ENERGY MANAGEMENT

DOE/Martin Marietta Earnings Limitation Agreement
July 6, 1987

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

Dear Mr. Chairman:

On March 5, 1987, we issued a report to you concerning affiliate relationships of Martin Marietta Energy Systems, the operating contractor for the Department of Energy's (DOE) Oak Ridge National Laboratory and three other facilities. In that report, we discussed concerns of organizational conflict of interest relating to Energy Systems' transferring a DOE-developed technology to an affiliate known as the Tennessee Innovation Center for commercialization. We reported that, in our opinion, Energy Systems gave its affiliate an unfair competitive advantage by giving it information on the technology while withholding such information from an unaffiliated firm seeking the technology. This action was inconsistent with conflict-of-interest terms in its contract with DOE.

In early 1986, while our review was being conducted, DOE and Martin Marietta Corporation (which owns both Energy Systems and the Innovation Center) recognized the existence of organizational conflict-of-interest concerns and began negotiating an agreement to limit Martin Marietta's return from certain Innovation Center investments. The agreement was executed on October 30, 1986. As you requested, we have analyzed this agreement to determine whether it will achieve its objective of limiting the return Martin Marietta can receive from Innovation Center investments in companies that are commercializing DOE-developed technology or companies in which Energy Systems personnel are involved as consultants, investors, or employees.

In summary, we believe that the agreement may not accomplish its intended purpose because


2The Innovation Center was established to help fulfill a promise made by Martin Marietta Corporation, in its proposal to operate the Oak Ridge facilities, to invest up to 10 percent of its contract award fee to promote economic development in the Oak Ridge area. However, the establishment and operations of the Innovation Center were not incorporated into the operating contract.
- Martin Marietta, in certain circumstances, could retain substantial returns on its investment—through the Innovation Center—in companies involved in commercializing DOE technologies and
- it lacks enforcement and effective monitoring provisions.

To obtain information on how the earnings limitation agreement will work, we interviewed officials involved in negotiating and reviewing the agreement from DOE's Oak Ridge Operations Office, Martin Marietta Corporation, Energy Systems, and the Innovation Center. We also reviewed all available documents pertaining to the agreement. Appendix I contains a detailed discussion of our scope and methodology.

Background

The Tennessee Innovation Center, a wholly-owned subsidiary of Martin Marietta, is a for-profit venture capital firm that invests in new or existing businesses, providing them with financial, business, and clerical assistance until they become economically viable. These new businesses, called "venture companies," generally give the Innovation Center (and therefore Martin Marietta) an ownership interest in return for its assistance. The venture companies develop and commercialize new technologies. As of April 1987, the Center had invested in eight venture companies, four of which are developing technologies that originated from DOE's Oak Ridge National Laboratory.

Energy Systems, as part of its responsibilities as the laboratory's operator, manages the "transfer" of technology developed with DOE funds to the private sector for commercialization. Energy Systems selects the individuals or firms to which the technology is given. Organizational conflict-of-interest questions may arise if the firm selected to commercialize a technology is affiliated with Energy Systems.\(^3\) The Innovation Center is an Energy Systems affiliate which, through its venture companies, has obtained several DOE technologies and has therefore come under scrutiny for potential organizational conflict of interest.

Because Martin Marietta owns and has the power to control both Energy Systems and the Innovation Center, the potential exists for it to financially benefit from an Energy Systems decision to give technology to an Innovation Center company. This may create an incentive for Energy

\(^3\)DOE acquisition regulations define an organizational conflict of interest as a relationship or situation whereby a contractor has past, present, or currently planned interests that relate to work to be performed under a DOE contract that may result in the contractor or its affiliates being given an unfair competitive advantage. This has been incorporated into the DOE/Energy Systems contract by article 61.
Systems to give its affiliate an advantage over other firms in transferring DOE technologies, which, when commercialized, could create a sizable income for Martin Marietta.

**Terms of the Agreement**

The agreement is designed to limit the return Martin Marietta can receive on investments the Innovation Center makes in certain venture companies that may benefit from the affiliate relationship between Energy Systems and the Innovation Center (referred to in the agreement as limited venture companies). The agreement defines venture companies subject to the agreement as those that (1) receive exclusive or the first and only nonexclusive licenses from Energy Systems to commercialize DOE-developed technologies, (2) employ Energy Systems employees, (3) receive significant consulting services from Energy Systems employees, or (4) are owned 5 percent or more by Energy Systems personnel.

These four circumstances could lead to the companies obtaining an unfair advantage from Energy Systems over unaffiliated firms and could therefore be perceived as an organizational conflict of interest. According to DOE and Martin Marietta officials, the limitation is intended to reduce incentives for favoritism and avoid perceptions of organizational conflict of interest. In particular, DOE officials said the earnings limitation agreement is designed to address the concerns that would arise if one of the Innovation Center's limited companies marketed a tremendously successful new product, such as the Xerox Corporation did with its photocopy machine.

The Innovation Center can also invest in other venture companies (non-limited companies) that are not covered by the four limiting circumstances set forth in the agreement. Martin Marietta's return on investment in such companies is not limited by the agreement. The agreement also places no restrictions on the nature of such investments.

The agreement establishes a ceiling on Martin Marietta's return on investment from limited venture companies that DOE and Martin Marietta officials consider to be "reasonable." Returns beyond the ceiling are considered excess and must be distributed to beneficiaries according to

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4DOE patent policies allow Energy Systems to obtain title to many inventions developed at the facilities it operates. After obtaining a patent on the invention, Energy Systems can issue licenses to firms wishing to commercialize the invention. Licenses can be issued on an exclusive or nonexclusive basis.
the terms of the agreement. The limitation is reached when Martin Marietta has recovered each of the following:

- its total investment in all limited venture companies,
- its total investment in nonlimited venture companies that has not been recovered in the form of returns from such companies,
- an annual percentage, equal to the cost-of-money rate specified by the Secretary of the Treasury, of the total Martin Marietta investment, averaged over the year, and
- an additional 8 percent (representing a reasonable profit) of the investment in limited venture companies.

The agreement requires Martin Marietta to report annually to DOE, beginning March 31, 1987, on its total investment in, and return on investment from, the Innovation Center and its venture companies. Any return exceeding the limitation is to be distributed to beneficiaries selected by Martin Marietta according to criteria in the agreement. Appendix II describes the terms of the agreement in greater detail.

