acts.

The reclassification can be implemented administratively,²⁴ subject to concurrence of the budget scorekeepers – OMB, CBO and the House and Senate Budget Committees.²⁵

Once reclassified, the appropriations committees would continue to set annual spending levels in appropriations Acts, but the appropriation level would be scored net of the collections, i.e. a net zero.

3.3.3 Precedent for Administrative Reclassification of NWF Fees

Reclassification of NWF fees as offsetting collections would be consistent with the current appropriations committee practices for the Nuclear Regulatory Commission (NRC), where approximately 90 percent of its annual appropriations is offset by fees, and the Federal Energy Regulatory Commission (FERC), where virtually 100 percent of appropriations are offset by fees. Both the NRC and FERC have multiple fee authorities whereby certain fees are set on the basis of the cost of service for individual transactions, and other fees are levied annually on the basis of the appropriations level.²⁶

There is ample precedent for administrative reclassification of fees. FERC fees were originally classified as offsetting receipts, similar to the NWF fees, but were administratively reclassified as offsetting collections in the President's FY 1996 budget. DOE Power Marketing Administration receipts from purchase power and wheeling services also were originally classified as offsetting receipts, but administratively reclassified as offsetting collections in the FY 2001 budget. DOE

²⁴ A 2004 survey identified a total of 33 federal budget accounts government-wide that had been administratively reclassified over a 9 year period of FY 1996 through FY 2004.

²⁵ Budget scorekeeping guidelines were originally established in the conference report accompanying the Budget Enforcement Act of 1990. The Act was extended by the Balanced Budget Act of 1997. The conference report accompanying that Act stated that "Accounts and activities shall not be reclassified unless all of the scorekeepers agree." The authorities of the 1990 and 1997 Act expired in 2002, and have not since been renewed. Nonetheless, the scorekeepers continue to honor the guidelines contained in the conference reports accompanying both statutes.

²⁶ For example, NRC fees are implemented through two regulations: Part 170 fees, which are cost-of-service transactional fees, and Part 171 fees that are an annual levy based on appropriations amounts.

Power Marketing Administration receipts for annual O&M expenses were administratively reclassified as offsetting collections in the FY 2010 budget.

3.3.4 DOE Generic Authority to Support Classification of NWF Fees as Offsetting Collections

In addition to the government-wide policy on administrative reclassification of receipts, DOE has generic statutory authority to collect and retain receipts as offsetting collections, if so specified in appropriations Acts. The Energy Research and Development Administration Authorization Act of 1978 (ERDA Authorization Act) provided permanent authority for then-ERDA, and now DOE, to retain receipts for application within spending accounts so long as it was so specified in appropriations Acts.²⁷ This authority was cited as the basis for recording revenues from uranium enrichment as offsetting collections to the uranium enrichment appropriation (during the period when DOE owned and operated the nation's uranium enrichment enterprise, prior to the establishment of USEC). This authority continues to be used annually to support the recording of DOE miscellaneous revenues as offsetting collections within the DOE Departmental Administration account.

3.3.5 Administrative versus Legislative Reclassification of NWF Receipts

The Bush Administration supported the concept of reclassification of NWF receipts as offsetting collections, but proposed that the reclassification be implemented legislatively rather than administratively. The President's FY 2005 budget proposed legislation to reclassify the NWF receipts as offsetting collections. At the time, OMB staff informally advised DOE that the NWF fees could not be reclassified administratively because:

- The 1 mill fee was set in an authorization statute; and
- OMB staff believed that CBO and the Budget Committees would not agree to administrative reclassification. (However, DOE staff was not aware of, nor participated in any informal consultations with CBO or Budget Committee staff on this issue).

Thus, OMB staff viewed the reclassification as a policy issue that required legislation. There is no indication that OMB staff gave any consideration to the fact that:

²⁷ The Energy Research and Development Administration Authorization Act of 1978 (Section 201 of P.L. 95-238) provided generic authority for the then Administrator to retain and use receipts as offsetting collections, when so specified in appropriation Acts. The authority is unique to DOE, and provides an exemption from the Miscellaneous Receipts Act (31 U.S.C. 3302), which otherwise would require the collections to be deposited directly in the Treasury as offsetting receipts.

- The NWPA set the fee at 1 mill only as a starting point to achieve that statutory objective of full cost recovery, with explicit provision that the fee could be modified administratively; and
- DOE could rely upon its generic authority under the ERDA Authorization Act to implement the reclassification through appropriations Act language rather than new authorizing legislation.

The possibility of adoption of a split accrual/cash fee policy would provide additional rationale for pursuing administrative reclassification of the fee.

