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AUDIT OF  
NON-CONVENTIONAL  
ENERGY DEVELOPMENT  
PROJECT NO. 492-0294

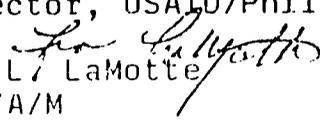
AUDIT REPORT NO. 2-492-88-15-N  
MARCH 30, 1988

UNITED STATES GOVERNMENT

# Memorandum

TO: Mr. Frederick Schieck  
Director, USAID/Philippines

DATE: March 30, 1988  
RIG/EA-88-172

FROM: Leo L. LaMotte   
RIG/A/M

SUBJECT: Audit Report No. 2-492-88-15-N  
Audit of Non-Conventional Energy Development, Project  
No. 492-0294

Attached is a copy of the final report on the subject audit. The certified public accounting firm of Joaquin Cunanan & Co., Manila, Philippines prepared the report dated January 25, 1988. A separate report of the exhibits mentioned in the report will not be issued, rather they will be maintained in RIG/A/Manila offices. The report containing the exhibits will be made available to USAID/Philippines because the exhibit report contains the specific details needed by the USAID to resolve the recommendations shown below.

The purpose of the review was to determine whether project funds were being properly accounted for in compliance with the terms of the grant and other applicable A.I.D. policies and procedures, and to identify and evaluate the internal accounting and administrative controls of the fund. The auditors reviewed accounts, reports and other relevant documents to determine the adequacy of the accounting systems and procedures. Transactions totaling \$405,173 or approximately 62% of funds disbursed for project implementation were verified. Of this amount, \$15,214 in costs have been questioned or recommended for disallowance.

On the basis of audit procedures performed, the auditors suggested several improvements to the systems and internal controls to better protect USAID/Philippines funds. The Implementing Agency for the subproject Solar Crop is obligated to remit back to the Bureau of Energy Development (BED) the amount of approximately \$1,305. This amount may ultimately need to be refunded to USAID/Philippines. This amount represents expenditure in 1984 which was disapproved by BED but still was part of the liquidation report. In addition, the Commission on Audit of the Government of the Philippines did not provide access to the original copies of the supporting documents.

As a result, the following recommendations will be included in the Office of the Inspector General's audit recommendation follow-up system.

Recommendation No. 1

We recommend that USAID/Philippines resolve \$15,214 in questioned and suspended costs and issue a bill of collection as appropriate. USAID/Philippines should also ensure that the Contingency expenditure of \$1,305 on the completed subproject Solar Corp which was disapproved by the Bureau of Energy Development be refunded to USAID/Philippines if appropriate.

Recommendation No. 2

We recommend that USAID/Philippines make a determination as to who is responsible for making sure that the subprojects' equipment is dismantled, salvaged, or made operational as appropriate. USAID/Philippines should then recommend appropriate action to this GOP division and monitor the actions taken. USAID/Philippines should also consider A.I.D.'s policy on recurrent costs in resolving this recommendation.

Please advise this office within 30 days of the actions planned or taken to implement these recommendations.

## *Joaquin Cunanan & Co.*



25 January 1988

Office of the Inspector General - Audit  
Agency for International Development  
Ramon Magsaysay Center  
1680 Roxas Boulevard, Manila

Attention: Mr. Leo L. La Motte, J.D., CPA  
Regional Inspector General - Audit

Gentlemen:

Final Report on the Results of the Audit and Survey of  
the USAID Funded NonConventional Energy Development  
Project

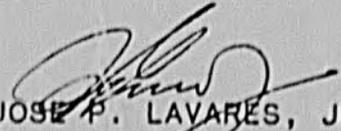
We are pleased to submit our final report on the results of the audit and survey of the Non Conventional Energy Development Project. This completes our work under Delivery Order No. 3, IQC No. 492-0000-I-03-6104-00.

This report consists of two (2) parts. The first part is the report proper while the second part contains the exhibits. Included in the exhibits are snapshots of some project sites and equipment inspected at various project sites.

Thank you for allowing us to reconstitute our final report to address primarily the requirements of a financial and compliance audit and the interest of your project officers.

We have enjoyed working with you and your staff on this project and we look forward to be of further assistance to you.

Yours very truly,

  
JOSE P. LAVARES, JR.  
Principal, Management Consulting Services Dept.

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## EXECUTIVE SUMMARY

### A. Objectives and Scope of the Audit

Joaquin Cunanan & Company/Price Waterhouse (Phils.) was commissioned to perform a financial and compliance audit of the NonConventional Energy Development Project and an inventory of project equipment at various project sites. Specifically, the audit sought to:

1. determine if proper procedures have been followed in the use and liquidation of funds and in the procurement of goods and services;
2. conduct a physical count of project equipment to establish location, appraise their condition and assess their utilization in meeting project objectives; and
3. examine on a general scale, decision-making, planning, procurement and other procedural points within project implementation in the light of project documentation specifications and AID regulations.

