The Honorable John D. Dingell  
Chairman, Subcommittee on Oversight  
and Investigations  
Committee on Energy and Commerce  
House of Representatives

Dear Mr. Chairman:

In our December 31, 1986, report, Energy Management: Effects of Recent Changes in Department of Energy Patent Policies (GAO/RCED-87-5), we reviewed a proposed agreement between the Department of Energy (DOE) and Martin Marietta Energy Systems (Energy Systems). Among other things, the proposed agreement included provisions governing Energy Systems' use of royalties it receives from licensing inventions for which it has acquired title from DOE. This included allowing Energy Systems to use royalties to perform activities in support of DOE's mission. Our review focused primarily on whether the agreement would violate a legislative restriction on DOE's augmenting its appropriation. This restriction is intended to prevent agencies from retaining funds received from nongovernment sources for use in agency programs.

In summary, it is our opinion that Energy Systems' deposit of royalties into a separate account for use in carrying out the agreement's provisions is not, by itself, an improper augmentation of DOE's appropriation. Energy Systems may also use the royalties to carry out technology-transfer activities authorized under the agreement without improperly augmenting DOE's appropriation. However, to avoid an improper augmentation, DOE must deposit into the U.S. Treasury, as miscellaneous receipts, any royalty funds it receives from Energy Systems as (1) reimbursement for DOE patenting costs and (2) reimbursement of "seed
In August 1987, DOE entered into an agreement with Energy Systems to cooperatively establish and cofund a program of technology transfer aimed at commercializing certain inventions developed at the DOE facilities Energy Systems operates. The agreement was incorporated into Energy Systems' contract with DOE as Article 69, "Special Understanding With Respect to Contractor Licensing Operations on Waived Subject Inventions."

The cooperative technology-transfer program applies to inventions developed at the facilities for which Energy Systems obtains title from DOE through a waiver process. The Atomic Energy Act of 1954 and the Federal Nonnuclear Energy Research and Development Act of 1974 have generally provided for government ownership of inventions developed under DOE contracts. However, the acts also allow DOE to waive its title to such inventions to contractors that operate the DOE facilities so that they can commercialize the inventions. The contractors generally commercialize the waived inventions by obtaining patents on them and issuing licenses to parties that wish to use the inventions or market them. Licensees are normally required to pay royalties to the contractor as compensation for the rights they receive under the licenses.

Under Article 69, Energy Systems agreed to undertake an aggressive licensing program whereby waived inventions would be moved expeditiously into the commercial marketplace by means of appropriate licensing agreements. Article 69 also provides that Energy Systems will contribute all royalties obtained pursuant to activities covered by Article 69 to the cooperative technology-transfer program. The royalties are to be deposited into an account that will be used for specified activities. Provisions describing how royalties may be used are set forth in sections (g) and (h) of the agreement. (See app. 1.) Article 69 also provides that Energy Systems shall not derive any monetary benefit from royalties received under the licensing program.

According to DOE patent officials, Article 69 is written so that it can also be made applicable to royalty revenues which Energy Systems receives from licensing copyrighted material at such time as DOE approves a modification of Energy Systems' contract allowing it to license such material.
Augmentation Questions Relating to the Agreement

Augmentation questions relate both to Energy Systems' deposit of royalties into an account for use in carrying out the provisions of Article 69 and to specific uses of royalties that Article 69 authorizes. These uses are: (1) activities relating to technology transfer, (2) reimbursement of DOE patenting costs, and (3) reimbursement of seed money. In addition, Article 69 specifies how royalties may be used in cases where royalties exceed 5 percent of the annual contract budget. Our analysis of augmentation issues relating to the deposit of royalties and each of the four royalty uses is presented below.

Deposit of Royalties

Article 69 provides that Energy Systems will deposit all royalties it receives from licensing waived inventions into a "separate account." This account is to be carried over from year to year and used by Energy Systems for activities which are consistent with DOE's research and development mission and the objectives of Energy Systems' contract with DOE. According to DOE patent officials, the account into which royalties are to be deposited is controlled by Energy Systems, reflecting DOE's view that Energy Systems owns the royalties.

It is our opinion that Energy Systems' deposit of royalties into an account which it controls is not, by itself, an improper augmentation of DOE's appropriation. Article 69 outlines a substantial role for Energy Systems in commercializing inventions. Thus, in receiving the royalties, Energy Systems does not appear to merely serve as a collection agent for DOE. Therefore, in our view, the royalties Energy Systems receives are not funds received by the government for its use. As a consequence, we believe they are not covered by the provisions of 31 U.S.C. 3302 (1982), which require that miscellaneous receipts from all sources received for the use of the government be deposited into the general fund of the Treasury.

