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UNITED STATES GENERAL ACCOUNTING OFFICE

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ENERGY AND MINERALS DIVISION

May 3, 1982

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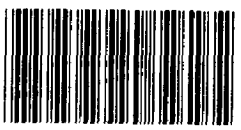
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The Honorable Max Baucus
United States Senate

Dear Senator Baucus:

Subject: The Corps of Engineers Has Expended Fiscal Year 1982 Appropriations for Libby Dam Units 6, 7, and 8 (GAO/EMD-82-81)

Your March 24, 1982, letter expressed concern that the U.S. Army Corps of Engineers' (Corps') fiscal year 1982 appropriations are possibly being spent in furtherance of units 6, 7, and 8 at Libby Dam, Montana. Specifically, you requested that we answer the following questions:

1. Will transformer units being procured by the Corps in any way be in furtherance of units 6, 7, or 8?

2. Has the Corps applied any of its fiscal year 1982 appropriations to contracts for units 6, 7, or 8?

We found that the Corps' acquisition of two custom-designed double transformers, 1/ in effect, enhances the future economic viability of units 6, 7, and 8. Further, the Corps is spending about 70 percent of its fiscal year 1982 Libby Dam appropriated funds for generators and other equipment for these three units.

SCOPE AND METHODOLOGY

Our review was conducted in accordance with GAO's "Standards for Audit of Governmental Agencies, Programs, Activities, and Functions." To determine the guidance the Congress gave with respect to expenditures for Libby units 6, 7, and 8, we reviewed the legislative history for the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) and the Corps' appropriations for 1982. We discussed with Corps' officials, both in the field and headquarters, their views on Congress' direction for units 6, 7,

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1/A double transformer housed in a single unit to handle power from two generating units.

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and 8. We also reviewed three court cases relating to Libby to determine the court's position.

To address the first question, we discussed the procurement of the two double transformers with Corps officials in Seattle, Washington, and Portland, Oregon. From the discussions, we learned how the Corps planned to use them and learned that an economic analysis had been performed to justify the second double transformer. We discussed the economic analysis with Corps officials in Portland, Oregon, to determine how the analysis was performed and the assumptions made. Because of time constraints, we did not review the support and data behind the assumptions. In analyzing whether this procurement would enhance the economic viability of the Libby Additional Units and Reregulating Dam (LAURD) we reviewed Corps files and discussed this matter with Corps' officials.

To address the second question, we analyzed Corps contract files to determine contract dates and amounts. We also discussed this matter with Corps officials in Seattle, Washington, and Portland, Oregon. We discussed the economic analysis of whether or not to terminate component contracts for units 6, 7, and 8 with Corps officials in Portland, Oregon, to determine how the analysis was performed and assumptions used. Again, due to limited time, we did not review the support and data behind the assumptions.

BACKGROUND

Libby Dam is located on the Kootenai River in northwestern Montana. It was authorized by the Congress under the 1950 Flood Control Act and completed by the Corps in 1973. The 1950 act authorized a total of eight generators for Libby. The initial dam includes four generators with an installed capacity of 420 megawatts.

The Corps planned to install the four additional generators as part of a Libby Dam Project phase 2 effort that also included a reregulating dam downstream from the main Libby Dam. This additional dam would be needed to control downstream river fluctuations which would result when the main dam is operating during peak periods. Construction for LAURD began in fiscal year 1977.

However, in September 1978 a United States District Court in Montana issued an injunction to stop the entire LAURD project, citing a lack of congressional authorization and failure to comply with the National Environmental Policy Act (NEPA) because of an inadequate Environmental Impact Statement (EIS). 1/ In March

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1/457 F. Supp. 1177 (1978).

1979, the Ninth Circuit Court of Appeals upheld the District Court injunction to stop construction of the reregulating dam, but not the additional units, based on the conclusion that while the Congress had not authorized the reregulating dam, it had authorized the main dam. 1/ The court noted that the "four turbines may not be utilized without a reregulating dam." (The Ninth Circuit Court did not address the merits of the NEPA issues.) Therefore, the Corps could proceed with construction of the four additional units.

In early 1981, the Corps sought to have the injunction dismissed. In July 1981, the U.S. District Court rejected the Corps' request. 2/ In its review of the previous cases, the District Court noted:

> "The [Appellate] Court recognized, as did this court, that installation of the additional turbines without the reregulating dam downstream does not make sense * * *. This is because utilization of the four additional turbines would result in serious river fluctuation problems which, without a reregulating dam, would wreak havoc downstream."