The audit involved the review and inspection of seventeen (17) out of the 23 sub-projects started within the period 1979 to 1983. At the time of the audit, twelve (12) were on-going and five (5) were closed projects. The review did not include an evaluation of performance/operating efficiency of the sub-projects.

### B. Approach to the Audit

To satisfy the objectives set forth by the audit, the audit team employed various audit steps and procedures, as follows:

1. Review of significant portions of project documents and familiarization with project mechanics.

2. Development and testing of an audit program via a pre-audit survey which considered various criteria developed as norms or standards by which project efficiency in the areas of handling/liquidation of funds, equipment accounting, use and control, among others, can be comprehensively examined.
3. Familiarization with accounting and other systems (planning, procurement etc.) to establish general and specific control areas in the course of the audit.

C. Major Findings and Recommendations

Findings

As regards accounting for and disposition of project funds, the audit team established the following:

1. Project expenditures were based on duly approved programs/justifications.
2. The Commission on Audit representatives at the Bureau of Energy Development (BED) and the implementing agencies in coordination with BED-Accounting passed on project expenditures through the conduct of post-audit which provides general assurance that disbursed project funds were in order and complied essentially with AID requirements.
3. Timely or regular submission of financial/liquidation reports by some implementing agencies have not been observed. Delayed submission of reports to BED correspondingly, delayed subsequent fund releases/cash advances and created a huge backlog of unprocessed liquidation reports. It appears that lack of understanding by the implementing agencies of government/COA rules and regulations (e.g. supporting documents/requirements for cash advance liquidation) also added to the delay in the processing.

On the physical inventory of project equipment, inspection and survey of project sites revealed the following:

1. Project equipment installations are not insured. Moreover, most of the equipment are currently wanting in repair/replacement while a few are still to be operationalized or installed.
2. The present information system at BED and the implementing agencies is not adequate to properly monitor the performance and condition of project equipment/installations.
3. Markings/identification of USAID funded and procured equipment have been made only in anticipation of the audit.
4. Some livelihood programs, such as ice plants and electricity generation projects which depend heavily on project equipment have been severely affected by the inoperational status of project equipment.

#### Recommendations

The audit team proposes the following to help project implementing agencies comply with AID regulations, systems and documentation requirements particularly as regards the use and liquidation of project funds and handling, monitoring and control of project equipment:

1. Establish closer and periodic coordination with USAID through regular exchange of project financial and other information (e.g., releases of loan and grant funds, direct procurement covering equipment and compliance with major AID requirements).
2. Complement the periodic internal review and audit of project implementors' books of accounts as regards project funds disposition with operations/project management assessment. Project

management e.g. USAID project officers and the implementing agency's project managers should anticipate periodic and surprise audits (e.g., financial or operations audit). On the part of the implementing agency, they should undertake more periodic visits/inspections of major equipment installations particularly for projects that are experimental in nature. Also, project recipients/beneficiaries should be encouraged to document and report on the performance of equipment and installations to facilitate the provision of required repair/replacement.

3. BED should strictly enforce the provisions of the Memorandum of Agreement on reporting/fund liquidation. In addition, written guidelines on reporting/liquidation requirements should be developed for use by the implementing agencies.
4. BED should remind the implementing agencies of the insurance requirement covering project equipment and follow-up the same to ensure compliance.
5. Rehabilitation of some projects (using unutilized funds) that can continue to provide benefits such as the IVES should be considered by USAID/BED.

## RESULTS OF THE AUDIT AND SURVEY

### I. Financial and Compliance Audit

#### A) Background

The NonConventional Energy Development (NonCon) Project, which aims to assess the applicability and feasibility of various nonconventional energy technologies in the country, is carried out through the NonConventional Resources Division (NCRD) of the Bureau of Energy Development (BED) and is funded by USAID through loans and grants. Funds for the project are released by the Bureau of Treasury to the BED-NCRD, which in turn advances the funds to the implementing agencies (IA). Specific goods and services for the various projects were directly provided by USAID on behalf of the project (e.g., direct purchase of commodities/equipment, foreign consulting services). A few projects were terminated in the early phase of the project. As of 15 September 1987, there were 13 ongoing and 10 closed projects. A listing of the 17 projects detailing USAID's share in total project funding and other relevant project information is shown on page 2 of this report.

#### B) Objectives, Scope, Limitations of the Audit and Methodology

##### 1. Objectives of the Audit

The objectives of the financial and compliance audit were to review the records and books of USAID, BED-NCRD and project implementing agencies to determine if proper procedures have been followed in the procurement of goods and services and accounting for the use of funds, and to examine on a general scale, decision-making, planning, procurement and other procedural points within project implementation in the light of project documentation specifications and AID regulations.