3.4 BUDGET SCORING OF POSSIBLE ADMINISTRATIVE ACTIONS

The effect of administrative reclassification of the NWF fees, combined with the use of the split accrual/cash fee collection mechanism (option 1 discussed in Section 3.2 of this paper) would be to enable Congress to appropriate funds from the NWF on a net zero basis, up to the level that would fully utilize the annual accrual amount (i.e. about \$0.8 billion) plus the amounts held in company-held reserves from unpaid fees accrued in prior years. Net zero appropriations scoring does not guarantee that the full amount of proposed spending would be approved, but it would insulate NWF spending decisions from competition with other discretionary federal spending programs subject to limits on discretionary spending and appropriation subcommittee allocations.²⁸ These changes would affect the current federal budget process in two respects:

- First, the modification of fee collection procedures to reflect a combination of accrual and cash budget accounting, if adopted, would affect the level of annual receipts scored in the federal budget.²⁹ In the near term, the level of receipts likely would decrease, thus increasing the annual total federal deficit. In future years the level of receipts would increase, contributing to deficit reduction. Overall, there would be net increase in receipts (on an un-discounted basis) due to the addition of interest payments on the portion of the 1 mill accrued fee that is collected in subsequent years. On a net present value basis, the total level of receipts to the government over time would be unchanged (if DOE imposes

²⁸ Under the provisions of the Congressional Budget Act, aggregated limits on annual discretionary spending are allocated in a two-part process: the Section 302 (a) allocation sets a total limit on spending bills originating from the Appropriations Committees, while the Section 302(b) allocations set limits for each individual appropriations bill.

²⁹ This assumes that OMB and CBO would continue the current practice of scoring the receipts in the budget on a cash basis rather than on the basis of the accruals. The previous proposals by former Secretaries Pena and Richardson to allow deferred payment of fees provide precedent for this budget scoring assumption.

interest at Treasury rates on the deferred portion of the fees), or could actually be higher (if DOE imposes an interest rate that represents a premium above Treasury rates).³⁰

- Second, the administrative reclassification of NWF receipts would not change the federal deficit, but would have equal and offsetting changes in the totals for direct (mandatory) spending and discretionary spending. The level of direct spending would increase because NWF fees would no longer be scored as an offset. The level of discretionary spending would decrease, due to the net zero scoring of NWF appropriations. However, these changes would need to be within the context of a Congressional Budget Resolution; otherwise, if the total discretionary spending cap is not modified, the savings from net zero appropriations for the NWF would be used for other discretionary appropriations.³¹

Effectuation of the changes through the issuance of an amendment to the current Part 961 regulations would not trigger Congressional pay-as-you-go (PAYGO) requirements, since no legislation is involved.

The proposed change would be subject to review under the administrative PAYGO requirements established by memorandum during the Bush Administration, and supported by the Obama Administration.³² However, the proposed reclassification may not fall within the scope of the administrative PAYGO guidelines, and even if so, the administrative PAYGO requirements could be met in several ways. The administrative PAYGO requirements appear to be targeted to federal agency regulatory changes, implemented outside the annual President's budget process, that modify eligibility requirements for entitlement programs. The proposed administrative reclassification of NWF receipts could be implemented as part of the President's budget cycle for the FY 2014 budget, and the offset requirement could be satisfied through a reduction in the level of the discretionary spending cap to reflect the net zero appropriation level for the NWF. In a worst case scenario, DOE could seek an exemption from administrative PAYGO requirements pursuant to the provision for exceptions "...in light of extraordinary need or other compelling

³⁰ For example, Secretary Pena proposed that nuclear utilities could invest the unpaid portion of the fees at a higher "industry rate" of return rather than the Treasury rate, with the utilities retaining the premiums for use to offset a portion of the cost of on-site storage of used/spent fuel.

³¹ Historically, changes in budget "concepts and definitions" such as administrative reclassification were presented by OMB to CBO and the Budget Committees prior to the finalization of the President's budget, either informally or as part of the requirements for the Budget Enforcement Act (BEA) Preview Report (requirement since expired). This would enable the CBO and the Budget Committees to make appropriate adjustments to budget baseline projections prior to formulation of spending caps in the Congressional Budget Resolution.

³² The administrative PAYGO policy was established in OMB Memorandum M-05-13, issued on May 23, 2005. The President's FY 2011 budget stated that the Obama Administration continues to support the administrative PAYGO policy. A Report by the Congressional Research Service, "OMB Controls on Agency Mandatory Spending Programs: 'Administrative PAYGO' and Related Issues for Congress," documented only a single instance where administrative PAYGO was applied.

circumstances.”³³ In this case, the need for assured funding for the used/spent nuclear fuel management program to mitigate the magnitude of further federal budget liability to the Judgment Fund would provide a compelling argument. In the case of the most recent administrative reclassification, which was the reclassification of Power Marketing Receipts for O&M costs in the FY 2010 budget, OMB imposed a new offset requirement, namely an appropriations adjustment in the first year of the reclassification. This had the effect of offsetting the savings in discretionary spending resulting from the reclassification of receipts. This adjustment, referred to as CHIMP (change in mandatory program), is not currently documented in OMB guidance, so it is unclear whether the CHIMP precedent would be applicable to the reclassification of NWF receipts.

³³ OMB Memorandum M-05-13.

4.0 ISSUES FOR POSSIBLE LEGISLATIVE CHANGES TO THE NWF

The three proposed administrative improvements – adopting combined accrual and cash budgeting, changing in the timing of fee collections, and administratively reclassifying NWF fee proceeds – would result in significant progress toward the objectives of sound financial management of the commercial used/spent nuclear fuel management program.