Analysis of the Agreement

Because the agreement is new and Martin Marietta had not yet submitted its first annual report at the conclusion of our review, we cannot determine precisely how the agreement will work in practice, or how DOE will enforce or effectively monitor it. While, as described earlier, the agreement is designed to limit the return Martin Marietta can receive from limited venture companies in certain situations, our analysis indicates that the agreement may not prevent Martin Marietta from retaining substantial returns from investments in the limited companies.

Avoiding the Limitation

Martin Marietta could retain excess earnings from limited companies indefinitely within the context of the agreement by

- increasing investments in nonlimited companies to offset returns from successful limited companies,
- selling ownership in successful companies after the agreement terminates, and

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5Thus, Martin Marietta may use excess returns from successful limited companies to offset any "deficiency" (unrecovered investment) in nonlimited companies. However, deficiencies in limited companies are not offset by excess returns from nonlimited companies.

6Profit for nonlimited companies is not included in the amount that must be recovered before the limitation is reached.
• using certain nonequity forms of investment, such as warrants (options to purchase stock), to avoid the limits established in the agreement.

Offset of Limited Earnings

The agreement is intended to mitigate the potential for organizational conflict of interest when the Innovation Center's venture companies have a connection to Energy Systems, by removing financial incentives for Energy Systems to give the limited companies favored treatment over nonaffiliated firms. However, the agreement is structured so that investments in both limited and nonlimited companies must be recovered before the limitation is reached. Therefore, Martin Marietta may be able to realize a substantial return on investment from limited companies but would not be required to distribute excess earnings as long as its investment in nonlimited companies had not been recovered. As a result, Martin Marietta may have an incentive to avoid the limitation by increasing its investments in nonlimited companies to offset its returns from successful limited companies.

According to DOE officials, the agreement is intended to allow Martin Marietta to spread the risk of unsuccessful investments over all Innovation Center venture companies, so that it would not have to give away earnings from one company while still losing money on others. Martin Marietta's Director of Strategic Planning said that all the Innovation Center venture companies are benefiting the Oak Ridge economy, whether they are limited or not. The agreement, however, does not restrict investment in nonlimited companies and does not require that Innovation Center companies benefit the Oak Ridge community. (As of April 1987, two of the Innovation Center's eight venture companies were located outside Oak Ridge.)

Limitation Ends With Cessation of the Operating Contract

The agreement and its limitations end if Energy Systems ceases to be the Oak Ridge operating contractor, which could occur as early as September 1989 when the first 5-year contract period expires. At that time, Martin Marietta will distribute any additional recognized return it has received in excess of the limitation. However, any return from limited companies after that point will not be subject to limitation. Because Martin Marietta could avoid recognizing gains from increased market value of its ownership equity until the equity was sold, Martin Marietta could bypass the limitation on its return by retaining its ownership in successful venture companies until after the agreement terminates.
The Innovation Center's Chairman told us that Martin Marietta intends to sell its ownership in the Innovation Center companies as soon as they become economically viable and Martin Marietta can recover its investment. However, there is no requirement to do so even if a venture company’s equity increases in value. Martin Marietta may be able to realize a sizable profit by retaining ownership in successful limited companies until the agreement is no longer in effect.

While it may be unlikely that one of the limited venture companies will develop a product that is as successful as a Xerox copier, in the long term, one or more companies may become successful to the extent that the value of Martin Marietta's ownership interest in them may increase substantially. If this occurs, the increased value may not be recognized under the terms of the agreement until Martin Marietta sells its equity in the companies—an event that may not take place until after the agreement is terminated.

Nonequity Investment

The agreement applies only to companies in which the Innovation Center acquires an ownership interest; it does not address nonequity types of investments, such as warrants, that do not normally involve purchase of ownership. Warrants, for example, are options to purchase stock at a certain price that can be publicly traded in the same manner as stock. As the value of the company increases, so does the value of the warrants. The owner of the warrants can then sell them at a profit without exercising the options and becoming an owner in the company. If the Innovation Center decides to purchase warrants in a venture company instead of purchasing equity, the company would not be covered by the language in the agreement. Thus, the Center could potentially profit from selling the warrants, but its return from such sale would not be subject to limitation, even though the company may otherwise meet the definition of a limited company, that is, one that obtained technology from Oak Ridge or used Energy Systems personnel in some capacity.

DOE and Martin Marietta officials did not contemplate this type of investment by the Innovation Center when the agreement was written. However, they said that the agreement is intended to cover such mechanisms in that they produce return on investment to Martin Marietta.

\footnote{For example, this may occur if a company's market value exceeds the company's book value. The company's market value may, however, not be known until the equity is sold (unless the company's stock is publicly traded).}
through the Innovation Center, even though the agreement does not specifically address them. Nevertheless, their intentions may be difficult to enforce as long as the agreement is silent on the issue of nonequity investments. (Because we did not have access to the Innovation Center's financial data, we do not know whether it has made any nonequity investments.)

Lack of Enforcement and Effective Monitoring Provisions

The agreement does not specify how its terms will be enforced. Martin Marietta is responsible for notifying DOE, through an annual report, which companies the Innovation Center has invested in, whether they fall within the circumstances for limitation, and whether Martin Marietta's return on investment from the companies has exceeded the limitation amount. The excess return would then be distributed to beneficiaries. However, the agreement does not specify what action DOE may take or what sanctions will be imposed if Martin Marietta does not abide by its terms (e.g., if it does not submit an annual report, if it submits incomplete or erroneous information, or if it does not make the required distribution of funds).

Martin Marietta's Director of Strategic Planning told us that in the event Martin Marietta does not abide by the terms of the agreement, DOE could take actions affecting the Oak Ridge operating contract award fee to assure compliance and that enforcement procedures need not be specified in the agreement. According to the DOE contracting officer responsible for the Oak Ridge operating contract, however, sanctions through the operating contract could not be imposed because the agreement is not part of the contract. Several DOE officials, including the contracting officer, told us that they are relying on Martin Marietta's integrity to abide by the agreement. Both DOE and Martin Marietta officials said they believed the agreement is legally enforceable and that DOE could take Martin Marietta to court for noncompliance. In our view, legal action could be costly and time consuming for both parties and would not be as effective as imposing clearly defined sanctions.

The wording of the agreement is also unclear concerning the scope of a certified public accountant (CPA) review of the annual report that will be submitted to DOE. Martin Marietta's Controller told us that the CPA firm would provide an opinion on the completeness and accuracy of the annual report based on the requirements stated in the agreement. However, because they are not specifically addressed in the agreement, certain transactions, such as nonequity investments, could be omitted from the annual report without comment by the CPA auditor. As a result, we
believe a CPA opinion may not provide DOE with sufficient information to assure that Martin Marietta is fully reporting its return on limited venture company investments.

