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**RELEASED**

August 22, 1983

RESOURCES, COMMUNITY  
AND ECONOMIC DEVELOPMENT  
DIVISION

B-104105

The Honorable John D. Dingell  
Chairman, Subcommittee on Oversight  
and Investigations

The Honorable Richard L. Ottinger  
Chairman, Subcommittee on Energy  
Conservation and Power  
Committee on Energy and Commerce  
House of Representatives

The Honorable Howard H. Baker, Jr.  
The Honorable Gordon J. Humphrey  
The Honorable James A. McClure  
United States Senate



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The Honorable Marilyn Lloyd  
House of Representatives

Subject: Comments on a Plan for Obtaining Private Financing  
for the Clinch River Breeder Reactor  
(GAO/RCED-83-226)

This letter responds to your request for our views on the private financing plan for the Clinch River Breeder Reactor (CRBR) that the Department of Energy (DOE) submitted to the Congress on August 1, 1983. This plan was developed by a Breeder Reactor Corporation<sup>1</sup> (BRC) task force. As you know, reports of a more preliminary nature, which described a potential framework for obtaining private financing for the CRBR, were issued by DOE and BRC in March 1983.

We evaluated the March reports in response to your earlier requests and issued our report to you on May 12, 1983 (GAO/RCED-83-151). We concluded that the reports

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<sup>1</sup>The Breeder Reactor Corporation is a company formed to obtain the financial and other participation of the 753 utilities contributing funds to the Clinch River Breeder Reactor Project.

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- represented the beginning of a process that would require much more work before a detailed private financing proposal is developed,
- represented a trade-off between short-term budgetary savings and possible higher overall Government costs for the project, and
- did not provide sufficient information to adequately analyze the tax benefits of private financing.

Our most recent review was conducted to provide the recipients of our May 12, 1983, report with an update of that analysis. Our objective was to compare the latest CRBR financing plan, released to the Congress on August 1, 1983, with the private financing framework established by DOE and BRC task force reports in March 1983. We discussed these documents and our interpretation of the documents with DOE officials and members of the BRC task force. We also discussed them with representatives of one of the investment banking firms that participated in formulating the plan. We did not solicit DOE's review and comments on a draft of this report because of the short time frame involved in conducting our work. This is also in keeping with the agreement reached regarding agency comments on our May 12, 1983, report. We have discussed the report's contents with managers of the project in an effort to include DOE's views and ensure the report's accuracy.

#### PERSPECTIVE ON FINANCIAL ASPECTS OF THE CRBR

When CRBR was first authorized in 1970, it was estimated to cost \$700 million. Private sponsors (primarily utilities) agreed to provide \$257 million, plus any interest earned on the funds provided. The Federal Government agreed to pay the remaining costs. DOE currently estimates total project costs to be about \$4 billion. To date, the private sponsors have contributed \$158 million. The funds already contributed have been held in escrow--where they have earned interest--until needed for project expenses. DOE now anticipates that the total private contribution--including funds provided to the project, funds yet to be contributed, and interest earned on contributed funds held in escrow--will total \$334 million.

Currently, \$1.66 billion has been spent on CRBR, including about \$1.5 billion in Federal funds and about \$.16 billion from utility contributions. Although construction has not begun, site preparation is nearly complete, the plant's design is over 90 percent completed, and about 70 percent of the plant components have been ordered or delivered.

PRIVATE FINANCING PLAN BETTER DEFINED

The private financing plan DOE submitted to the Congress on August 1, 1983, represents a more detailed version of the plan outlined in the March reports. Specifically, more information is provided on project organization, debt financing, equity financing, and tax benefits. However, the basic concepts remain the same--that with appropriate Government guarantees, the revenues from CRBR-generated electricity, and available tax benefits, investors could be found to finance a portion of the remaining CRBR cost. Furthermore, while the private sector financing would produce budgetary savings during the CRBR's construction, such savings would be a trade-off against either future reductions in Federal revenues or additional budget outlays. Specifically, the revenues expected to be produced from the sale of CRBR-generated electricity will be used to pay back private investors. If, however, the revenue is inadequate, the plan calls for the Federal Government to provide all additional funds.