However, these changes alone would not provide the funding certainty needed to execute large scale capital investments needed in the future for centralized storage, processing and disposal programs and projects. To ensure that these investments are executed effectively, efficiently and on a timely basis, legislative restructuring of the NWF may be appropriate.

Three issues involving possible legislative changes are discussed in the following sections.

4.1 ISSUE #4: DESIGNATING THE NWF AS A TRUST FUND

Under current federal budget conventions, a Fund is not designated as a Trust Fund unless it is specifically so named in legislation.

The federal budget contains a number of special funds designated as trust funds. Typically the designation of a trust fund is intended to underscore the fact that the moneys are dedicated for a special purpose and must be managed accordingly.³⁴ Under OMB guidelines, “Trust funds account for the receipt and expenditure of monies by the Government for carrying out specific purposes and programs in accordance with the terms of a statute that designates the fund as a trust fund [emphasis added]....”³⁵ The GAO reports that “OMB’s policy is to identify receipts as belonging to a trust fund if the receipts have the following two attributes: (1) they are dedicated by law to a particular program or set of programs, and (2) they are dedicated to accounts designated in law as “trust accounts.”³⁶ Clearly, OMB’s preference is to not designate new trust funds unless clearly directed in statute.

The Carter Administration Interagency Review Group (IRG) considered three alternatives for the treatment of funds: offsetting receipts that would be scored against the entire DOE budget (which was labeled as status quo), a separate trust fund, or payment directly to the United States Treasury. The IRG recommended that “...DOE analyze alternative methods of cost recovery to generate full

³⁴ The use of the term “trust fund” in the federal budget, however, is not the same as a private trust fund. In a private trust fund, the beneficiary of a trust usually owns the trust’s assets, which are managed by a trustee who must follow the stipulations of the trust. In contrast, the federal government both owns and manages the assets of the trust fund and can, through legislation, raise or lower the fund’s collections or payments or alter the purposes of the trust fund.

³⁵ OMB Circular No. A-11, “Preparation of the Federal Budget, Part I: General Information,” , Section 20, p.39, (2009)

³⁶ U.S. GAO, “Federal Trust and Other Earmarked Funds: Answers to Frequently Asked Questions,” January 2001.

funding of a trust fund or its equivalent so as to assure that the revenues received are adequate and are properly applied directly to the waste management program.”³⁷

Because the NWPA did not specifically use the term ‘Trust Fund’, OMB classified it as a “Special Fund,” a designation which facilitated the subsequent bifurcation of the budget accounting of the receipts and spending.³⁸

There are currently over 200 government trust funds, but only a dozen or so are of the magnitude of the NWF. There is no standard set of criteria for designation of a fund as a federal trust fund,³⁹ but most trust funds appear to share two distinguishing characteristics:

- budget impacts are measured on the basis of net cash flows; and
- spending is typically not subject to annual appropriations

Re-designating the existing NWF as a trust fund would be generally consistent with the original policy intent. As described earlier, the IRG originally recommended that the NWF be established as a trust fund. In addition, the legislative history of the 1982 Act is replete with references to the NWF as a trust fund. During the 1982 Senate debate on the Nuclear Waste Policy Act, the Office of Technology Assessment issued a report that recommended the establishment of a revolving or trust fund, to guarantee availability of the fee revenues as needed.⁴⁰ In addition, various CBO cost estimates referred to the NWF as a trust fund and provided Congress with cost estimates, including projected surplus or deficit balances in the NWF, on the assumption that monies would be spent from the NWF as needed to meet program schedules, and that the NWF could borrow funds from the Treasury to cover any short-term requirements not covered by fees.⁴¹ Any plain meaning review of the legislative history conveys the point that the NWF was intended to operate as a trust fund, unfettered by other federal budgetary restrictions.

The final legislative language in the NWPA did not specifically designate the NWF as a trust fund, perhaps because the legislation required that spending from the NWF be subject to

³⁷ Interagency Review Group, “Report to the President by the Interagency Review Group on Nuclear Waste Management,” March 1979, p 122.

³⁸ OMB Circular No. A-11, Section 20.12 provides that a special fund is an account used to track receipts and spending for programs that have specific receipts dedicated by law for their use but which are not designated in law as trust funds. Also, obligation and expenditure of monies in a special fund normally requires annual appropriations by Congress.

³⁹ The designation of “trust fund” in the federal budget does not have the same meaning as a private trust fund. A private trust fund has 3rd party trustees that control disbursements of the fund for legally prescribed purposes, whereas a federal trust fund is controlled by a federal agency and does not have trustees.

⁴⁰ U.S. Office of Technology Assessment, “Managing Commercial High-level Radioactive Waste,” April 1982.

⁴¹ See, for example, Congressional Budget Office Memoranda of February 26, 1982, March 23, 1982 and April 23, 1982, reprinted in the Congressional Record – Senate, April 28, 1982, pp. S.4166-4169.

appropriations. Under a unified trust fund concept, both spending and receipts would need to have the same classification, in order for the trust fund to be recorded in the budget on a net basis.