Further, the agreement is silent as to whether DOE will have access to financial data from the Innovation Center and the venture companies to verify the report and assure that Martin Marietta is complying with the agreement. The Innovation Center’s Chairman said DOE would not have access to the records, while Martin Marietta’s Controller said he would probably give DOE access if asked to do so. However, this right is not guaranteed in the agreement.8

Conclusions

DOE and Martin Marietta have recognized concerns about the appearance of organizational conflict of interest relating to the Tennessee Innovation Center. After 6 months of negotiation, they established the earnings limitation agreement to address these concerns by limiting Martin Marietta’s return from certain Innovation Center companies in selected circumstances, as defined in the agreement.

On the basis of our analysis of the agreement and our discussions with DOE and Martin Marietta officials on how it will be implemented, we believe the agreement does not ensure that the return which Martin Marietta can receive from investments in certain venture companies is limited. Therefore, it may not reduce Energy Systems’ incentives to favor the Innovation Center and eliminate perceptions of conflict of interest. We are also concerned that the agreement does not (1) give DOE access to the financial information it needs to determine that the annual report submitted by Martin Marietta is accurate and complete and (2) specify the sanctions that may be imposed if Martin Marietta does not comply with the terms of the agreement.

We cannot say with certainty that we have identified all the agreement’s potential problems because the agreement is new and Martin Marietta had not yet submitted an annual report at the time our review ended. Other problems may not become evident until after the agreement is fully implemented. However, we believe that DOE should initiate action to correct the potential problems that we have identified. Further, we believe that DOE should take actions recommended in our earlier report.

8In addition to these concerns, in appendix III we discuss other aspects of the agreement that are unclear, where the wording of the agreement is not consistent with explanations provided to us by DOE and Martin Marietta officials on how it will work, and their interpretations of the agreement’s provisions.
to strengthen its own oversight of Energy Systems’ compliance with conflict-of-interest requirements. This would include carrying out periodic reviews of Energy Systems to ensure that business contacts with affiliates (including the Innovation Center and its venture companies) and potential conflict-of-interest situations are identified and reported to DOE.

Recommendations

We recommend that the Secretary of Energy direct the Oak Ridge Operations Office Manager to initiate discussions with Martin Marietta for the purpose of negotiating amendments to the agreement to

- strengthen its controls over Martin Marietta’s ability to profit from certain Innovation Center investments,
- provide DOE access to information needed to ensure that the annual reports on the limitation agreement are accurate, and
- specify the sanctions that could be imposed if Martin Marietta does not comply with the terms of the agreement.

We discussed the factual information in this report with agency officials, who agreed that it was accurate. However, as you requested, we did not obtain agency comments on a draft of this report. In addition, as arranged with your office, unless you publicly announce its contents earlier, 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 general direction of Flora H. Milans, Associate Director. Major contributors are listed in appendix V.

Sincerely yours,

J. Dexter Peach
Assistant Comptroller General
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Appendix I

Background, Objectives, Scope, and Methodology

Background

DOE's Oak Ridge Operations Office is one of eight regional offices that oversee DOE's research and production facilities throughout the country. Among the facilities under the Oak Ridge Operations Office's supervision are the Oak Ridge National Laboratory (ORNL), an energy research and development facility conducting work in areas such as fission and fusion energy, physical sciences, biomedical and environmental sciences, fossil fuels, energy conservation, and renewable energy; two gaseous diffusion plants for uranium enrichment; and a nuclear materials and weapon components production plant.¹

In April 1983 DOE issued a request for proposals to operate the Oak Ridge facilities. Union Carbide Corporation had been the operating contractor for 40 years. In the request for proposals, DOE indicated that the contractor selected to operate the facilities would be expected to transfer DOE-developed technology locally, thereby helping the Oak Ridge community broaden its industrial tax base and decrease its financial dependency on the federal government. (Technology transfer is the process whereby new technologies developed through research are transferred to companies in the private sector for commercial development.)

In December 1983 DOE selected Martin Marietta Corporation as the new management and operating contractor for the Oak Ridge facilities. Martin Marietta established a wholly-owned subsidiary, Martin Marietta Energy Systems, for the sole purpose of operating the facilities. Energy Systems took over as management and operating contractor on April 1, 1984. DOE reimburses Energy Systems the cost of operating and maintaining the facilities and pays a fixed annual fee plus an award fee that varies according to its performance each year. DOE uses the technology transfer effort as one criterion to measure Energy Systems' performance.

¹One of the gaseous diffusion plants, located in Oak Ridge, Tennessee, has been on standby status since 1985. The other is located in Paducah, Kentucky. Y-12, the nuclear materials and weapon components plant, is located in Oak Ridge, Tennessee.
Martin Marietta's Commitment to Invest in the Oak Ridge Economy

In its contract proposal, Martin Marietta made a commitment to invest up to 10 percent of its annual award fee from operating the Oak Ridge facilities in new or expanding Oak Ridge businesses. The commitment was made to benefit the area economically and reduce local dependence on DOE. The award fee was $11,223,100 in fiscal year 1985.

The Tennessee Innovation Center was established in September 1984 to fulfill Martin Marietta's commitment in its proposal. The Center is a for-profit corporation that, in return for an ownership interest, helps new businesses organize; providing them with office and laboratory space, and legal, financial, accounting, marketing, and other assistance. The companies are generally involved in developing and commercializing technologies, including some originating at the DOE Oak Ridge facilities. The companies may obtain licenses from Energy Systems to commercialize inventions developed at the DOE facilities to which Energy Systems has secured legal ownership. They may also engage in activities not related to DOE-funded technologies. As of February 1987, the Innovation Center had invested in eight of these developing businesses (venture companies), four of which are developing DOE technologies.

Concerns Over Conflict of Interest

Since both Energy Systems and the Tennessee Innovation Center are wholly owned by Martin Marietta Corporation, their relationship has raised concerns about potential conflicts of interest. In March 1987, as requested by the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, we reported on Energy Systems' use of the Innovation Center to assist in commercializing a technology developed at the ORNL under Energy Systems' technology transfer program.

We concluded that Energy Systems' activities relating to transfer of the technology, as well as certain other aspects of Energy Systems' dealings with the Innovation Center, were inconsistent with the organizational conflict-of-interest provisions contained in its contract with DOE and with DOE regulations. The contract prohibits Energy Systems or its affiliates from obtaining an unfair competitive advantage as a result of performance of the contract (such as implementing the technology transfer program). DOE regulations state that businesses are affiliated when one controls or has the power to control another, or when a third party controls or has the power to control both (as Martin Marietta has the power...

