September 5, 1989

SUMMARY OF: A Special Report on the Alaska Energy Authority, Selected Budgetary Practices, Analysis of Personal Services, and Loan Programs, August 18, 1989.

PURPOSE OF THE REPORT

In accordance with a Legislative Budget and Audit Committee request and Title 24 of the Alaska Statutes, this special report was prepared to: (1) report on the budgetary practices of the Alaska Energy Authority (AEA) for FY 88 and FY 89; (2) analyze the nature and extent that personal services costs are charged to various AEA capital projects; and (3) analyze available cash balances as of June 30, 1989 of loan fund programs administered by AEA.

STATUS OF PROJECTS

As of June 30, 1989 the Alaska Energy Authority (AEA) was administering over 50 projects and capital appropriations. In order to provide for a basis for discussing the status and activities associated with various projects, we have divided them into five general categories: (1) completed operational projects; (2) projects in the feasibility assessment phase; (3) rural area projects; (4) hydroelectric projects in the construction phase; and (5) miscellaneous other projects.

For each category of a project a schedule has been prepared presenting the total authorizations, expenditures, encumbrances, and the remaining balance for each project identified as of June 30, 1989.

BUDGET STRUCTURE AND PERSONAL SERVICES

The Alaska Energy Authority's operational budget is made up of four components: (1) Administration, (2) Capital Improvement Projects (CIPs), (3) Operations and Maintenance (O&M), and (4) Power Cost Equalization Program. Most of the administration component of the budget is funded by non-continuing General Fund appropriations. The CIP component is primarily funded by continuing General Fund appropriations made for particular CIP projects and the proceeds from bond sales made to finance major capital projects. The O&M component is funded from program receipts earned from the sale of power from three of the four dam pool projects which are operated by AEA.

Using the Revised Program process, AEA has avoided having to reduce positions in their administrative component by shifting some of the costs to capital projects. By doing so, AEA is essentially capitalizing a certain amount of their administrative costs into the costs of the projects being developed.

AEA has acknowledged that this transfer of administrative costs to a major capital project represents a departure from past agency practice. However, the agency has maintained that this practice ". . .is consistent with the private sector common practice of capitalizing administrative costs."

OTHER ADMINISTRATIVE COSTS CHARGED TO PROJECTS

Many of the positions classified and budgeted as CIP positions perform administrative or support duties for AEA operations. Through the agency's internal Labor Distribution System, most of the personnel costs associated with these positions are charged to CIP projects as indirect

labor. This report analyzes the impact of charges of personal services costs associated with these "administrative" CIP positions compared with direct personnel costs.

LOAN FUNDS AND BALANCES

As of June 30, 1989 AEA was responsible for administering three revolving loan funds that provided funding for various projects related to energy and power development. Our analysis indicates that as of June 30, 1989 the available cash balance for each of these funds was as follows:

Power Development Revolving Loan Fund	$55,711
Rural Electrification Revolving Loan Fund	$84,053
Power Project Loan Fund	$54,179

UNDERWRITING COSTS

According to an internal report prepared by AEA's Senior Auditor, the agency incurred $442,474 in underwriting expenses for bonds that were never issued. Additionally, the agency has incurred more than $120,000 in underwriting costs for bonds that have yet to be issued for the Bradley Lake Hydroelectric Project.

A SPECIAL REPORT ON THE DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT ALASKA ENERGY AUTHORITY SELECTED ADMINISTRATIVE PRACTICES

August 18, 1989

Audit Control Number

08-4316-89-S

Alaska Energy Authority Board of Directors

Chairman	Robert Martin
Public Member	Neil Davis
Public Member	Lee Nunn
Commissioner, Department of Commerce and Economic Development	Larry Merculief
Commissioner, Department of Transportation and Public Facilities	Mark S. Hickey
The Adjutant General, Department of Military and Veterans Affairs	John W. Schaeffer
Director of Policy, Office of Management and Budget, Office of the Governor	Mary Halloran

September 5, 1989

Members of the Legislative Budget
and Audit Committee:

In accordance with a Legislative Budget and Audit Committee special request and the provisions of Title 24 of the Alaska Statutes, the attached report is submitted for your review.

A SPECIAL REPORT ON THE
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
ALASKA ENERGY AUTHORITY
SELECTED ADMINISTRATIVE PRACTICES

August 18, 1989

Audit Control Number

08-4316-89-S

The audit involves a report on the current status and remaining balances of various capital projects administered by the Alaska Energy Authority; selected budgetary and cost accounting practices of the agency; and a special presentation of the available cash balances in the loan funds administered by AEA.