From a policy perspective, the principal issues to be considered in designating the NWF as a Trust Fund are that:

- The long-term (i.e. multi-century) nature of the obligation requires the federal government to step into the role of a trustee, acting on behalf of the nuclear utilities, to safely manage the disposition of used/spent nuclear fuel in a safe manner for the benefit of future generations.
- The monies collected by the federal government should be dedicated solely to used/spent nuclear fuel disposition. These funds should not be used for other governmental purposes.
- Expenditures for the cost of disposition of used/spent nuclear fuel should be borne solely by the fees and not by general taxpayer revenues or borrowing from the public.

4.2 ISSUE #5: RESTRUCTURING THE NWF AS A “REVOLVING TRUST FUND”

A revolving fund, or revolving trust fund, is authorized to make expenditures from fund balances without the need for appropriations. OMB defines a Revolving Fund as “...a fund that conducts continuing cycles of business-like activity, in which the fund charges for the sale of products or services and uses the proceeds to finance its spending, usually without requirement of annual appropriations.”⁴²

A forerunner Senate nuclear waste management bill, S. 2189, reported by the Energy and Natural Resources Committee, authorized the a fund for interim spent fuel storage as a revolving fund, not subject to appropriations.⁴³ Further, S. 2189 established the Fund as fully “off-budget,” exempt from appropriations and all requirements of the Congressional Budget Act. Subsequent bills that formed the basis for the final NWPA did not have comparable provisions and instead authorized expenditures from the NWF subject to appropriations. This raised some concerns that the requirement for annual appropriations could jeopardize the ability of the program to meet statutory objectives. Testimony before the House on pending nuclear waste legislation in 1981 from the former Congressional Office of Technology Assessment pointed out that:

⁴² OMB Circular No. A-11, Section 20.3. OMB guidance further provides that there are three types of revolving funds: Public enterprise funds, which conduct business-like operations mainly with the public, intra-governmental revolving funds... and trust revolving funds, which conduct business-like operations mainly with the public.” The distinction between a Public Enterprise Fund and a Trust Fund is not precise. Typically, a Trust fund is so designated because the authorizing statute specifically uses the term ‘Trust Fund;’ otherwise the revolving fund is classified as a Public Enterprise Fund.

⁴³ The Nuclear Waste Policy Act, Senate Energy and Natural Resources Committee, Report No. 96-548, January 3, 1980.

“...the predictability of the program depends upon the predictability of the annual expenditures from the waste management fund, not simply the predictability of the revenues going into the fund. By retaining a degree of Congressional control over annual program expenditures, these bills leave open the possibility that, in a period of pressures to balance an increasingly tight Federal budget, some of the expenditures required to assure steady progress on the waste management schedule might be deferred or eliminated – thereby jeopardizing the long term goal. In short, it appears to us that there is an inherent conflict between a stable commitment to a long term fixed schedule for a complex technical project such as waste disposal on the one hand, and a high degree of external annual budgetary control on the other.

As emphasized earlier, striking a balance between the independence that appears to be needed to ensure steady and predictable progress towards timely achievement of a long-term goal, and the degree of oversight and control required in a democratic society, may be one of the most difficult challenges involved in devising a comprehensive waste management program.”⁴⁴

The predicted deferral of expenditures due to federal budgetary pressures in fact occurred.

The NWF Revolving Trust Fund would be modeled after other energy-related revolving funds, including the Bonneville Power Administration Fund and the Tennessee Valley Authority Fund. The U.S. Enrichment Corporation originally operated as a revolving fund prior to its privatization in 1998.

Spending from the NWF that is not subject to appropriations would be classified for budget purposes as mandatory spending.⁴⁵ Medicare and Medicaid payments to individuals, unemployment insurance and farm price support payments are all examples of mandatory spending that are authorized in permanent legislation. The NWF funding requirements, as established in the NWPA and interpreted through court decisions, are generally consistent with the concept of mandatory spending, since the expenditure of funds is pursuant to binding contracts.⁴⁶ This concept was initially advanced in a 2001 DOE Report to Congress⁴⁷ which cited two arguments in support of mandatory spending from the NWF:

⁴⁴ Testimony of Thomas A. Cotton, Office of Technology Assessment, before the Subcommittee on Energy Research And Production, Committee On Science And Technology, U.S. House of Representatives, October 5, 1981

⁴⁵ The Budget Enforcement Act of 1990 and OMB Circular No. A-11 refer to mandatory spending as spending authority resulting from permanent laws.

⁴⁶ Most contracts with the federal government contain an explicit provision that the performance of the government’s obligations is “subject to appropriations.” The standard contracts with nuclear utilities contain no such conditions.

⁴⁷ U.S. Department of Energy, “Alternative Means of Financing and Managing the Nuclear Waste Management Program: An Update, 2001.

- the Government’s statutory and contractual commitment to dispose of SNF and nuclear waste is conditional only upon payment of the fees by nuclear utilities; and
- the legislative requirement for appropriations was part of a mechanism to exercise control over an off-budget account, and not a statement of Congressional intent that the nuclear waste program was a discretionary activity of the Federal Government. Moreover, the authorization of borrowing authority in the NWPA provides additional evidence that Congress did not intend for shortfalls in fund balances from preventing OCRWM from meeting contractual obligations.