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Appendix I
Background, Objectives, Scope,
and Methodology

to control both Energy Systems and the Innovation Center). In our opinion, Energy Systems gave its affiliate, the Tennessee Innovation Center, an unfair competitive advantage by giving it information on a technology while withholding such information from another unaffiliated company interested in obtaining the same technology.

While we were conducting our earlier review, DOE officials in Oak Ridge became concerned with the Energy Systems/Tennessee Innovation Center relationship and named a task force to study alternatives to mitigate what they viewed as an appearance of conflict of interest. Neither DOE nor Martin Marietta believe that an actual conflict of interest exists in the Energy Systems/Tennessee Innovation Center relationship. However, they recognize the potential for the perception of conflict of interest if Martin Marietta could benefit from such relationship by making windfall profits from companies that receive technology conceived with government funds at the Oak Ridge facilities.

On the basis of the task force’s recommendations, Martin Marietta agreed to address DOE’s concerns by establishing an agreement to limit its return on investment in certain Tennessee Innovation Center companies in selected circumstances. DOE and Martin Marietta finalized the agreement on October 30, 1986. The provisions of the agreement are discussed in appendix II.

Objectives, Scope, and Methodology

This assignment originated as part of the work performed on our previous review of Energy Systems’ affiliate relationships requested by the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce. Because the agreement was still in draft form when we completed the audit work on that assignment, the Chairman requested that we review the agreement when it was finalized.

Our objective in this assignment was to perform an in-depth analysis of the agreement to determine whether it will accomplish its objective of limiting Martin Marietta’s earnings from the Innovation Center’s venture companies. We performed our work at DOE’s Oak Ridge Operations Office, Energy Systems’ facilities in Oak Ridge, Tennessee, and at Martin Marietta Corporation offices in Bethesda and Baltimore, Maryland.
Appendix I
Background, Objectives, Scope, and Methodology

To accomplish our objective, we obtained and reviewed all drafts and the final agreement, the DOE/Energy Systems contract, DOE organizational conflict-of-interest regulations, Energy Systems' conflict-of-interest procedures, DOE's request for proposals relating to the Oak Ridge operating contract, Martin Marietta's contract proposal, and other DOE and Energy Systems documents and files. We also reviewed reports prepared by an independent accounting firm that reviewed the agreement for DOE and the minutes of a December 1986 meeting involving DOE, Energy Systems, and Innovation Center representatives.

We interviewed DOE and Energy Systems officials in Oak Ridge, including DOE's Director of the Procurement and Contracts Division, Chief of the Systems and Cost Analysis Branch, and Chief Patent Counsel; and Energy Systems' Vice President for Technology Applications and General Patent Counsel. We also interviewed Martin Marietta's Controller and Director of Strategic Planning in Bethesda, Maryland, and the Chairman of the Innovation Center's Board of Directors in Baltimore, Maryland.

We discussed the factual information in the report with DOE officials in Oak Ridge. However, as requested by the Chairman, we did not request DOE or Martin Marietta officials to formally review and comment on a draft of this report.

Our review was conducted in accordance with generally accepted government auditing standards between November 1986 and March 1987.
Purpose of Earnings Limitation Agreement

The earnings limitation agreement is intended to limit the return Martin Marietta may receive from its investment in the Innovation Center and its venture companies in selected circumstances. The limitation, applied to earnings from venture companies that obtain DOE technology from Energy Systems or are assisted by Energy Systems personnel, is intended, according to DOE officials, to prohibit Martin Marietta from making a windfall profit while allowing the company to continue investing in local Oak Ridge businesses.

Agreement Designed to Mitigate Conflict-Of-Interest Concerns

Both DOE and Martin Marietta officials believe that potential conflict-of-interest concerns involving the Innovation Center relate primarily to the possibility that Martin Marietta could make large financial gains from venture companies commercializing DOE technology. The officials believe that the agreement adequately mitigates such concerns by ensuring that Martin Marietta’s return from the venture companies is limited to a reasonable amount.

According to DOE officials, the Innovation Center’s involvement in commercializing technology developed under the Oak Ridge contract might be perceived as unfair, especially if one of the venture companies becomes extremely successful and produces excessive or “unconscionable” profits for Martin Marietta. The officials told us that the agreement mitigates this potential appearance of unfairness by preventing Martin Marietta from making excessive profits if any of the limited venture companies become successful.

Martin Marietta officials also said the Energy Systems/Innovation Center relationship could create conflict-of-interest concerns if Martin Marietta received an unfair or exorbitant profit from its investment in the limited venture companies. They said that, by limiting Martin Marietta’s earnings to a reasonable amount, the agreement assures that Martin Marietta will not be able to unfairly benefit from Energy Systems decisions in the technology transfer program.
Appendix II
Purpose of Earnings Limitation Agreement

Agreement Limits
Martin Marietta’s Return From
Innovation Center Companies

The agreement limits Martin Marietta’s return on investment from the Innovation Center’s venture companies in certain circumstances that DOE believes could create the appearance of conflict of interest. The agreement identifies the circumstances that will be subject to the limitation, establishes a maximum level of return to Martin Marietta from the companies under these circumstances, and requires Martin Marietta to donate any earnings exceeding the allowable level to a public organization to use in developing DOE technologies.

Circumstances Subject to the Limitation

In examining conflict-of-interest concerns involving the Innovation Center, DOE identified four circumstances that it believed might cause the public to think that Innovation Center companies had an unfair advantage over other companies in commercializing DOE technology, according to DOE officials. The circumstances under which the earnings limitation will be applied are as follows:

- An Innovation Center company has received an exclusive license\(^1\) from Energy Systems for technology developed at DOE’s facilities.
- An Innovation Center company has the first and only nonexclusive license for DOE technology.
- An Innovation Center company has obtained significant technical consulting services from an Energy Systems employee.
- An Energy Systems employee is employed by or owns at least 5-percent interest in an Innovation Center company.

Under the terms of the agreement, Martin Marietta’s earnings will be limited only during the time that these circumstances exist. DOE and Martin Marietta officials said they will meet annually to review the circumstances related to each company. According to the officials, DOE will make the final determination as to which companies will be subject to the limitation, except that, under the agreement, a limitation will automatically be removed from companies having the only nonexclusive license for a DOE technology, whenever Energy Systems grants additional licenses to other companies. The annual meetings will give Martin Marietta an opportunity to discuss with DOE the circumstances of individual companies that Martin Marietta believes have changed to the extent that the companies could no longer be perceived as having an unfair advantage.