In July 1980, as a result of previous work on Libby Dam, 3/ we wrote the Corps questioning the installation of four additional generators in the main dam without the reregulating dam authorization. Similarly, concern over installing four additional units without the reregulating dam has been expressed at various times in the Congress. House and Senate committees both provided guidance on how the Corps was to spend its 1982 appropriations on Libby. A July 23, 1981, colloquy between Representative Pat Williams of Montana and the Chairman, Subcommittee on Energy and Water Development, House Committee on Appropriations, occurred as the Corps' 1982 appropriations was debated on the House floor. The following is extracted from Representative Williams' dialogue:

> "To add these additional units without the reregulating dam, which Congress has refused to authorize, is unnecessary and wasteful * * *. Am I correct then in my understanding that the $5 million which is being appropriated today is to be used only for the installation of one additional unit at Libby Dam, and not for any other facet of the Libby additional units and reregulating dam project?"

1/594 F. 2d 742 (1979).

2/519 F. Supp. 643 (1981).

3/U.S. General Accounting Office, "Continuation of Funding for Montana's Libby Dam Project--Is It Warranted?" EMD-80-93, July 10, 1980.

The following is the Chairman, Subcommittee on Energy and Water Development, House Committee on Appropriations' answer to the above question:

> "Yes, I can tell the gentleman from Montana that no funds in this legislation are to be applied to construction of the Libby reregulating dam or the additional units 6, 7, or 8."

The Senate Budget Committee expressed similar views during the fiscal year 1982 funding process. The Senate Budget Committee reported:

> "As part of the funds cut from the Corps construction effort, the Committee anticipates the elimination of funds for the Libby Additional Units and Reregulating Dam in Montana. It is the Committee's intent that any present appropriations be used solely for the completion of the fifth installed unit at the main Libby Dam, and for immediate termination of work on the sixth, seventh, and eighth installed units. These additional units were intended by the Corps to be used primarily in conjunction with a reregulating dam that has not been authorized by Congress." 1/

In addition, the Senate Appropriations Committee report for the Corps' fiscal year 1982 appropriations 2/ reflecting the budget request for additional Libby units was reduced. The report further states "The intent of the reduction is so the Corps does not award any new contract which will result in the production of power by more than one of the four additional units at this time."

The Corps was already proceeding, however, to purchase two double transformers for all four units. The Corps invited bids for transformers on December 31, 1980. Several bids were received, but while the Congress discussed the Corps' budget, the invitation was extended seven times until a bid protest was resolved. The Corps' 1982 appropriation bill was signed on December 4, 1981. After passage of the budget, the Corps began plans to change the transformer specification to a single transformer for unit 5 in place of two double transformers. The Corps did not extend the bids any further nor did it cancel the invitation for bid on the double transformers.

Subsequently, a February 24, 1982, letter from the Chairman, Subcommittee on Energy and Water Development, House Appropriations

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1/Senate Report No. 97-139, June 17, 1981.

2/Senate Report No. 97-256, October 1981.

Committee to Major General Heiberg, Director of Civil Works, Office of the Chief of Engineers, stated that it was his understanding that a transformer contract for the Libby Additional Units project was being held in abeyance, based on the July 23, 1981, colloquy between himself and Representative Williams. The letter further mentions that with the General's assurance, the second double transformer could be used in a proper manner in other than the Libby Additional Units project and that if such action is economically sound, the Committee has no objection to awarding the contract. But the Chairman cautioned that this approval in no way changes the intent of the colloquy between himself and Representative Williams. Based on this letter, the Corps performed an economic analysis which showed the purchase of two double transformers, to be used at Libby and as a spare at Lower Columbia Dams, was economically justified.

CORPS' RECENT PROCUREMENT OF TRANSFORMERS ENHANCES FUTURE ECONOMICS OF UNITS 6, 7, AND 8

On March 26, 1982, the Corps contracted for two double transformers custom designed for Libby, at a contracted price of $2.7 million. 1/ The Corps plans to locate one of the double transformers at Libby with one transformer hooked up to Libby unit 5. The other half of this transformer will serve as a backup for units 1 through 5. The Corps plans to have the other double transformer as a spare for one of the Corps' dams on the lower Columbia River, even though modification would be needed at these dams before it could be used. The Corps' procurement of the two double transformers, in effect, enhances the future economic viability of Libby units 6, 7, and 8.