The audit was conducted in accordance with generally accepted governmental performance auditing standards. A further statement of our audit approach is included in the Report Objectives, Scope, and Methodology section of this report.

Randy S. Welker, CPA
Legislative Auditor
Division of Legislative Audit

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REPORT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with a Legislative Budget and Audit Committee request and Title 24 of the Alaska Statutes, this special report was prepared to: (1) report on the budgetary practices of the Alaska Energy Authority (AEA) for FY 88 and FY 89; (2) analyze the nature and extent that personal services costs are charged to various AEA capital projects; and (3) analyze available cash balances as of June 30, 1989 of loan fund programs administered by AEA.

Objectives

The specific objectives of this report were to respond to specific interests expressed by the Legislative Budget and Committee's audit request. The following selected management practices or areas of interest and concern were reviewed:

1. The unexpended and unobligated balance of the capital projects administered by the Alaska Energy Authority.

2. The use of capital project funds to support the agency's administrative costs.

3. The existing and projected balances of the energy loan funds administered by the Alaska Energy Authority.

4. An accounting of bond counsel and underwriting expenditures for projects for which bonds have not been or yet to have been issued.

Scope

The scope of our review involved both FY 88 and FY 89, although depending on what aspect of objectives were being addressed and the availability of information, different fiscal years' activities were emphasized.

Budgetary practices for both FY 88 and FY 89 are included in this report. Although how personal services costs associated with AEA administration were charged to capital projects was analyzed for both fiscal years, the report primarily focuses on FY 88 activity. Loan fund balances and analysis are as of the end of FY 89. The accounting of various underwriting and bond counsel costs are from inception to the last day of fieldwork.

Methodology

In the course of preparing this report we relied on the following sources of information:

1. Internal budget and financial planning documents prepared and used by AEA.

2. Accounting information as recorded on the State's accounting system (AKSAS).

3. Internal accounting information generated by AEA's Labor Distribution System.

4. Schedules prepared by AEA accounting staff, which were reconciled to AKSAS.

5. Informational documents that AEA makes available to the general public, including annual audited financial statements, capital projects status report summary, and the agency's annual report.

From this assortment of information we developed the analysis and presentation necessary to respond to the objectives of our report and address the concerns expressed by the Legislative Budget and Audit Committee in their special audit request.

ORGANIZATION AND FUNCTION

The Alaska Energy Authority (formerly named the Alaska Power Authority), was established in 1976 "to promote, develop, and advance the general prosperity and economic development of the people of Alaska by providing a means of constructing, acquiring, financing, and operating (1) power projects and (2) facilities that recover and use waste energy."

To accomplish these goals, Alaska Energy Authority (AEA) conducts reconnaissance and feasibility studies; designs, constructs, and operates power projects; issues bonds; administers loan and grant programs; and enters into contracts for the sale of power and waste heat. The extent of AEA's involvement in any power project depends upon local needs and preferences, project financial requirements, and state budget considerations.

AS 44.83.020 establishes AEA as a public corporation of the State within the Department of Commerce and Economic Development but with separate and independent legal existence. Consequently, AEA is governed by a seven-member Board of Directors, including the Commissioners of the Departments of Commerce and Economic Development, Military and Veterans Affairs, and Transportation and Public Facilities; the Director of the Office of Management and Budget; and three members at large appointed by the Governor.

With a staff of more than 70, AEA administers the various capital funds for identified power development projects throughout the State. The agency administers three loan funds to assist in the energy production and development, and will assume administration of the Bulk Fuel Revolving Loan Fund during FY 90. AEA also administers the State's Power Cost Equalization program, aimed primarily at subsidizing the cost of power in rural areas of the State.

Alaska Energy Authority
Completed Projects
Schedule of Authorizations, Expenditures, Encumbrances, and Remaining Project Balances
As of June 30, 1989
(UNAUDITED)

	Total Authorizations	Expenditures thru 6-30-89	Encumbrances	Remaining Balance
Terror Lake	$202,639,156	$198,468,746	$ 2,250	$ 4,168,160
Tyee Lake	131,113,397	127,461,236	1,000	3,651,161
Anchorage-Fairbanks Intertie	128,463,119	125,326,360	35,816	3,100,943
Swan Lake	95,755,046	94,795,049	2,250	957,747
Solomon Gulch	48,351,728	48,222,513	51,000	78,215
Craig-Klawock Intertie	750,000	749,735	-0-	265
Total Completed Projects	$607,072,446	$595,023,639	$92,316	$11,956,491

STATUS OF PROJECTS

As of June 30, 1989 the Alaska Energy Authority (AEA) was administering over 50 projects and capital appropriations. At the end of each calendar year the agency prepares a report summarizing the status and funding of the various projects. In addition, the report provides a description of the project, what was accomplished during the past year, and what activities are planned for the project in the upcoming year.