\(^1\) An exclusive license allows a firm or individual the sole right under a patent to commercialize an invention. Nonexclusive licenses may allow more than one firm or individual the right to commercialize an invention.
The agreement allows Martin Marietta to make an unlimited return from its investment in Innovation Center venture companies that are not using DOE technology or have not received assistance from Energy Systems' personnel (nonlimited companies).

Martin Marietta’s return on investment from the venture companies is determined by either cash receipt to Martin Marietta (cost method) or the equity method of accounting applied in accordance with generally accepted accounting principles. These principles require that the equity method be used where the parent company exercises significant influence over the policies of the subsidiary. Significant influence is normally presumed if a parent company has at least 20-percent ownership interest. Under the equity method, a parent company’s consolidated net income includes its proportionate share of the subsidiary’s net income. The cost method, on the other hand, must normally be used where the parent company’s ownership interest is less than 20 percent. Under this method, the parent company’s reported earnings from the subsidiary represent dividends received from the subsidiary.

Determination of Allowable Return

Martin Marietta’s earnings from the companies subject to the agreement are limited to an amount equal to the total investment in the Innovation Center and all its venture companies (limited and nonlimited) plus the average cost-of-money for that investment, defined as the annual average of the cost-of-money rates specified by the Secretary of the Treasury applied to the total average Martin Marietta investment. The cost-of-money amount is compounded annually. In addition, Martin Marietta is allowed to receive an additional 8-percent return (compounded annually) on its investment in the limited companies, which represents a reasonable return, according to DOE and Martin Marietta officials.

The agreement defines Martin Marietta’s investment as all cash disbursed to either the Innovation Center or its venture companies, and all direct expenditures or allocations of corporate central activities in support of the Innovation Center. Martin Marietta’s investment in the Innovation Center that is not used to purchase equity ownership in the venture companies (i.e., working capital and central support activities) will be allocated among the individual companies using the ratio of the

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2The agreement also states that at the end of each year the balance of funds transferred from Martin Marietta to the Innovation Center shall not normally exceed one-fourth of that year’s actual expenditures by the Center.
Center’s equity investment in each company to its total equity investments in all of the companies.

DOE officials explained that they allowed Martin Marietta to include as investment all of its costs associated with the Innovation Center or the venture companies, as well as funds used to purchase equity. They agreed to allow Martin Marietta to recover all of its costs because of the high risks it is taking in assisting new companies that may have extremely high failure rates. Martin Marietta’s Director of Strategic Planning stated that Martin Marietta is allowed to recover all costs associated with the Innovation Center because the Center operates solely for the venture companies’ benefit.

The task force that developed the agreement arbitrarily selected 8 percent above the annual percentage cost-of-money as a reasonable rate of return under the agreement, DOE officials said. They also said this rate is less than Martin Marietta’s overall annual corporate rate of return and is reasonable when compared with the risk element involved in the investments. The officials agreed that the return rate should be compounded annually.

DOE officials said the task force believed the allowable earnings rate is reasonable and will mitigate any perceptions of conflict of interest without discouraging Martin Marietta’s continued investments in companies obtaining Oak Ridge technology.

Limitation Applies to Return From Venture Companies in the Aggregate

The agreement considers Martin Marietta’s investment in all the Innovation Center companies to determine when the limitation is reached. The investment in all limited companies combined (or “in the aggregate”) must be recovered (or offset) through earnings from limited companies. Excess earnings from limited companies must then be applied to unrecovered investment in nonlimited companies (offsetting any deficiency) before the limitation is reached. However, if the aggregate nonlimited companies recover more than the investment in the nonlimited category, the excess earnings are not applied to unrecovered investment in limited companies. Tables II.1 and II.2 present hypothetical examples to illustrate in a simplified manner how this “offset” works. These examples are not intended to reflect actual Martin Marietta returns from the venture companies.
Appendix II
Purpose of Earnings Limitation Agreement

Table II.1: Excess Returns From Limited Companies Offset Unrecovered Investment in Nonlimited Companies

<table>
<thead>
<tr>
<th>Limited</th>
<th>Investment</th>
<th>Return</th>
<th>Excess/deficit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>40,000</td>
<td>100,000</td>
<td>+ 60,000</td>
<td>+ 30,000</td>
</tr>
<tr>
<td>Company B</td>
<td>60,000</td>
<td>30,000</td>
<td>- 30,000</td>
<td></td>
</tr>
<tr>
<td>Nonlimited</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company C</td>
<td>00,000</td>
<td>20,000</td>
<td>- 60,000</td>
<td>- 30,000</td>
</tr>
<tr>
<td>Company D</td>
<td>100,000</td>
<td>40,000</td>
<td>- 60,000</td>
<td>- 120,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280,000</strong></td>
<td><strong>190,000</strong></td>
<td></td>
<td><strong>90,000</strong></td>
</tr>
</tbody>
</table>

Amount still to be recovered 90,000
Earnings in excess of limitation 0

*aExcess $30,000 return in limited category is used to offset $120,000 unrecovered investment in nonlimited category.

Table II.2: Excess Returns From Nonlimited Companies Do Not Offset Unrecovered Investment in Limited Companies

<table>
<thead>
<tr>
<th>Limited</th>
<th>Investment</th>
<th>Return</th>
<th>Excess/deficit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>40,000</td>
<td>20,000</td>
<td>- 20,000</td>
<td>- 40,000</td>
</tr>
<tr>
<td>Company B</td>
<td>60,000</td>
<td>10,000</td>
<td>- 20,000</td>
<td></td>
</tr>
<tr>
<td>Nonlimited</td>
<td></td>
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</tr>
<tr>
<td>Company C</td>
<td>80,000</td>
<td>200,000</td>
<td>+ 120,000</td>
<td>+ 90,000</td>
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<tr>
<td>Company D</td>
<td>100,000</td>
<td>70,000</td>
<td>- 30,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>280,000</strong></td>
<td><strong>330,000</strong></td>
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<td><strong>50,000</strong></td>
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</table>

Amount still to be recovered 40,000
Earnings in excess of limitation 0

*aExcess $90,000 return from nonlimited companies do not offset $40,000 unrecovered investment in limited companies.