4.3 ISSUE #6: EXECUTIVE BRANCH AND CONGRESSIONAL OVERSIGHT IN THE ABSENCE OF ANNUAL APPROPRIATIONS

Legislative restructuring of the NWF as a revolving trust fund, as described in the preceding sections, would remove the program from the annual appropriations process. However, this is not intended to eliminate or diminish Congressional oversight. There are a variety of options for Congress to exercise control over the program. For example, Congress could:

- Require development and submission to Congress of a Mission Plan, to serve as the basis for expenditures from the NWF. The Mission Plan could be the subject of oversight hearings. Also, Congress could require that the Mission Plan be formally approved, in the form of a Congressional Resolution. A 1985 Report by the Office of Technology Assessment suggested a similar approach, namely the adoption of multi-year appropriations tied to Congressional approval of a Mission Plan that presented a multi-year budget. The Report concluded that this approach “...could serve as the principal mechanism for balancing the need for adequate congressional oversight with the need for increased flexibility of operation and funding.”⁴⁸
- Impose greater authorization oversight of the major multi-year capital investment projects within the program. For example, Congress could establish line item authorizations with lump sum cost caps for major capital investment items – the 1982 Act provided an initial framework by separately authorizing (without spending limitations) a test and evaluation facility, a monitored retrievable storage facility and a repository program. Alternatively, Congress could establish a multi-year authorization for the entire program, such as the triennial authorization provision in the 1982 Act. Similar mechanisms are in place for BPA and TVA: BPA is required to obtain Congressional authorization of blocks of multi-

⁴⁸ U.S. Congress Office of Technology Assessment, “Managing the Nation’s Commercial High-Level Radioactive Waste,” March 1985.

year borrowing authority for transmission and renewable energy projects, while TVA is currently subject to a statutory ceiling on its outstanding debt

- Require separate capital and operating budgets, with appropriations approval of the annual operating budget only. This will provide a mechanism for annual Congressional oversight, and ensure that program administration remains as lean as feasible.

Of course, while it does not need to be explicitly authorized, Congress could impose an annual limit on program obligations or expenditures if issues arose regarding the scope and pace of used/spent nuclear fuel management program.

4.4 “ON-BUDGET” VERSUS “OFF-BUDGET” STATUS FOR THE NWF

The possibility of establishing a restructured Nuclear Waste Trust Fund as a revolving fund, would continue to remain “on-budget” but would not be subject to certain budgetary restrictions such as annual appropriations, OMB apportionment or sequestration. This action would provide a significant degree of financial flexibility while stopping short of moving the NWF “off-budget” which has been recommended by some in the past.

There have been several proposals to make the NWF fully “off-budget.” As discussed in Section 4.2 of this paper, a forerunner bill, S. 2189, would have authorized an interim storage fund as “off-budget.” The final NWPA authorized DOE to commission an independent review of the program. The Advisory Committee Report to the Secretary of Energy recommended that the civilian waste management program be reorganized into a proposed FEDCORP and moved off-budget and not subject to appropriations.⁴⁹ There was no action on this recommendation. In 1999, the House Energy and Commerce Committee reported legislation (H.R. 45) that moved the NWF to off-budget status.⁵⁰ Final legislation was never enacted into law.

The issues and options presented in this paper would substantially achieve the objectives of a fully off-budget NWF. Appendix E compares the relatively “off-budget” treatment for the options presented in this paper for restructuring the NWF with the current NWF. The figure also includes, for comparison purposes, the characteristics of the TVA Fund.

⁴⁹ Advisory Panel on Alternative Means of Financing and Managing Nuclear Waste Facilities, “Managing Nuclear Waste – A Better Idea,” December 1984, p. XI-4.

⁵⁰ H.R. 45, reported by the House Energy and Commerce Committee on April 21, 1999.

4.5 PAY-AS-YOU-GO (PAYGO) REQUIREMENTS FOR LEGISLATIVE CHANGES TO THE NWF

Proposed legislation to reauthorize the NWF as a Revolving Trust Fund, with spending exempt from appropriations, would trigger Congressional pay-as-you-go or PAYGO provisions.

The Congressional PAYGO requirements were recently updated and codified in the Pay-As-You-Go Act of 2010.⁵¹ The Act establishes a PAYGO scorecard for all legislation that modifies direct (mandatory) spending. The Act requires PAYGO estimates for the initial year, the first five year period and the first ten year period. The PAYGO estimates are recorded on a PAYGO scorecard, which tracks all PAYGO impacts of legislation enacted over the course of the Congressional session. If the PAYGO scorecard is not cleared (i.e. fully offset) by the end of the session, OMB is authorized to issue an across-the-board sequestration order to effectuate savings. Thus, the PAYGO requirement is intended to apply bill-by-bill, but rather at an aggregate level that takes into account all legislation enacted during the course of the year.