In order to provide a basis for discussing the status and activities associated with various projects, AEA's projects were divided them into five general categories: (1) completed operational projects; (2) projects in the feasibility assessment phase; (3) rural area projects; (4) hydroelectric projects in the construction phase; and (5) miscellaneous other projects.

Completed Projects

The schedule on the opposite page summarizes the six projects classified as completed and operating projects. Only those projects owned and operated by AEA are included in this category. Other projects completed on behalf of local communities/utilities are classified elsewhere (such as the Chester Lake project which is classified under the Rural Projects category).

The hydroelectric projects that make up the Four Dam Pool are included in this category. Although these projects are on-line and operational, AEA is still incurring some incidental construction-related expenditures, which are being charged to the projects. These most recent year charges represent a minor part of the projects' overall costs.

According to AEA's January 1989 project status report, remaining items to be addressed for these projects include those associated with Federal Energy Regulatory Commission (FERC) compliance and licensing standards, safety features, completion of construction items, and cost of litigation. These final construction costs are anticipated to be substantially completed by January of 1991.

The Anchorage-Fairbanks Intertie is a 170-mile, 345 KV transmission line which connects the existing power generating systems of southcentral Alaska with the Fairbanks area. The system has been operational since 1985. AEA recently received a claims settlement of more than $3 million from the project's design engineer.

Alaska Energy Authority
Feasibility Projects
Schedule of Authorizations, Expenditures, Encumbrances, and Remaining Project Balances
As of June 30, 1989
(UNAUDITED)

Project	Total Authorizations	Expenditures thru 6-30-89	Encumbrances	Remaining Balance
Susitna Feasibility	$135,182,776	$135,182,776	$ -0-	$ -0-
Black Bear Lake	3,247,053	3,233,571	-0-	13,482
Cordova Hydroelectric	2,196,304	2,183,300	-0-	13,004
Railbelt Energy Alternatives	2,091,500	1,986,669	33,903	70,928
Grant Lake	1,696,608	1,696,608	-0-	-0-
Southeast Intertie	799,000	678,848	40,198	79,954
Larsen Bay	280,000	231,783	-0-	48,217
Stream Gauging Projects	63,700	36,357	18,100	9,243
Kotzebue - Nome Coal Study	150,000	28,694	121,306	-0-
Manokotak - Dillingham Intertie	35,000	25,466	9,428	106
Total Feasibility Projects	$145,741,941	$145,284,072	$222,935	$234,934

The Craig-Klawock transmission line is a recently completed project that services the two communities in southern Southeast Alaska. The Craig-Klawock Intertie consists of 5.5 miles of transmission line that is leased, operated, and maintained by Alaska Power and Telephone. The line has been operational since January 1988 and has provided for the transfer of lower cost power from Craig to the Klawock service area.

Feasibility Projects

Included in this group of projects are appropriations made for feasibility assessments of relatively larger scale projects which, for the most part, were anticipated to serve urban areas. The most significant project in this group is the extensive feasibility study done of the Susitna Hydroelectric project.

In FY 89 AEA charged almost $6,000 to Susitna wind-down activities. Local entities serving Prince of Wales Island and Seward are pursuing FERC licensing for the Black Bear Lake and Grant Lake projects, respectively. In FY 89 AEA charged less than $6,000 to the Black Bear project and had made no charges to Grant Lake. According to AEA, the remaining balance of the Black Bear Lake appropriation is needed to cover costs incurred by the agency in providing technical assistance to local utility which is seeking an FERC license for the project. Projects with relatively larger remaining balances - the Railbelt Energy Alternatives Study, Southeast Intertie feasibility, and Larsen Bay feasibility projects continue to be the most active projects in this category.

With FY 89 expenditures of more than $1 million, the Railbelt Energy alternatives study was the most active feasibility project administered by AEA during the past fiscal year. According to the January 1989 project's summary report, it was anticipated that the overall alternative study would be completed in final form by mid-1989. The alternatives study will present information regarding feasibility and costs of meeting the energy demand of Railbelt consumers. It reviews alternatives involving extended interties between Anchorage and Kenai, upgrading of the Anchorage-Fairbanks intertie, or construction of a new line between Anchorage and Fairbanks via Glenallen. In addition, the final report addresses power supply plans without the proposed interties and analyzes the merits of more consumer conservation, coal, and natural gas pipeline alternatives.