Annual Reporting Requirements

Under the agreement, Martin Marietta will provide annual reports to DOE showing its total investment in the Innovation Center and the venture companies. For each company subject to the return limitation, the report will include both the cumulative allowable return and the cumulative return Martin Marietta has actually received from each company. The report will also show Martin Marietta's cumulative investment in and earnings received, in the aggregate, for those companies not subject to the limitation.
The agreement requires Martin Marietta to retain an independent certified public accounting firm to audit the Innovation Center's financial statements annually. As part of its review, the accounting firm will also determine the accuracy of Martin Marietta's "annual investment summary." Martin Marietta will include the accounting firm's opinion as part of its report to DOE.

**Disposition of Excess Earnings**

Martin Marietta agreed to donate any of its earnings from the venture companies that exceed the specified limit to "public organizations which include as their corporate purposes the maturation of DOE-initiated technologies requiring additional development efforts." While the agreement does not specify the beneficiaries of the excess earnings, Martin Marietta officials told us they will be nonprofit organizations. The agreement stipulates that Martin Marietta will not intentionally profit from any funds it distributes. Martin Marietta will initially distribute any excess returns by March 1990 and then annually thereafter.

**Agreement Terminates When Energy Systems' Contract With DOE Expires**

The agreement will terminate immediately when Energy Systems' contract with DOE ends. At that time, Martin Marietta will distribute any earnings from the limited companies that exceed the allowable level and will have no further obligations to limit its return from them.
Inconsistent or Unclear Language in the Agreement

In addition to the concerns regarding the agreement discussed in the letter, we identified several instances where wording in the agreement was inconsistent or its terms were not clearly defined. In some cases, DOE and Martin Marietta officials agreed on what the wording meant, but in other cases the officials differed in their interpretations of the agreement. How the wording is interpreted could affect the amount of return on investment that Martin Marietta can retain and thus affect whether the agreement accomplishes its objectives.

DOE Involvement in Removing Companies From the Limitation

The agreement contains inconsistent wording regarding DOE involvement in removing venture companies from the limited category. In section III F, the agreement provides that a venture company may be removed from the limited category if the basis for the limitation no longer exists. If Martin Marietta decides that the factual basis for imposing the limitation does not “further the general objective” of the agreement for a particular company, then it must discuss removing the limitation with DOE. However, section III B of the agreement, which defines one circumstance under which venture companies will be limited, allows Martin Marietta to unilaterally remove a company from the limited category. The limiting circumstance is when a venture company receives or possesses the first and only nonexclusive license to a DOE technology. If a second license is granted, the circumstance would no longer apply.

Martin Marietta’s Director of Strategic Planning said that, in this case, the agreement should be interpreted literally and that no discussions with DOE need to be held before the venture company would be removed from the limitation.

However, DOE officials with whom we discussed this said that DOE should be informed of and agree to the removal of any limitation. They believe that once a venture company has become subject to the limitation, it should remain in that category until DOE decides the limitation should not apply.

Energy Systems officials told us they would talk to DOE before issuing a second nonexclusive license when the first had been to an Innovation Center company.

Increased Value of Equity

The agreement, in our opinion, is not clear concerning whether capital gains from sale of ownership in venture companies is considered return on investment. Exhibit B of the agreement, which shows how returns
will be calculated for all venture companies, defines recognized return as “cumulative [Martin Marietta] return recognized by either cash receipt or equity method [of accounting].” In our view, this implies that return will be recognized only as income paid or allocated to Martin Marietta as a venture company earns a profit.

When we initially discussed this issue with Martin Marietta’s Controller (the official responsible for developing the annual report to DOE), he said that the limitation did not include income from the sale of equity in the venture companies. However, DOE officials, Martin Marietta’s Director of Strategic Planning, and the Innovation Center’s Chairman later told us that the agreement does include returns from increased value of equity, if a sale takes place while the agreement is in effect. Martin Marietta’s Controller subsequently said that this interpretation is correct.

Even though the DOE and Martin Marietta officials now agree that the agreement intends to include the sale of equity as return on investment, we believe its language is unclear. In particular, there is no requirement in the annual report format to identify returns from sale of equity. This could allow future errors in reporting equity transactions and limiting Martin Marietta’s overall earnings from its Innovation Center investment.

**Beneficiaries**

Section V of the agreement establishes that beneficiaries of the excess funds generated from successful limited companies will be “devoted to public purposes and include within [their] corporate purposes the maturation of the DOE-initiated technologies which require additional development efforts.” Martin Marietta’s Director of Strategic Planning told us this is interpreted to mean that only nonprofit organizations, such as universities, may receive the excess funds. However, the actual wording of the agreement does not specifically limit beneficiaries to nonprofit organizations.

This section of the agreement also states that Martin Marietta alone will select the beneficiaries. Martin Marietta’s criteria for selecting beneficiaries, stated in the agreement, include a prerequisite of no intentional profit potential to Martin Marietta. The agreement provides that Martin Marietta will advise DOE of beneficiary organizations before distributing funds. The agreement does not specify, however, if DOE has the authority to disapprove a disbursement if it believes the beneficiary does not meet the criteria specified in the agreement. The Innovation Center’s
Inconsistent or Unclear Language in the Agreement

Chairman said Martin Marietta is not required to get DOE input in selecting the beneficiaries, but that DOE would probably be consulted in this matter.

Inconsistent Use of "Aggregate"

The language in the agreement is not clear on whether Martin Marietta must recover its investment plus the allowed return in each limited company or in all limited companies in the aggregate in order for the limitation to be reached. In sections IV B (1) and (2), the agreement refers to conditions under which the limitation will actually be applied. The sections state that, before the limitation is imposed, Martin Marietta shall recover its total investment plus the allowed return (1) in "all" companies falling within the limited category and (2) in all nonlimited companies "in the aggregate."