Use of Royalties for Technology Transfer

Under Article 69, Energy Systems is allowed to use royalties for the following activities aimed at promoting technology transfer:

- Initiatives to meet technology-transfer needs of licensees or potential licensees, including production of sample materials for evaluation, and preparation of additional documentation to facilitate adoption of a given technology.
- Activities that increase the licensing potential of other waived inventions under the contract.
Contributions to nonprofit organizations which would enhance technology transfer.

It appears that none of the royalties used for these purposes can be considered to be funds received by the government for its use. Rather, the royalties will be used to further the purposes of Article 69 as part of the bargain between DOE and Energy Systems. Accordingly, we see no improper augmentation of DOE funds in these instances that violate the deposit requirement of 31 U.S.C. 3302.

We recognize, however, that the Article’s provisions may increase the technology-transfer activities Energy Systems performs in support of DOE’s research and development mission to a level exceeding that which could be carried out with appropriated funds. Thus, the Congress may wish to take these activities into account when determining the size of DOE’s appropriations. If so, the Congress could require DOE to (1) report the amount of royalties Energy Systems has received from its licensing activities under Article 69 and (2) estimate the amount of royalties expected to be used for technology-transfer activities during the upcoming fiscal year. Article 69 requires Energy Systems to keep records of its receipt and expenditures of royalties and to provide a summary report to DOE within 60 days following the end of each fiscal year. As of September 30, 1987, Energy Systems reported having received approximately $291,000 in royalty receipts and earned interest. Article 69 also authorizes the DOE contracting officer or the officer’s representatives to inspect Energy Systems’ books, records, and accounts at reasonable intervals.

Reimbursement of DOE Patenting Costs

Under Article 69, royalties may be used to reimburse DOE for certain patenting costs. According to DOE patent officials, this reimbursement will take place in cases where DOE has spent funds to obtain a patent on an invention that is subsequently waived to Energy Systems. In this regard, on November 23, 1987, DOE’s Oak Ridge Operations Office requested that Energy Systems remit to DOE $90,573 to cover what DOE had determined to be its patenting costs on waived inventions as of that date.

DOE patent officials stated that DOE has received reimbursement of patenting costs from contractors in the past, with the funds received being deposited in the Treasury. However, during the course of our review, DOE examined whether it could retain a portion of such funds and use them to obtain patents on other inventions. In this regard, a February 4,
1987, opinion prepared by a DOE attorney argued that DOE could retain reimbursements covering certain DOE patenting costs, in part, because they could be categorized as "refunds" to the account that funded the patenting expenditures. The legal opinion also expressed the view that language in the Energy and Water Development Appropriation Act for fiscal year 1987 allows DOE to retain money received from contractors as reimbursement for DOE patenting costs. The Energy and Water Development Appropriation Act for fiscal year 1988 contains similar language.

In our view, however, DOE lacks authority to retain any royalties it receives from Energy Systems as reimbursement for patenting costs. Such funds are not "refunds" to the account that funded the expenditures. Further, DOE's authority to retain funds under Title III of the Energy and Water Development Appropriation Act is not available to DOE in this situation since the provision applies only to miscellaneous revenues. Amounts recovered as adjustments to appropriations previously obligated and expended are not revenues. Accordingly, any royalties DOE receives as reimbursement for patenting costs should continue to be deposited into the Treasury as miscellaneous receipts. Our analysis of the arguments presented in the DOE legal opinion is discussed in greater detail in appendix II.

In June 1988, DOE's Assistant General Counsel for Patents told us that after considering the matter, DOE had decided to continue depositing reimbursements of DOE patenting costs into the Treasury.

### Reimbursement of Seed Money

Article 69 authorizes Energy Systems to incur patenting and licensing costs on waived inventions under the licensing program up to an amount of $200,000 per fiscal year through September 1989. These funds, which DOE refers to as "seed money," are intended to help Energy Systems promote the use of government inventions by paying for Energy Systems' patenting and licensing costs. However, the Article calls for Energy Systems to provide reimbursement of the seed money it has used after royalties from its licensing activities become self-sustaining. Article 69 calls for reimbursements to be made to the general operating fund of Energy Systems' contract with DOE. However, DOE's Assistant General Counsel for Patents told us that as of June 1988, DOE had not decided whether the reimbursements would be made available for Energy Systems to use in carrying out other contract activities or whether they would be deposited into the Treasury.
In our opinion, allowing Energy Systems to use the reimbursements to carry out other contract activities would result in an improper augmentation of DOE's appropriation. The use of funds for seed money is a proper expenditure of DOE's appropriation. If Energy Systems repays the funds to the general operating fund of the contract and DOE allows Energy Systems to use the reimbursements for other contract activities, it would constitute an unauthorized increase in the amount of funds available to DOE. To avoid an improper augmentation, DOE should deposit the reimbursements into the Treasury as miscellaneous receipts.