The focus of the Southeast Intertie feasibility analysis has been affected by the recent upswing in mining activity in that region of the

State. Projections of energy demand are being reevaluated in light of the actual and anticipated increases for energy demand. The Larsen Bay hydroelectric project feasibility study has been completed, and the city of Larsen Bay is undertaking construction of the project utilizing a $493,694 loan from the Power Project Revolving Loan Fund.

Rural Area Projects

Projects in this category are generally smaller scale, aimed at providing affordable power to a limited number of potential customers in the rural parts of the State. The appropriations in this category are for specific projects in identified communities or are for programs that provide assistance to various rural communities in developing power generation and distribution facilities.

The non-community specific projects in this category are all aimed at improving access to, and efficiency of, power supplies in rural Alaska. The projects include the rural electrification, community feasibility, construction assistance, technical assistance, waste heat, regional feasibilities, rural energy reconnaissance, and the metering installation survey. In AEA's annual capital projects status report the various communities served by these projects are listed.

Appropriations received for specifically identified projects cover all aspects of power generation and development. Specific projects range from the more than $4 million Chester Lake project, which has been operational since May 1988, to a much smaller $15,535 appropriation for a reconnaissance study for a Port Alsworth electrical system.

Based on the amount of FY 89 expenditures compared to the total inception to date expenditures listed in the schedule above, AEA focused a great deal of attention on the completion of rural projects during the past year. In particular, the following seven projects either had significant progress or were completed during the past fiscal year:

1. Chignik Lake ($198,008 in FY 89 expenditures) - This project was a result of design and preconstruction engineering funding provided by rural community feasibility funds in FY 81. State appropriations were combined with $26,000 in federal funds to construct a power generation and transmission facility.

2. Quinhagak Electrification ($125,599) - This project is essentially complete and represents construction of a new distribution system. In addition to AEA funds, the community utilized a $400,000 municipal grant from the Department of Administration.

3. Ouzinkie Hydroelectric Project ($108,745) - This project involved the design and construction of a 117 kilowatt hydroelectric project. Actual total costs of the completion of the project were approximately $610,000. This project funding represented a grant to cover part of the community's costs associated with this project.

4. Brevig Mission Upgrade ($107,158) - This project replaced a low voltage distribution system with a more efficient high voltage system capable of accommodating 20 new homes built in the community. The project should be complete and closed by January 1990.

5. Napaskiak Power Plant Upgrade ($100,000) - This project involved relocating the community's power plant and fuel storage tanks in addition to upgrading the electrical distribution system.

6. Tatitlek Electrification ($99,468) - This project is completed and involved replacement of an unsafe, unreliable, and outgrown overhead distribution system with a high voltage underground system.

7. Unalaska Generator Upgrade ($50,000) - This project involved upgrading the community's generation capacity in response to increased demand brought on by seafood processors connecting to the city's electrical system.

In addition to the significant recent expenditure activity for these projects, all expenditures reported in the schedule for the White Mountain Power System Upgrade, Eagle region villages, and Chalkyitsik Electrification projects were made during FY 89. This suggests that these projects are just beginning to get off of the ground and probably will involve significant activity in FY 90.

Major Projects in Construction

Bradley Lake is the largest project currently being managed by AEA. The 90 megawatt project is located near Homer and will contribute to the generating capacity of Alaska's railbelt area. Recently, AEA has revised downward its estimate of completion costs to $328,000,000 net of financing costs. As of mid-August 1989 it was estimated that the project was halfway completed.

Miscellaneous Projects

The largest appropriation in this category is for enhancing AEA's information processing system. The project has allowed AEA to automate the agency's contract administration systems, project cost management systems, and accounting systems. Currently AEA in consultation with the Department of Administration's Division of Finance is seeking a cost effective automated accounting system that can be integrated into the State's accounting system structure.

The State Energy Policy Task Force was a group of 22 individuals (13 from the public, 4 from the Executive Branch, and 5 legislators) which reviewed the State's energy policy and programs. The task focused on issues such as energy program organization, the Power Cost Equalization Program, energy conservation programs, and power project financing.