The latest plan calls for the project to be a joint venture comprised of the Federal Government and a partnership of private investors. The Secretary of Energy--following enactment of appropriate legislative authorization--would transfer title of the CRBR powerplant to the joint venture. The Government and the private investors would own the project in proportion to their respective investments.

The BRC plan calls for the joint venture to raise about \$1 billion toward the remaining cost of CRBR. As shown below, the \$1 billion would be comprised of new debt and equity sources and utility contributions already pledged but not yet provided.

|  | Millions               |
|--|------------------------|
| Proceeds of 30-year bonds                                | \$1,040                |
| Deduct interest to be paid on<br>construction loan       | 365                    |
| Direct construction funds provided<br>by borrowings      | 675                    |
| Equity participation                                     | 150                    |
| Utility contribution already pledged<br>but not provided | <u>175<sup>a</sup></u> |
| <b>Total</b>   | <b><u>\$1,000</u></b>  |

<sup>a</sup>According to DOE officials, the actual estimate of the outstanding utility contribution is \$176 million. DOE officials explained that the \$1 million difference is due to rounding.

The BRC plan envisions that the remaining costs to complete the project (DOE estimates these to be \$1.5 billion) will be paid by the Federal Government. Thus, the private financing plan would require the Congress to enact a \$1.5 billion appropriation, although obligations would be made over the next 7 or more years needed to complete plant construction. In the event of cost overruns, construction schedule delays, operating problems, or insufficient electric power sale revenues, the plan calls for the Federal Government to provide all additional funds.

The plan also calls for the Federal Government to guarantee that the investors' tax benefits associated with the CRBR will be realized and that, if CRBR is not completed, licensed, or operated as planned, the investors will be repaid--both their investment and a rate of return on their investment to be agreed upon during future negotiations. Thus, the March reports and the more recent plan emphasize that private financing can only be obtained if the Federal Government retains all project risks by guaranteeing that the Federal funding will be provided when needed, the CRBR will be built and licensed on schedule, and it will operate and produce revenues as projected.

According to the plan, representatives from four investment banking firms participated in formulation of the plan. They have stated that with appropriate legislation and assurances, significant private funding can be raised for the CRBR project.

#### Debt financing

The plan states that the initial private sector debt financing would be provided from \$675 million in short-term (1984 through 1990), 10-percent construction loans. Task force officials believe these loans will be available from several large private lenders. BRC task force officials anticipate that interest on the construction loans (to be paid when the loans are retired) will total about \$365 million.

The construction loans (including interest) would be retired by issuing 30-year bonds in 1990. BRC officials estimate that the bonds would carry a 10-percent interest rate and would be underwritten by investment bankers. The 30-year bonds would be retired using revenues from the sale of CRBR electricity. The plan states that interest paid to the bondholders would be taxable.

BRC and investment banking officials point out that the 10-percent interest rate anticipated for the construction loans and the 30-year bonds is only an estimate. The actual interest rate paid will reflect market conditions at the time of issuance. If actual interest rates are lower, interest payments will be

reduced and a surplus of CRBR revenues may exist. If interest rates are higher, some action will have to be taken to make the bonds more attractive. According to BRC task force officials, lenders and/or bondholders may have to be provided with a share of CRBR power sale revenues in exchange for a lower interest rate. If power sale revenues are insufficient to cover these additional payments, additional Federal funds may be required.

#### Equity financing

The BRC task force anticipates raising \$150 million by selling equity (partnership) shares in the CRBR. Shares will be sold by the investment bankers, although the plan does not specify who might purchase the shares. The return to the equity investors will be in the form of tax benefits (discussed below) and a share of the CRBR revenues available after the bondholders and operating expenses are paid. Task force officials stated that the distribution of such revenues will be made in accordance with a ratio that will be determined when the shares are sold. DOE data indicates that over the 30-year life of the project, more than \$1 billion will be available to the joint venture from CRBR power sale revenues after the bondholders and operating expenses are paid.