As a companion to PAYGO, the Congressional Budget Act sets procedural requirements affecting legislation that authorizes new direct (mandatory) spending. The procedural provisions require that changes in classification of spending or receipts need to be consistent with a Congressional Budget Resolution or other budget agreement. The budget scorekeeping rules originally established in conjunction with the Budget Enforcement Act of 1990 require that enactment of legislation that reclassifies the spending for an account must be consistent with a budget agreement.⁵² Thus, any legislative changes to the NWF are not only subject to PAYGO but also must be in conformance with the applicable Congressional Budget Resolution or other applicable budget agreement. Failure to do so would make the legislation subject to point of order, which would then otherwise require a waiver in order to proceed to floor action in either the House or Senate.

Legislation that restructures the NWF as a Revolving Trust Fund would be subject to PAYGO. The PAYGO impact would be triggered by the proposal to eliminate the requirement that expenditures from the NWF be subject to appropriations. This would create a new stream of direct (mandatory) spending from the NWF. However, authorizing the expenditure of funds from the NWF would NOT result in a PAYGO score equal to the current \$24 billion balance in the

⁵¹ H.J. Res. 45, February 5, 2010.

⁵² This requirement was established in the Conference Report as Scorekeeping Rule Number 13: "Reclassification after an agreement. Except to the extent assumed in a budget agreement, a law that has the effect of altering the classification or scoring of spending and revenues (e.g. from discretionary to mandatory, special fund to revolving fund, on-budget to off-budget, revenue to offsetting receipt), will not be scored as reclassified for the purpose of enforcing a budget agreement."

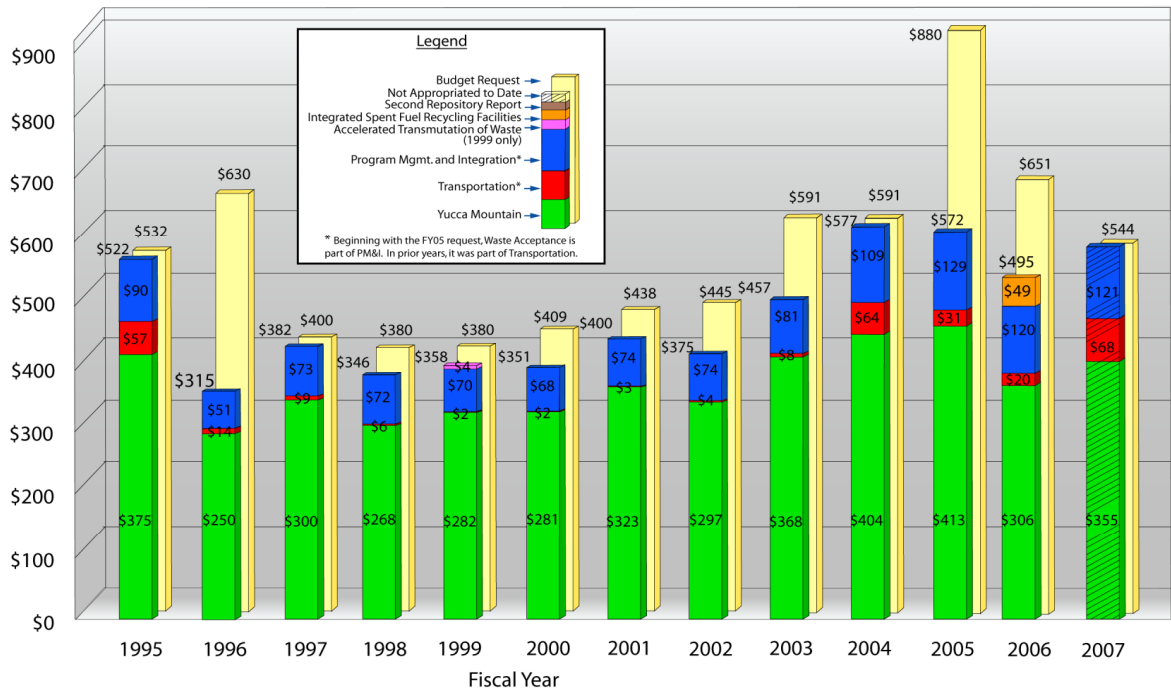
NWF. Instead, the PAYGO score would depend upon the estimated expenditures needed to implement the proposed program authorized in the legislation. For example, if new legislation authorized the establishment of one or more new centralized interim storage facilities, and authorized the establishment of a revolving trust fund, the PAYGO score would be based on the estimated cost and schedule for implementing the interim storage program authorized in the legislation.