Alaska Energy Authority
Rural Area Projects
Schedule of Authorizations, Expenditures, Encumbrances, and Remaining Project Balances
As of June 30, 1989
(UNAUDITED)

	Total Authorizations	Expenditures thru 6-30-89	Encumbrances	Remaining Balance
Waste Heat Projects (Note 1)	$ 6,831,000	$ 5,899,231	$133,714	$ 798,055
Chester Lake (Note 2)	4,031,700	4,012,365	14,190	5,145
Rural Electrification	3,106,000	2,803,412	85,469	217,119
Rural Community Feasibility	2,982,453	2,720,923	8,961	252,569
Bethel Region	1,254,800	1,253,369	-0-	1,431
Rural Energy Construction Assistance (Note 3)	1,000,000	340,748	-0-	659,252
Rural Technical Assistance	617,973	592,750	22,801	2,422
Regional Feasibility Program	505,000	502,123	-0-	2,877
Rural System Efficiency Improvement	300,000	236,800	61,753	1,447
Ouzinkie Hydroelectric	260,000	260,000	-0-	-0-
Nikolai Electrical System	250,000	166,760	83,240	-0-
Rural Energy Reconnaissance	250,000	227,339	1,767	20,894
Chignik Lake	199,000	198,515	-0-	485
Quinhagak Electrical Project	152,000	136,898	-0-	15,102
Hope Electrical Line Extension	150,000	50,693	95,000	4,307
Brevig Mission	144,900	107,158	-0-	37,742
Red Devil Electrification	125,000	107,920	17,080	-0-
Bethel Intertie	102,551	83,591	2,400	16,560
Napaskiak Power Plant Upgrade	100,000	100,000	-0-	-0-
Tatilek Electrification	100,000	99,750	250	-0-
Metering Installation Survey	100,000	99,641	430	(71)
White Mountain Power System Upgrade	75,000	39,020	30,837	5,143
Eagle Region Communities	65,000	6,572	20,000	38,428
Chalkyitsik Electrification	51,300	21,881	-0-	29,419
Unalaska Generator Upgrade	50,000	50,000	-0-	-0-
Yakutat Waste Heat	36,000	33,824	-0-	2,176
Port Alsworth Electrical Project	15,535	14,818	-0-	717
Total Rural Projects	$22,855,212	$20,166,101	$577,892	$2,111,219

Note 1: AEA has completed, owns, and operates approximately $3,500,000 of waste heat projects located in rural Alaska. Revenues from the sale of energy from these projects fund a portion of the agency's operations.

Note 2: Chester Lake is owned by the Metlakatla community and is operated by Metlakatla Power and Light.

Note 3: The rural energy construction assistance project is funded entirely from funds from local communities that are used to "purchase" technical assistance from AEA.

Alaska Energy Authority
Bradley Lake Hydroelectric Project
Schedule of Authorizations, Expenditures, Encumbrances, and Remaining Project Balances
As of June 30, 1989
(UNAUDITED)

	Total Authorizations	Expenditures thru 6-30-89	Encumbrances	Remaining Balance
Bradley Lake (Note 1)	$442,580,000	$110,574,138	$ -0-	$332,005,862

Note 1: Authorizations for Bradley Lake represent the following:

General Fund Appropriations	$175,080,000
Bond Proceeds	267,500,000
Total Authorizations	$442,580,000

Alaska Energy Authority
Miscellaneous Projects
Schedule of Authorizations, Expenditures, Encumbrances, and Remaining Project Balances
As of June 30, 1989
(UNAUDITED)

	Total Authorizations	Expenditures thru 6-30-89	Encumbrances	Remaining Balance
Management Information Study	$505,000	$504,609	$ -0-	$ 391
Energy Policy Task Force	200,000	200,000	-0-	-0-
Snettisham Project Transfer	74,178	46,047	25,798	2,333
Total	$779,178	$750,656	$25,798	$2,724

BUDGET STRUCTURE AND PERSONAL SERVICES

The Alaska Energy Authority's (AEA) operational budget is made up of four components: (1) Administration, (2) Capital Improvement Projects (CIPs), (3) Operations and Maintenance (O&M), and (4) Power Cost Equalization Program. Most of the administration component of the budget is funded by non-continuing General Fund appropriations. The CIP component is primarily funded by continuing General Fund appropriations made for particular CIP projects and the proceeds from bond sales made to finance major capital projects. The O&M component is funded from program receipts earned from the sale and transmission of power from the six electric facilities owned by AEA in addition to revenues from waste heat sales.

In response to legislative reductions of funds, but not of positions, in the FY 88 administration budget component, and in order to fund the number of authorized positions in the final budget, AEA began shifting some of that component's costs to the CIP component. The diagram on the following page illustrates the reallocation of personal services expenditures between the agency's budgetary components.

Using the Revised Program (RP) process, AEA transferred the funding of two administrative positions (Accountant and Analyst Programmer) to the CIP portion of their budget. In addition, AEA began transferring select percentages of personal services costs associated with management and administrative positions in their administration component to projects in the CIP component of their budget. The inset to the right provides a break-down of the positions and the portion of their personal services reallocated to CIP projects.