DOE and Martin Marietta officials told us they interpret the agreement as meaning that both limited and nonlimited companies are considered in the aggregate for purposes of applying the limitation. As a result, only one limited company has to succeed and recover the total investment plus the allowable return in both categories in order for the limitation to be reached. However, because the term "aggregate" is not used in the first section, the agreement could be interpreted as meaning that each of the limited companies must succeed before the limitation could be reached. This could greatly increase the return Martin Marietta could receive before it would have to distribute earnings to beneficiaries.
AGREEMENT

THIS AGREEMENT, made effective on the 30th day of October, 1986 by and between Martin Marietta Corporation (hereinafter "MMC"), a corporation organized and existing under the laws of the State of Maryland and having a place of business at 6801 Rockledge Drive, Bethesda, Maryland 20817, and the United States of America, represented by the Department of Energy (hereinafter "DOE") through its Oak Ridge Operations Office (hereinafter "ORO") located in Oak Ridge, Tennessee;

WITNESSETH

WHEREAS, MMC has a wholly-owned subsidiary, Martin Marietta Energy Systems, Inc. (hereinafter "Energy Systems"), which is under Contract No. DE-AC05-84OR21400 to manage and operate certain facilities of the DOE;

WHEREAS, in responding to DOE's request for proposal with respect to the management and operation of such DOE facilities, MMC made certain commitments to make investments in the Oak Ridge economy;

WHEREAS the MMC commitment to make these investments was not part of the contractual terms and conditions of the management and operating contract No. DE-AC05-84OR21400;

WHEREAS, pursuant to that commitment, MMC created the Tennessee Innovation Center, Incorporated (hereinafter "TIC"), a corporation organized and existing under the laws of the State of Tennessee, which has and may, from time to time, make investments in companies which are based on DOE-funded technologies;

WHEREAS, the DOE has some concerns about appearance of conflict of interest related to TIC, as a wholly-owned subsidiary of MMC; and

WHEREAS, MMC is willing to agree to address those DOE concerns.

NOW, THEREFORE, the parties hereto agree to be bound as follows:

1. Background

A. In order to avoid the appearance of conflict of interest, MMC agrees to the principle of limiting its return on investments in certain companies in selected circumstances. This Agreement is intended to:

(1) identify the circumstances subject to the limitation;

(2) identify the level of the limitation; and
(3) set forth MMC's intended disposition of any funds which exceed the limitation.

II. Definitions

A. "Venture Companies" shall be those entities in which MMC has a direct financial interest through investment by TIC or subsequent direct investment by MMC of resources, capital funds, or stock for which equity has been received.

B. "DOE Technology" shall be those technologies developed under DOE funding at facilities managed by Energy Systems.

III. Circumstances Subject to the Limitation.

A. The Venture Company is the holder of an exclusive, ORO approved, license from Energy Systems primarily based on one or more DOE Technologies.

B. The Venture Company is the first and only non-exclusive licensee of one or more DOE Technologies. Upon grant of additional licenses to other companies, any limitations under Article IV shall no longer apply.

C. The Venture company has contracted (with the approval of Energy Systems) for significant technical consulting services from an Energy Systems employee utilizing DOE Technology.

D. An Energy Systems employee has received permission and is acting as an employee of, or has a substantial financial interest (for equity of at least 5%) in, a Venture Company. Equity ownership in Venture Companies by TIC employees shall in no manner subject a Venture Company to the limitation under this paragraph.

E. A sufficient basis for imposing the limitations described in Article IV exists only during such time as any of the above conditions are present. Where, in the judgment of MMC, the factual basis for imposing the limitation does not further the general objective of this Agreement with respect to a particular Venture Company, then the parties agree to review whether or not the limitation continues to apply to such individual Venture Company. Further, MMC agrees to notify DOE whenever a Venture Company which had not previously met any of the criteria does meet such criteria.

IV. The Nature of the Limitation on MMC's Return on Investment

A. The limitation applies to the return received by MMC as a result of MMC's ownership in the aggregate of those Venture Companies falling within the circumstances set forth in Article III. The limitation itself shall be defined as.
Appendix IV
Earnings Limitation Agreement Between DOE
and Martin Marietta

Full recovery of MMC Total Investment (as defined in Exhibit A, attached hereto, and hereby incorporated by reference as if fully written in the text of this Agreement), plus annual percentages consisting of: (1) the average of the Cost-of-Money rates specified semi-annually by the Secretary of the Treasury during the calendar year for which the annual percentage is computed and (2) eight percent.

These annual percentages shall be applied to the average of MMC Total Investment, based on the beginning and ending balances for the calendar year. The product resulting from these calculations is to be compounded annually as illustrated on Exhibit B.

B. This limitation will be imposed only after both (1) and (2) of the following conditions have been met or condition B. (3) alone has been met.

(1) The MMC Total Investment, plus the annual percentages specified above shall have been recovered for all Venture Companies falling within the classification of being subject to the limitation, as determined by cash receipt to MMC or the equity method of accounting.

(2) The MMC Total Investment, plus the government determined annual Cost-of-Money only, shall have been recovered, in the aggregate, for all Venture Companies not subject to the earnings limitation. This additive requirement shall also be determined on the basis of cash receipts to MMC or by the equity method of accounting.

(3) Should the return on investment in those Venture Companies subject to the limitation (Paragraph IV., B., (1) above) exceed the agreed limitation, while those Venture Companies not subject to the limitation have not reached the agreed minimum return (Paragraph IV., B., (2) above), then the "excess" return from the limited Venture Companies will be applied to cover the deficiencies of the unlimited Venture Companies as set forth in Paragraph IV(B)(2) above with the remainder, if any, to constitute the funds for alternative disposition, pursuant to Article V of this Agreement.

C. The method of administering this Agreement is set forth in Exhibit A of this Agreement which is hereby incorporated by reference as if fully written in the text of this Agreement. Such administration methods may be revised by mutual agreement of the signators or their designees, from time to time.
Appendix IV
Earnings Limitation Agreement Between DOE and Martin Marietta

V. Disposition of Funds in Excess of the HMC Return on Investment Limitation

A. MMC, solely, shall select beneficiaries which meet the criteria set forth in this Article. While MMC has not yet determined the specific beneficiaries of any funds which exceed the agreed return on investment, the criteria for selecting the beneficiary will include the prerequisite of no intentional profit potential for MMC. The criteria for such a beneficiary organization is that the organization will:

1. be devoted to public purposes and include within its corporate purposes the maturation of the DOE-initiated technologies which require additional development efforts; or

2. meet such other criteria to which the parties may agree.

B. MMC commits that such disposition will meet the above-noted criteria and will advise DOE of the beneficiary organization prior to any funds disbursement to same. The initial distribution of any funds which exceed the agreed return on investment, as identified by the annual reports, shall be made by MMC by March 30, 1990 and annually thereafter. DOE will be notified of such distributions, including the amounts and the receiving organization(s).

VI. Termination:

This Agreement will continue until such time as Energy Systems is no longer a management and operating contractor under DOE contract No. DE-AC05-84-OR21400. At such time this Agreement will terminate immediately and MMC will within 60 days distribute any amounts required to be contributed in accordance with Article V as of the date of termination calculated in accordance with Article IV. After such distribution, no further obligations will exist under this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

By:  
Joe LaGrone  
Manager, Oak Ridge Operations  
Department of Energy  
Date: October 30, 1986

By:  
Peter Dunston  
Vice President  
Martin Marietta Corporation  
Date: 9/22/86
EXHIBIT A

ADMINISTRATION GUIDELINES

Administration Guidelines associated with MMC Return on Investment Limitations in Selected Cases of Venture Companies.