Royalties Exceeding 5 Percent of the Contract Budget

Article 69 also contains provisions governing how royalties will be used if they exceed 5 percent of Energy Systems' annual contract budget. It provides that 75 percent of such excess royalties will be paid into the Treasury, while the other 25 percent will be used for the same purposes as royalties that fall below the 5-percent level. As we stated in our earlier report, there is no augmentation of appropriations if royalties are paid into the Treasury as miscellaneous receipts, which is apparently how 75 percent of the royalties will be used. Augmentation issues relating to the remaining 25 percent of the royalties depend on how the royalties are used. Uses of royalties which raise augmentation questions have been discussed above.

Conclusions

Energy Systems' deposit of royalties into an Energy Systems-controlled account and its use of such royalties to carry out the technology-transfer activities authorized under Article 69 do not violate prohibitions on DOE's augmenting its appropriation. In our view, these activities are not covered by the provisions of 31 U.S.C. 3302, which require that miscellaneous receipts be deposited into the general fund of the Treasury.

However, augmentation problems do exist concerning two uses of royalties authorized under Article 69. In cases where royalties are used to reimburse DOE for (1) DOE patenting costs and (2) seed money provided to Energy Systems, DOE must deposit such royalties into the Treasury as miscellaneous receipts to avoid an improper augmentation. DOE plans to deposit reimbursements of DOE patenting costs into the Treasury, but DOE had not decided, at the conclusion of our review, what it would do with reimbursements of seed money.

Recommendation

We recommend that the Secretary of Energy direct the Oak Ridge Operations Office Manager to deposit into the U.S. Treasury all royalties
received under Article 69 that are used to provide reimbursement for seed money provided to Energy Systems.

**Matter for Consideration by the Congress**

As discussed above, we do not believe that the provisions of Article 69 allowing Energy Systems to use royalties to carry out technology-transfer activities violate prohibitions on DOE's augmenting its appropriation. We recognize, however, that the provisions may increase the amount of technology-transfer activities Energy Systems performs in support of DOE's mission. If the Congress wishes to take Energy Systems' use of royalties to perform technology-transfer activities into account when considering DOE's appropriations, it could require DOE to report on the amount of royalties received by Energy Systems and to estimate the extent to which royalties will be used for technology-transfer activities. The Congress could then consider whether it believes any adjustment in DOE's appropriation should be made in light of the availability of such royalties.

Our work on this assignment consisted primarily of reviewing the agreement between DOE and Energy Systems and pertinent laws and legal decisions. We also interviewed patent officials located at DOE's headquarters in Washington, D.C., and at its Oak Ridge, Tennessee, Operations Office. Our work was performed between December 1987 and June 1988 in accordance with generally accepted government auditing standards.

We have discussed the factual information in this report with DOE officials and have included their comments where appropriate. However, as requested, we did not obtain official agency comments on a draft of this report. In addition, as agreed with your office, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of Energy and other interested parties.
This work was performed under the direction of Keith O. Fultz, Senior Associate Director. Major contributors are listed in appendix III.

Sincerely yours,

J. Dexter Peach

J. Dexter Peach
Assistant Comptroller General
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Abbreviations

DOE Department of Energy
GAO General Accounting Office
Appendix I
Allowable Uses of Royalties

Under section (g) of Article 69, Energy Systems may use royalties for the following purposes, in priority order:

- Payment of federal income taxes, including interest and penalties, resulting from its activities under Article 69.
- Reimbursement of DOE patent filing and prosecution costs. Under paragraph (c)(3) of Article 69, Energy Systems agreed, upon written request of the contracting officer, to reimburse DOE for reasonable patent filing and prosecution costs DOE incurred on inventions which had been waived to Energy Systems.
- Royalty revenue sharing with Energy Systems' employees. Under paragraph (f) of Article 69, Energy Systems is to establish a policy and implementing procedures for sharing royalty revenues with the creators of licensed intellectual property. The policy and procedures have been approved by DOE.
- Payment of patenting and licensing costs incurred by Energy Systems after royalty revenues from Energy Systems' licensing activities become self-sustaining.
- Reimbursement of patenting and licensing costs incurred by Energy Systems before royalty revenues become self-sustaining. Under paragraph (c)(1) of Article 69, Energy Systems is authorized to incur patenting and licensing costs on waived inventions not to exceed $200,000 per fiscal year through September 1989.
- Initiatives to meet technology transfer needs of licensees or potential licensees, including (1) production of sample materials for evaluation, (2) preparation of additional documentation to facilitate adoption of a given technology, (3) applied engineering to accomplish packaging or producibility, and (4) product testing.
- Activities that increase the licensing potential of other waived inventions under the contract.
- Contributions not to exceed 20 percent of the gross royalty revenues per year to nonprofit organizations when the contributions would enhance technology transfer.