At the time that these transfers were approved, it was estimated that they represented almost $97,000 in personal services costs. Another 40% of the personal services costs for the director of Program Development and Facilities was transferred to the O&M component. This combination of transferring all or a percentage of personal services costs allowed AEA to meet the Legislature's $179,900 personal services reduction in their FY 88 Administration budget component.

Response to FY 89 Budget Reductions

The FY 89 budget act reduced AEA's FY 89 administrative budget's personal services component to $600,000 from the agency's requested amount of $847,100. AEA received a supplemental appropriation of $120,000 for this component, thus resulting in a net reduction of $127,100. Although the agency stated in the FY 88 RP request that they did not anticipate continuing the shift of administration component costs to the CIP component, the $127,100 personal services budget required continuation of the practice. AEA reevaluated some of the percentages and the administrative positions that were charged to Bradley Lake and the Railbelt Alternatives Study for FY 89. In addition to charging 40% of the director of Program Development and Facilities' personal services to the O&M component, the agency processed a new FY 89 RP which transferred a portion of administration component personal service costs to the agency's capital project component. See the inset at left for a breakdown of personal services' percentages transferred.

FY 90

For FY 90, AEA's final proposed budget for personal services in the administrative component was for $866,100. The amount represented the prior year's budget level of $720,000 with the $127,000 cut restored and an increase of $19,000 for increased costs associated with health care benefits. AEA received a final administration component personal

services budget of $787,900, a reduction of $78,200. AEA anticipates continuing allocation of administration component personal services costs to the CIP and O&M components for the upcoming fiscal year.

Essentially, AEA has avoided having to reduce positions in their administration component by shifting some of the costs to capital projects. By doing so, AEA is essentially capitalizing a certain amount of their administrative costs into the costs of the projects being developed.

AEA notes in the narrative of the first FY 88 budget RP request that charging a portion of personal services costs of administration to major capital project represents a departure from past AEA practice. The narrative goes on to note, however, that this practice ". . .is consistent with the private sector common practice of capitalizing administrative costs."

Capital Project Positions

In the inset below is a schedule of positions that were included in the FY 88 AEA Budget as CIP Positions. Although some of these positions have been eliminated and others have been reclassified for FY 89 and FY 90, the general nature of CIP positions has essentially remained the same.

Individuals in these positions complete time sheets each two weeks recording what projects they worked on during the period. Personal services costs associated with these positions are charged to various CIP projects based upon these time sheets. Projects are charged direct personal services expenditures when the time sheets reflect that individuals specifically worked on an identified project.

The projects also receive an allocation of indirect personal service charges which are generated from individuals recording their time to the performance of administrative overhead functions.

Projects receive an allocation of indirect personal service expenditures based on the amount of direct personal service costs which have been charged to the project. At the direction of AEA management, not all projects receive indirect personal services charges. Most of the rural, smaller scale projects are not charged with any indirect personal services costs. AEA management decisions regarding which projects receive allocations of indirect costs are based on the project's budgetary constraints. Very often AEA receives appropriations for the bare cost of procuring equipment for a small community; in those cases AEA generally charges any associated agency personal services costs to one of the more "generic" rural/regional program support projects. The schedule on the following page presents a comparison of FY 88 direct and indirect personal services as recorded for twelve major projects on the State's accounting system.

CIP Positions with Administrative Functions

Many of the positions classified and budgeted as CIP positions perform administrative or support duties for AEA operations. Although they are involved with and support AEA projects, positions such as Public Information Officer, Graphics Specialist, various Accountant/Auditor positions, Personnel Officer, Records/Library Supervisor, and Information Systems Supervisor indicate duties that provide general administrative services to all of AEA operations.

Through the agency's internal Labor Distribution System, most of the personnel costs associated with these positions are charged to CIP projects, as indirect labor. To analyze the impact of these

"administrative" CIP positions, we reviewed the FY 88 indirect cost charges for selected positions that appear to us to perform administrative duties. Positions in bold print on the CIP position schedule on page 16 were selected for further analysis.

These positions' indirect costs made up approximately half of the FY 88 indirect labor charges made to the Bradley Lake project. These positions' costs made up over 40% of the costs charged to the Southeast Intertie study project. The pie charts on page 19 illustrate the breakdown between direct labor charges, indirect CIP labor charges, and indirect administrative CIP labor charges for twelve selected projects.

Functions associated with project wrap-up and closing are more administrative in nature than engineering or technical. For example, the major work effort involved with closing the Susitna Feasibility project was the organization, microfilming, and storage of project records. Accordingly, the relatively higher amount of charges for administrative CIP positions to projects in the wind-down stages such as Susitna (68.2%), Tyee Lake (57.3%), and Terror Lake (55.2%) can be attributed to the nature of the workload involved.