According to task force officials and representatives of investment banking firms, legislative action is desired to exempt the equity investors from the Public Utility Holding Company Act of 1935. Because CRBR electricity would be marketed in several States, the joint venture and the private investors in CRBR would be subject to the act. Consequently, the terms of their securities, the terms of issuance, the capital structure, and certain corporate functions of the investors and their affiliates would be subject to Security and Exchange Commission approval. The BRC and investment banking officials said that they believe they would have little success in attracting investors unless an exemption is granted.

#### Utility contribution

The BRC task force also considers \$175 million in utility contributions to be part of the \$1 billion private investment package. This is not, however, a new contribution but the remaining undelivered portion of the utilities' original \$257 million pledge plus the interest it earns while in escrow. These funds would be provided for the CRBR even if the private investment plan were not implemented and the Federal Government continued to fund CRBR as initially planned.

PROPOSAL SPECIFIES TAX BENEFITS  
FOR THE EQUITY PARTICIPANTS

Tax benefits for the equity participants are better defined in the task force's new plan than in the March 1983 reports. The plan specifies that the participants will receive only those tax benefits available to investors in any similar private project. The plan states that the equity participants will be entitled to investment tax credits and tax deductions for accelerated depreciation; research and development expenses; and deductible costs, such as the interest paid by the joint venture on the loans. Tax benefits would be based on the total private investment, not on the equity share alone. That is, for an equity investment of \$150 million, the investors would receive tax benefits on the total new private investment of \$825 million (the \$1 billion private investment minus the remainder of the utilities' pledged but unpaid contributions).

The investment tax credit would allow a reduction in the investor's tax liability amounting to 8 percent of the investment. According to investment banking officials, the tax deduction for accelerated depreciation (for the private share of CRBR's cost) and the deduction for interest paid on the loans would cause the joint venture to show an income loss over the first 5-9 years of its operation. Such a loss would allow the private equity investors to avoid tax on an equal amount of income from another profitable activity. While the investment tax credit is a dollar-for-dollar reduction in tax liability, the value of the accelerated depreciation and the expense deductions would vary depending on the tax bracket of the investor.

At this time, the investors have not been identified, and although BRC officials believe the investors will be in the 46 percent Federal corporate tax bracket, they state that even that is uncertain. Thus, the net effect of private investment in the CRBR on Federal tax revenues is uncertain.

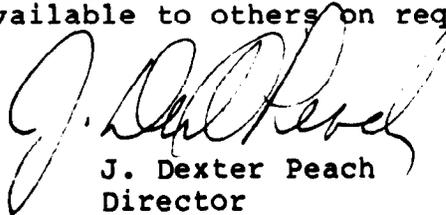
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Over the past few years, we have issued numerous reports dealing with various aspects of the breeder reactor research and development program and more specifically with the CRBR. We have consistently pointed out that the breeder program is a research and development program and that construction of a demonstration plant such as the CRBR or a similar demonstration project is a logical step in the research and development process.

In that context, discussion concerning the future of the breeder program in general and CRBR in particular rests on a broad range of issues. Among those issues are CRBR's role in breeder

reactor research and development, project costs and related budget implications, the need for and timing to bring breeder reactors on-line, the projected availability of uranium ore to fuel the current generation of light water reactors, and projected demand for electricity and nuclear power's role in meeting that demand. Thus, decisions about the future of the CRBR ultimately require value and political judgments by the Congress against the backdrop of a wide range of issues.

We plan no further distribution of this report until 30 days from the date of the report unless its contents are publicly announced by one of the requestors. At that time, we will send copies of the report to the Director, Office of Management and Budget; the Secretary of Energy; and to other interested parties. We will also make copies available to others on request.

A handwritten signature in black ink, appearing to read "J. Dexter Peach", is written over the typed name and title.

J. Dexter Peach  
Director