Section (g) also specifies that additional uses of royalties are to be subject to the contracting officer's prior approval.

Further, under paragraph (h) of Article 69, if royalties actually received by Energy Systems in any fiscal year exceed 5 percent of the annual contract budget, 75 percent of the excess royalties is to be paid into the U.S. Treasury and the remaining 25 percent is to be used for the purposes described above.
Legal Analysis Pertaining to Reimbursement of DOE Patenting Costs

Pursuant to section (g)(2) of Article 69, royalties may be used to reimburse DOE for patent filing and prosecution costs. According to DOE patent officials, this reimbursement will take place in cases where DOE has spent funds to obtain a patent on an invention which is subsequently waived to Energy Systems.

DOE patent officials told us that DOE has received reimbursement from contractors of patent filing and prosecution costs in the past, with the funds received being deposited in the Treasury. However, during the course of our review, DOE examined whether it could retain a portion of such funds and use them to obtain patents on other inventions rather than depositing them in the Treasury.

A February 4, 1987, opinion prepared by a DOE attorney concluded that certain reimbursements of DOE patenting costs could be retained by DOE. The attorney’s view was that reimbursements for outside attorneys’ fees or fees originally paid by DOE for the preparation and prosecution of patent applications, or for “novelty” searches, as well as for fees paid to the U.S. Patent and Trademark Office, may be retained by DOE. The attorney argued that the receipts may be categorized as “refunds” to the specific account that funded the patent expenditures, after title is waived, since it may be considered that the expenditures directly benefitted the DOE contractor and not the government. Therefore, according to his argument, the expenditures might be viewed retroactively as an authorized advance of funds, subject to subsequent adjustment in the nature of a refund. For support, the opinion referred to our views regarding refunds, principally 23 Comp. Gen. 652 (1944).

An agency may retain receipts which qualify as “refunds to appropriations.” Refunds have been defined as “repayments for excess payments and are to be credited to the appropriation or fund accounts from which the excess payments were made. Refunds must be directly related to previously recorded expenditures and are reductions of such expenditures.” Refunds have also been defined as representing “amounts collected from outside sources for payments made in error, overpayments, or adjustments for previous amounts disbursed.” (See 65 Comp. Gen. 600 (1986).)


2Treasury Department-GAO Joint Regulation No. 1, reprinted as Appendix B to Title VII of the Policy and Procedures Manual.
Appendix II
Legal Analysis Pertaining to Reimbursement of DOE Patenting Costs

In 23 Comp. Gen. 652, a state agency and the Department of Agriculture’s Soil Conservation Service entered into a cooperative agreement under which the expenses were to be shared, but the state agency was unable to pay its share of the money needed until after the work was done. We held that the amount paid by the Soil Conservation Service on behalf of the state agency, when repaid by the agency, could be credited to the appropriation. This amount was regarded as a tentative charge against the appropriation and not as an expenditure. We noted that to do otherwise would have depleted the appropriation, not only for the federal share, but also for the state share, which would have defeated the statutory provisions for cooperative work.

There is no improper augmentation of agency appropriations when there are adjustments in disbursements if the adjustments serve to correct the amount of the obligation that an agency bargained for under an agreement. (See 65 Comp. Gen. 600 and cases cited therein.) However, in the present case, the disbursements are to be authorized expenditures made for DOE patent applications. The repayment of these expenditures is not an adjustment that corrects earlier estimates or calculations that were proved to be mistaken. The disbursements are to be used for the purposes for which they were made available under the appropriation. There is no authority to repay an appropriation under these circumstances and in effect create a revolving fund, without specific authority. This is different from the circumstances in 23 Comp. Gen. 652, where advances were made beyond those properly available and if not repaid to the appropriation, would have defeated the purpose of the appropriation by making less money available for allowable purposes.

The DOE attorney’s opinion that DOE may retain moneys received from contractors as reimbursement for DOE’s patent application costs is based also on DOE’s statutory authority to retain moneys. Under Title III of the Energy and Water Development Appropriation Act for fiscal year 1987, P.L. No. 99-591, 100 Stat. 3341-204, 207, DOE’s departmental appropriation for administration provides that miscellaneous revenues may be retained and used for operating expenses within this account, but that the appropriation shall be reduced by the amount of miscellaneous revenues received. As noted in our 1986 report, which discussed a similar provision in the fiscal year 1986 appropriation act, this authority is not available to DOE in the circumstances under discussion since the provision applies only to “miscellaneous revenues.” Amounts recovered as adjustments to appropriations previously obligated and expended are not revenues.
For the reasons stated, DOE may not retain any portion of the funds received pursuant to paragraph (g)(2) of Article 69. These funds are to be deposited into the Treasury as miscellaneous receipts.
Appendix III

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