Alaska Energy Authority
Schedule of Personal Services Charges
For Major Capital Projects
For the Year Ending June 30, 1988

Name of Project	Direct Personal Services	Indirect Personal Services	CIP Admin Indirect Personal Services	Pct. of Admin CIP Indirect to Tot. Indirect	Pct. of Admin CIP Indirect to Total Pers. Svcs.
Bradley Lake	$ 509,702	$253,217	$116,298	45.93%	15.2%
Railbelt Energy Alternative	97,095	89,073	33,027	37.1	17.7
Waste Heat Products	70,746	48,950	21,030	43.0	17.6
Terror Lake Hydro	102,729	48,192	26,611	55.2	17.6
Susitna Feasibility	108,748	30,747	20,967	68.2	15.0
Rural Electric Projects	36,958	25,912	9,514	36.7	15.1
Anchorage/Fairbanks Intertie	98,049	24,668	10,801	43.8	8.8
Tyee Lake	25,518	16,159	9,238	57.2	22.2
Southeast Intertie	19,743	22,968	7,684	33.5	18.0
Solomon Gulch	19,348	11,788	8,659	73.5	27.8
Chester Lake	16,170	10,711	1,516	14.2	5.6
Swan Lake	13,432	9,618	4,646	48.3	20.2
Total	$1,118,238	$592,003	$269,991	45.6%	15.8%

Analysis of Power Development Revolving Loan Fund:

Appropriations to the Fund, Inception to Date	$210,000,000.00
Less: Appropriations Lapsed Back to the General Fund	(59,846,062.70)
Net Appropriations to the Fund, Inception to Date	$150,153,937.30
Cash Provided by Income to Fund	40,141,669.78
Total Cash Available for Loans, Inception To Date	$190,295,607.08
Less:	
Loans Outstanding as of June 30, 1989	(185,239,896.17)
Cash Reserved for Self-Insurance Fund	(5,000,000.00)
Available Cash Balance as of June 30, 1989	$ 55,710.91

Analysis of Rural Electrification Revolving Loan Fund:

Appropriations to the Fund, Inception to Date	$6,720,100.00
Less: Appropriations Lapsed Back to the General Fund	(1,614,900.00)
Net Appropriations to the Fund, Inception to Date	$5,105,200.00
Less:	
Loans Outstanding as of June 30, 1989	(4,488,377.65)
Loan Administration Expenses, FY 88 & FY 89	(14,979.27)
Cash Balance as of June 30, 1989	$ 601,843.08
Less: Loans Obligated but not Disbursed	517,790.40
Available Cash Balance as of June 30, 1989	$ 84,052.68

LOAN FUNDS AND BALANCES

As of June 30, 1989 AEA was responsible for administering two revolving loan funds that provided funding for various projects related to energy and power development: (1) the Rural Electrification Revolving Loan Fund, and (2) the Power Project Loan Fund. In addition, AEA assumed responsibility as of July 1, 1989 for the administration of two other energy-related loan funds: (1) the Power Development Revolving Loan Fund, and (2) the Bulk Fuel Revolving Loan Fund. In accordance with the special request and the objectives of our review, we have analyzed the four funds in order to determine the available cash balance of each fund.

Power Development Revolving Loan Fund

Under the loan fund's terms as set out in AS 44.33.600 the Power Development Revolving Loan Fund is made up of legislative appropriations, repayments of principal, and both the income from the investment of the fund's cash balance and from projects financed by loans from the fund.

Loans for the construction of the Four-Dam Pool projects make up the bulk of the outstanding loans. Since its inception in 1984, the fund has received $210 million in appropriations, over $40 million in income from power sales agreements, interest, and investment of available cash balances. Beginning in 1985, almost $60 million has been lapsed back to the General fund. The schedule on the opposite page provides a summary of cash sources, uses, and available balance from inception through June 30, 1989. The totals presented are unaudited and were compiled from AEA's accounting records.

Rural Electrification Revolving Loan Fund

Under the loan fund's terms as set out in AS 44.83.361 the Rural Electrification Revolving Loan Fund (RERLF) is made up of legislative appropriations and repayments of principal. Any interest earned on RERLF loans is put into the State's General Fund.

Loans are made only to electric utilities certified by the Alaska Public Utilities Commission. Loans may be made only for the extension of new electric service into an area of the State that an electric utility may serve under a certificate of public convenience. As of June 30, 1989 RERLF had made thirteen loans totaling more than $5.2 million (although as of that date only $4.75 million in proceeds had been disbursed).