Past Proposals To Change The NWF Funding Structure

DATE	PROPOSAL	DESCRIPTION
1984	Direct Spending (AMFM Report to DOE)	Proposed establishment FEDCORP to manage nuclear waste, with a single fund to hold nuclear waste fees and proceeds from borrowing. "Spending should not be subject to the budgetary constraints of a parent organization or other government entity."
1994	Mandatory Spending (President's FY 1995 Budget)	Propose legislation to authorize one-half of annual fees to be spent directly without appropriations. PAYGO offset proposed elsewhere in the budget.
1995	Mandatory Spending (President's FY 1996 Budget)	Propose legislation to reclassify NWF spending as a mandatory account, not subject to appropriations. PAYGO offset proposed elsewhere in the budget.
1997 (105 th Congress)	Annual user fee H.R. 1270 (Passed House)	Authorize an annual user fee not to exceed annual appropriations (less defense share) of up to 1.5 mill per kWh in any year until the opening of the repository, so long as the average annual fee over the period does not exceed 1.0 mill. Spending subject to annual appropriations. Required payment of unpaid one-time fees by date certain as PAYGO offset.
1997 (105 th Congress)	Split Fee S.104 (Passed Senate 4-15-1997)	Authorizes a two-part fee, consisting of offsetting collection user fee not to exceed annual appropriations (less defense share), and mandatory fee in the amount of difference, up to 1 mill per kWh total fee. Spending subject

		to annual appropriations. Required payment of one-time fees by date certain as PAYGO offset.
1998	Deferred Fee	DOE proposal to modify standard contracts to allow utilities to retain the portion of the 1 kWh fee that exceeded the annual appropriations level. Upon waste acceptance, the utilities would pay the deferred fees plus interest.
1999 (106 th Congress)	Off-Budget H.R. 45 (Reported by House Commerce Committee 4/21/1999)	Designated the NWF as off-budget, and exempt from sequestration and PAYGO. Requirements for 1 mill per kWh fee and annual appropriations unchanged from original Act.
2001	Mandatory Spending (Appropriations Entitlement) (DOE AMFM Update Report)	Recommendation to administratively reclassify NWF spending as mandatory spending, but subject to appropriations. NWF would be part of a class of federal programs known as “Appropriated Entitlements”, subject to appropriation action, but not subject to discretionary spending caps.
2004	Offsetting Collections (President’s FY 2005 Budget)	Proposes appropriations language to reclassify NWF fees as an offsetting collection to appropriations, with a net appropriations request of zero. Proposal was made contingent upon enactment of new authorization legislation.
2004	Offsetting Collections H.R. 3981 (Reported by House Commerce Committee 6-24-04)	Reclassify the NWF receipts as offsetting collections, as per the President’s FY 2005 budget proposal.
2005	Offsetting Collections (President’s FY 2006 Budget)	Re-proposed offsetting collections concept, but proposal was not assumed in the budget estimates.

Annual Appropriations and Administration's Budget Request



Annual Shortfall: (\$10M) (\$315M) (\$18M) (\$34M) (\$22M) (\$58M) (\$38M) (\$70M) (\$134M) (\$14M) (\$308M) (\$156M)

Cumulative Shortfall FY 1995-FY 2006: \$1.177B

As of June 2006

*Totals may not add up due to rounding

Evolution of Budget Requirements that Eroded NWF Funding Capability

Since the enactment of the NWPA of 1982 establishing the NWF, Congress enacted several budget control acts that dramatically reduced the funding flexibility originally envisioned in the NWPA.

The Balanced Budget and Emergency Deficit Control Act of 1985, also known as Gramm-Rudman-Hollings (GRH), placed the NWF on budget and made it subject to sequestration process. This change was designed to broaden the federal spending base subject to GRH sequestrations in order to reduce the magnitude of across-the-board reductions.

The 1987 amendments to GRH placed the appropriations from the NWF under the spending cap applicable to all domestic discretionary programs, even though the NWF was self-financed and not supported from the General Fund of the Treasury. This had the effect of forcing spending for the NWF to compete with other spending programs which did not have dedicated funding sources. Also, as a result, OMB dropped its historical practice of setting separate budget planning targets for the NWF, forcing it to compete against other DOE programs within a single DOE budget target for domestic discretionary spending.

The Budget Enforcement Act (BEA) of 1990 set new caps on discretionary spending accounts. The BEA also established new pay-as-you-go (PAYGO) requirements applicable to mandatory spending and receipts, in order to ensure that the net effects of legislative changes affecting mandatory spending were budget neutral.

In the Conference Report accompanying the Omnibus Budget Reconciliation Act of 1990, the NWF spending was designated as part of the domestic discretionary appropriations accounts for FY 1991, subject to the spending cap set in the BEA.

The 1997 Amendments to the Balanced Budget Act (BBA) extended through FY 2002 the caps on discretionary spending accounts and the PAYGO requirements for mandatory spending accounts.

Balance Sheet for Used/Spent Nuclear Fuel Management Program
Simplified Example
 (September 30, 2010)

ASSETS	\$ in billions
Cash on hand	0
Investments (Treasury Securities)	24.0 ⁵³
Accounts Receivable	
One-Time Fees	3.4 ⁵⁴
Annual Fees (Existing Licenses)	?
Physical Property	
Repository	7.9 ⁵⁵
Other	?
Total Assets	?
LIABILITIES	
Litigation Settlements	
Current Year Liability	? ⁵⁶
Future Year Liability	15.5 ⁵⁷
Future Disposal Liability	71.2 ⁵⁸
Total Liabilities	?
NET POSITION	?

⁵³ President's FY2012 Budget Appendix, p. 415.

⁵⁴ U.S. Department of Energy, Annual Financial Statement, FY 2010.