In essence, the presence of the double transformers within the Corps' system will enhance the economic viability of completing units 6, 7, and 8 since any future economic analysis of LAURD will consider the costs of the two double transformers as "sunk." Thus, if, in the future, the Congress debates the merits of completing Libby Dam units 6, 7, and 8, the fact that transformers designed for Libby have already been purchased will have the effect of reducing total project costs, thereby enhancing the economic viability of completing the project. Corps officials agreed that in any future economic analysis, the justification to complete units 6, 7, and 8 is made stronger by virtue that these two double transformers have been acquired.

1/The Corps plans to pay for the first double transformer from Libby appropriations and for the second double transformer from Bonneville Second Powerhouse appropriations.

In addition, the custom-designed double transformer that is now to be used as a spare would require modification to be used away from Libby. The Corps estimates installation and modification costs to use the double transformer at Lower Columbia Dams, if needed, would be about $60,000. A similar cost would be incurred to remove the transformer when not needed.

Furthermore, the economic analysis the Corps used to justify the purchase of the two double transformers was flawed because (1) other alternatives, such as using spare transformers from another location, were not considered and (2) all costs, such as installation or modification costs, were not included. The Corps' economic analysis considered using the second double transformer as a spare at the Bonneville Second Powerhouse, The Dalles, and Libby. The Corps' analysis showed a benefit/cost ratio of 1.25 to 1 for Bonneville, 3.62 to 1 for The Dalles, and 2.13 to 1 for Libby. However, the Corps' analysis only compared a "no spare" condition to using the second double as a spare, although other alternatives existed. For example, it did not consider using spare transformers available at non-Corps power projects in the Northwest. Furthermore, the Corps' analysis does not consider that the first double transformer, which is planned for Unit 5 at Libby, is already planned to serve as a backup to units 1 through 5. Thus, using the second double transformer for additional backup at Libby seems questionable.

The Corps' analysis is also flawed in that all costs were not considered. The second transformer is custom designed for Libby--not for other projects. The analysis mentions, but does not include in its calculations, that the unit is not directly compatible with Bonneville and The Dalles, and would require physical modifications to be used. However, the analysis did not consider capacity losses or modification costs. The analysis also excludes other costs, such as the cost of installation of the second transformer and costs to transport this transformer to other locations from Bonneville--both of which would reduce the cost effectiveness.

THE CORPS HAS USED FISCAL YEAR 1982 APPROPRIATIONS ON UNITS 6, 7, AND 8

A major portion of the Corps' fiscal year 1982 appropriations of $5 million for Libby are being used to acquire generator components and other parts in furtherance of units 6, 7, and 8. This represents funds to cover contractual obligations made before fiscal year 1982. The following table specifically shows how fiscal year 1982 appropriated funds are being spent for continuation of these contracts and the amounts committed under those contracts which would require future funding.

Table 1

Contracts	Fiscal year 1982 (000)	Future (000)
Generators	$2,850	$2,920
Governors	150	460
14.4-kV Breakers	330	500
Control switchboards	150	30
Contract totals	$3,480	$3,910

The Corps was aware of congressional guidance not to spend money in furtherance of units 6, 7, and 8, but performed an economic analysis to see what costs would be incurred to terminate or buy out of the contracts. The Corps' analysis showed it would cost the Federal Government $2.6 million more to terminate the existing Libby contracts on units 6, 7, and 8 than to complete them. However, we believe the Corps' analysis is questionable for several reasons. First, the Corps did not do any analysis to determine whether it would be economically advantageous to terminate the contracts for ancillary equipment (i.e., items other than the generators). Second, its analysis of terminating the generator contract contained what we believe to be questionable assumptions. The Corps assumed that the contractor would recover three times the labor costs involved in the contract, 95 percent of the material would be usable as scrap at a value of 10 percent of the original cost, and the contractors would make charges for handling equal to the salvage value. However, according to Corps officials who performed the analysis, the Corps did not contact the contractor to get any cost data, and none of the participants in the analysis had ever participated in a supply/contract termination. We also found that the analysis contained arithmetic mistakes which reduced estimated termination costs.

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As arranged with your office, we did not obtain Corps comments and unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

for J. Dexter Peach
Director