The schedule below provides a summary of cash sources, uses, and available balance from inception through June 30, 1989. The schedule presented on the opposite page was compiled, unaudited, from AEA's accounting records.

Power Project Fund

Under the loan fund's terms as set out in AS 44.83.170 the Power Project Loan Fund (PPLF) is made up of only funds appropriated by the legislature. Any repayments of principal and the interest earned on PPLF loans are put into the State's General Fund.

Loans may be made for a wide range of power development activities, ranging from the financing of reconnaissance and feasibility studies to the construction or expansion of power generation facilities. Projects may involve fossil fuel, wind power, tidal power, geothermal, biomass, hydroelectric, solar or other non-nuclear energy source.

Currently, AEA has 35 outstanding loan obligations for just over $34.6 million. The loans vary in terms ranging from 1 year to 35 years, and interest varies from 5% to 9.95%. Borrowers generally are required to make semi-annual payments due on the first of January and July. The schedule below provides a summary of cash sources, uses, and available balance from inception through June 30, 1989. The totals presented below are unaudited and were compiled from AEA's accounting records.

Appropriations to the Fund, Inception-to-Date	$40,400,000.00
Funds Received through Reimbursable Service Agreements	700,000.00
Less: Appropriations Lapsed Back to the General Fund	(2,377,000.00)
Net Appropriations to the Fund, Inception to Date	$38,723,000.00
Less:	
Total Loans Committed, as of June 30, 1989	(34,633,029.91)
Loans Retired, as of June 30, 1989	(4,000,000.00)
Loan Administration Expenses, FY 88 & FY 89	(35,791.52)
Available Cash Balance as of June 30, 1989	$ 54,178.57

Bulk Fuel Revolving Loan Fund

Under the loan fund's terms as set out in AS 45.87.010-.500, the Bulk Fuel Revolving Loan Fund (BFRLF) is made up of general fund appropriations and repayments of principal. Any repayments of interest associated with BFRLF loans are credited to the State's General Fund.

All loans have a one-year term and can be made up for no more than $50,000. Only communities with a population of less than 2,000 are eligible to apply. Loans may be made to private individuals if endorsed by a qualified community. Interest charged on loans varies. The statute allows the rate to be set up to the maximum of the percentage of the average weekly yield of municipal bonds for the 12 months preceding the date of the loan.

The schedule below is an analysis of available cash in BFRLF as of August 22, 1989.

Appropriations to the Fund, Inception to date	$1,974,427
Add:	
Reserves not involving cash outlay	53,908
Cash available for Loans and Expenses	$2,028,335
Less:	
Loans Outstanding	710,570
Loans Committed, Not Disbursed	682,671
Loan Administration Expenses	145,309
Available Cash Balance as of August 22, 1989	$ 489,785

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UNDERWRITING EXPENDITURES

According to an internal memorandum prepared by AEA's senior auditor, the Authority incurred $442,474 in consulting engineer fees for financing which were never obtained. According to the memorandum,

> in 1983, the Power Authority contracted with R. W. Beck to provide consulting engineering services. One part of the scope of Beck's work was to provide services related to the long-term financing of various Power Authority projects. [Beck was paid] $442,474 for services in this category related to the Four Dam Pool projects for which long-term bond financing was pursued but not placed.

The memorandum goes on to point out that through the use of contingency conditions in contracts with financial advisors and bond counsel AEA avoided fees of at least $171,451. Contracts were negotiated with the firms of First Southwest Company, Wohlforth & Flint, and John Nuveen & Co. to provide financial advisor, bond counsel, and underwriter services for the proposed financing of the Four Dam Pool projects.

These contracts were contingent upon the amount of bonds actually issued and, accordingly, no payment was made for work on projects for which bonds were not issued. Power authority records indicate that First Southwest and Wohlforth and Flint had accumulated billings of $171,451 associated with financing never pursued.

Bradley Lake Long-Term Financing

The memorandum further relates to the following discussion of underwriting costs for long-term financing for the Bradley Lake project that has yet to be placed:

> Variable rate demand bonds were issued in November, 1985 to provide the funds needed during construction [of the Bradley Lake Project]; these bonds will be redeemed with the proceeds of long-term bonds to be issued by completion of the project. As of January 1989, expenditures related to the future issuance of the long-term bonds total $120,721. . . . Additionally in November 1988, a competitive contract was awarded to R. W. Beck to provide services as Consulting Engineer. The contract provides for a maximum of $112,000 to be paid to R.W. Beck.

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