⁵⁵ U.S. DOE, Analysis of Total System Life Cycle Cost of the Civilian Radioactive Waste Management Program, Fiscal Year 2007. Example estimate is based on 80 percent (commercial share) of reported historical program cost for the Yucca Mountain repository from 1983-2006 (in \$2007); includes both soft costs and capital expenditures

⁵⁶ President's FY 2012 Budget Appendix, "Claims, Judgments and Relief Acts" Account, containing an estimate of \$4.6B in outlays for FY2011. No details are provided as to the portion budgeted for settlement payments on claims by nuclear utilities under the NWPA.

⁵⁷ U.S. DOE, FY 2010 DOE Annual Financial Statement.

⁵⁸ U.S. DOE, TSLCC Report. Estimate is based on 80 percent of the cost to complete the Yucca Mountain Repository (2007-2133), adjusted from 2007 dollars to 2010 dollars at a rate of 2.5 percent per year. Yucca Mountain estimate used as a proxy for future disposal liability.

Comparison of Budget Characteristics of NWF

	Current NWF	NWF: Administrative Options	NWF: Legislative Options	<i>Reference for Comparison: TVA Fund</i>
1. Fee collection accounted for as an offsetting collection to the fund?	NO	YES	YES	YES
2. Obligations and expenditures removed from annual appropriations?	NO	YES	YES	YES
3. Obligations and expenditures exempt from OMB apportionment?	YES	YES	YES	YES
4. Spending exempt from budget sequestration? ⁵⁹	NO	YES	YES	YES
5. Legislative changes exempt from pay-as-you-go (PAYGO) requirements? ⁶⁰	NO	NO	NO	NO
6. Budgetary transactions of the fund excluded from federal budget totals?	NO	NO	NO	NO

⁵⁹ The provisions for budget sequestration were authorized in the Budget Enforcement Act (BEA), which expired in 2002. During the period when the BEA was in effect, the Nuclear Waste Fund was subject to its provisions, but the TVA Fund was exempt.

⁶⁰ Statutory PAYGO requirements expired in 2002 with the expiration of the Budget Enforcement Act. The House of Representatives adopted new PAYGO procedures as part of the rules of the House; a one-year PAYGO provision is under consideration in the FY 2009 Congressional Budget Resolution.

JOSEPH S. HEZIR

Mr. Hezir graduated from Carnegie-Mellon University with a B.S. (1972) in Chemical Engineering and an M.S. (1974) from the Heinz School of Public Policy. While at the Carnegie-Mellon, he worked as an intern with the Allegheny County, PA Department of Air Pollution Control. He also interned with the New York City Environmental Protection Administration. Mr. Hezir worked as a research engineer for St. Joe Minerals Corporation and as an environmental engineering consultant to the steel industry.

Mr. Hezir served for eighteen years in the White House Office of Management and Budget (OMB), beginning in 1974 as a budget examiner in the Environment Branch. He was responsible for review of the Environmental Protection Agency water quality and radiation programs. In 1976, he received the OMB Professional Achievement Award for his work on water quality issues. In 1977, he became a senior analyst for government-wide management and reorganization planning for environmental, natural resources, and energy programs. In 1979, he became a senior budget examiner for energy technology programs. In 1982, he joined the Corporate Planning Department of Exxon Research and Engineering Company, responsible for the development of technology forecasts used in corporate business plans.

After returning to OMB in 1983, Mr. Hezir was chief of the Non-Nuclear Energy Branch, responsible for energy technology R&D, conservation, and energy regulatory programs. From 1986 to 1992, he served as the OMB Deputy Associate Director for Energy and Science, managing a 25 person division with responsibility for budgetary, regulatory, legislative, and policy development activities of the Department of Energy, National Aeronautics and Space Administration, the National Science Foundation, the Tennessee Valley Authority, the Nuclear Regulatory Commission, and the Smithsonian Institution. He also represented OMB in government-wide science and technology policy development. Mr. Hezir received the President's Outstanding Federal Executive Award in 1989.

Mr. Hezir has served as an advisor to a number of public policy and public service organizations. From 1992 to 1994, he was a member of the NASA Advisory Council. Mr. Hezir was a former member of the Board of Directors of the National Capital Area Chapter of the American Red Cross. He also served as a member of the External Review Panel of the American Association for the Advancement of Science. Mr. Hezir currently is a member of the Board on Physics and Astronomy of the National Research Council, and has been an advisor on federal science policy and budgeting to six separate National Academy of Sciences study panels. Mr. Hezir also serves as a visiting Engineer at the MIT Energy Initiative.

Mr. Hezir was a co-founder of the EOP Group, Inc. in 1992, and serves as its Vice President and Managing Partner. The EOP Group is a consulting firm that provides strategic advice to corporations, non-profit organizations and industry trade associations on federal executive branch policy, regulatory and budget issues. He also serves as the Executive Vice President of the EOP Foundation, an affiliated organization that conducts policy studies and executive training programs. Mr. Hezir is co-author of several books published by the Foundation, *Understanding the Budget of the United States Government*, and *Understanding the Regulatory Policy of the United States Government*.