The Administration of this Agreement will require annual reports submitted to DOE by MMC. Each report will contain:

1. An allocation of the MMC Total Investment in TIC and/or Venture Companies, defined as follows:
   a. MMC Total Investment, including dates, in each Venture Company subject to the limitation.
   b. MMC Total Investment in all Venture Companies (collective) not subject to the limitations.
   c. The elements of MMC Total Investment include:
      (1) All cash disbursed by MMC to either TIC or Venture Companies (such calculations to be net of any cash returns which may have been received by MMC from TIC or Venture Companies e.g., reimbursement for services, support, etc. provided by TIC to Venture Companies).
      (2) Appropriate direct expenditures or allocations of central MMC activities in direct support of TIC, such direct expenditures or such allocations to be specifically identified and costed within the annual report from MMC to the DOE.
      (3) At the end of each year, the balance of the funds transferred from MMC to TIC (i.e., those funds which had been transferred by MMC but not expended by TIC) shall not normally exceed one-fourth of that year's actual expenditures by TIC.

2. The Cost-of-Money (as identified in the Agreement) for the current reporting period.

3. For each Venture Company subject to the return limitation:
   (a) the computed cumulative MMC return on investment permitted in accordance with the limitation criteria set forth in this Agreement; and
   (b) the cumulative return on investment recognized by MMC determined by either cash receipt to MMC or the equity method of accounting.
4. For the aggregate of all (collective) Venture Companies not subject to the return limitation:

   (a) the computed cumulative MMC return on investment using only the Cost-of-Money; and

   (b) the cumulative return on investment recognized by MMC determined by either cash receipt to MMC or the equity method of accounting.

Reports from MMC will be submitted to DOE annually on the basis of the calendar year, within 90 days of the end of the calendar year. The first report covering the time period from inception of TIC through December 1986, is due March 31, 1987. An illustrative example of the report format is attached hereto as Exhibit B which is hereby incorporated by reference as if fully written in the text of this Exhibit A.

Such reports from MMC to DOE are judged by MMC to contain commercial or financial, confidential, proprietary and business sensitive data and, accordingly, will be identified as such and not subject to external dissemination by DOE, except to the extent required by applicable laws, regulations and statutes.

An independent audit will be performed annually on the financial statement of TIC by a qualified CPA firm. In addition, such an independent auditor shall review the preparation of MMC's annual investment summary, the computations of return on investment for each Venture Company and the appropriateness of the determination of cash versus equity accounting. The auditing firm's resulting opinion will be included within the annual report.

Initials:

DOE: 
Date: October 30, 1986

Martin Marietta: 
Date: September 22, 1986
### EXHIBIT B

**MARTIN MARIAETTA CORPORATION**  
TIE AND/OR VENTURE COMPANIES  
ALLOCATION OF INVESTMENT FOR  
ROI CALCULATION PURPOSES  

#### CALENDAR YEAR 1994

<table>
<thead>
<tr>
<th>Companies</th>
<th>Prior Years</th>
<th>Current Year</th>
<th>Return on Investment</th>
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<tr>
<td></td>
<td>(a) Venture</td>
<td>(b) Direct</td>
<td>(c) Cost of BE</td>
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<td>Capital</td>
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#### NOTES:

1. Percentage based on venture capital invested in company vs. total equity venture capital in all companies, used for allocation of working capital and central support services.
2. Actual equity capital invested.
3. Total MRC direct investment on Dec 31 of prior year, from column 6 of prior year.
4. Cumulative sum of money, sum of columns (d) and (e) of prior year.
5. Cumulative BE return, sum of columns (e) and (f) of prior year.
7. Current year allocation of TIE expenses, net of reimbursement for services, includes funds transferred by MRC to TIE, but not expended by TIE.
8. Guaranteed minimum rental payments made by TIE on behalf of Venture Company.
9. Allocation of MRC central support expenses (legal, finance, planning, etc.).
10. Sum of (1), (2), (3), and (4).
11. Sum of current year investment [(5)] and prior year direct investment [(ii)]
12. Current year capital cost of money returns, based on COMP times prior year COMP [(ii)] plus COMP times the average of column (c) and (d).
13. Current year allowed BE return, based on 8% times prior year return [(ii)] plus 8% times the average of columns (c) and (d).
14. Sum of columns (d), (e), (f), (g) and (h), and represents maximum MRC return allowed capped companies; minimum return on uncapped companies.
15. Cumulative MRC return recognized by either cash receipt or equity method.
### EXHIBIT B

**MARTIN MARIETTA CORPORATION**  
**TIC AND/OR VENTURE COMPANIES**  
**ALLOCATION OF INVESTMENT FOR**  
**ROI CALCULATION PURPOSES**  

**CALENDAR YEAR 1985**

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<tr>
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<td>TOTAL</td>
<td>100.0%</td>
<td>$100.0</td>
<td>$305.0 $13.4</td>
<td>$1.5 $170.0</td>
<td>$410.0</td>
<td>$915.0</td>
<td>$56.2</td>
<td>$996.2</td>
<td>$50.0</td>
</tr>
</tbody>
</table>

**NOTES:**  
1. Percentage based on venture capital invested in company vs. total equity.  
2. Venture capital in all companies used for allocation of working capital and central support services.  
3. Actual equity capital invested.  
4. Total HMC direct investment on Dec 31 of prior year, from column 6 of prior year.  
5. Cumulative cost of money, sum of columns (d) and (f) of prior year.  
6. Cumulative 8% return, sum of columns (a) and (e) of prior year.  
7. Current year equity capital investment.  
8. Cumulative HMC direct investment.  
9. Amounts transferred by HMC to TIC, but not expended by TIC.  
10. Average of prior year direct investment.  
11. Allocation of HMC central support expenses (legal, financial, planning, etc.).  
12. 8% times the average of columns (c) and (d).  
13. Sum of column (d), (e), and (f).  
14. 8% times the average of columns (c) and (d).  
15. Current year 8% return, based on 8% times prior year return (c) plus 8% times the average of columns (c) and (d).  
16. 8% times the average of columns (c) and (d).  
17. Sum of columns (d), (e), (f), and (g), and represents maximum HMC return allowed capped companies; minimum return on uncapped companies.  
18. Cumulative HMC return recognized by either cash receipt or equity method.
Appendix V

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