NGMCON AUDIT  
 SELECTED SIGNIFICANT FINDINGS  
 13 ON-GOING AND 4 TERMINATED PROJECTS

PROJECT	Rice Hull Fed Thermal Power Plant	Medium Scale Wind Power System	Solar Power Pumping System	Integrated Village Energy System	Grad. Program in Energy Eng'g & Mgt.	Gasification of Rice Hulls	Direct Heat Gasification System	Fermentation & Distillation Facility
PARAMETERS	1	2	3	4	5	6	7	8
AID'S share in funding commitment	75 %	98 %	45 %	74 %	73 %	91 %	92 %	39 %
No. of amendments to original project agreement executed between BEO/MCRD and the IAS	( 4 ) 1983 1984 1985 JULY, 1987	( 1 ) JULY, 1987	( 1 ) MARCH, 1987	( 2 ) JANUARY, 1985 JULY, 1987	( 2 ) MARCH, 1984 JULY, 1987	( 1 ) JULY, 1987	( 1 ) JULY, 1987	( 1 ) JULY, 1987
Financial Report / Litigation Report at BEO as of 30 September, 1987	DEC. 31, 1986	JULY 31, 1987	JUNE 30, 1987	JULY 31, 1987	SEP. 15, 1987	JULY 31, 1987	AUG. 31, 1987	MAY 31, 1987

PROJECT	Cogeneration System	Financial Planning Strategies	Biomass Assisted/Powered Refrigeration	Biomass Consultancy	Solar / Wind Consultancy	Solar Crop Dryer	Solar Lumber Dryer	Engine for Fuel Interchangeability	Public Information & Promotions Program
PARAMETERS	9	10	11	12	13	14	15	16	17
AID'S share in funding commitment	15 %	69 %	24 %	100 %	100 %	74 %	61 %	66 %	94 %
No. of amendments to original project agreement executed between BEO/MCRD and the IAS	( 2 ) NOVEMBER, 1984 APRIL, 1985	( 1 ) JULY, 1987	( 1 ) JULY, 1987	—	( 1 ) JULY, 1984	—	—	( 2 ) JULY, 1984 DECEMBER, 1984	—
Financial Report / Litigation Report at BEO as of 30 September, 1987	none	AUGUST, 1987	JUNE 30, 1987	not required by BEO/MCRD	not required by BEO/MCRD	closed project	closed project	MARCH 31, 1987 ( terminal report )	closed project

## 2. Scope and Limitations

The audit consisted of a pre-audit survey and a detailed audit. The survey covered an assessment of availability of and access to records while the audit included the examination of financial management/system, specifically the following: (1) accounting for funds; (2) methods of disbursements; (3) appropriateness and propriety of use of funds; and (4) procedures for liquidation to determine if project document specifications and AID regulations were met.

The audit conducted from 14 to 29 September 1987 covered seventeen (17) subprojects, twelve (12) of which were ongoing as of 15 September 1987. Five (5) closed projects were included in the audit.

During the pre-audit survey, the following limitations were established:

- a. Records and supporting documents of closed projects were hardly retrievable due to the following reasons:
  - since some projects have been closed for the last three or four years, specific project records/documents are mixed with other records and documents of the implementing agency in the records storage areas
  - files/storage areas were changed several times and/or were found destroyed by termites.
- b. Original copies of supporting documents to various transactions were eventually submitted to the Commission on Audit (COA) personnel assigned at the particular implementing agency which were then filed separately from its other records. Not only did this situation necessitated additional time to source out records but also required clearance from COA Regional/Head Office to verify original supporting documents.

To substantiate transactions where original supporting documents could not be verified, an alternative procedure was adopted - comparison of liquidation reports against books of accounts and correspondence files which reflected clearances or disallowances of project funds/liquidation.

Where no records were available at the implementing agency, records and reports filed at BED pertaining to the project were reviewed.

- c. The time allotted to conduct the audit was quite short. Transactions covered involved several accounting periods and a thorough audit would have required a comprehensive review of similar and recurring transactions from inception date (1973) to the present (30 June 1987).

Review of transactions covering project funds control and disposition was made on expenditures amounting to P7,931,925 (or approximately US\$405,173). As far as practicable, test for compliance and adherence to internal accounting controls were made on P3,475,392 or approximately US\$136,133 (or 44% of P7.9 million). Of this amount, P308,509 (or approximately US\$15,214) were questioned. Materiality of amount was used as basis for testing. Expenditures ranging from P2,000 to P300,000 were covered.

### 3. Methodology

The audit was conducted through execution of the following work steps: (1) review, validation and assessment of grant agreement and memorandums of agreement; (2) development and testing of an audit program via a pre-audit survey to establish audit scope and limitations as regards handling and liquidation of funds, equipment accounting, among others; (3) detailed review of records, documents and reports to substantiate adherence to general and specific provisions of agreements particularly in the areas of funds disbursements and liquidation, accounting, use and control of project equipment and project financial status reporting; (4) familiarization with other systems (planning, procurement, etc.) to test general and specific project administration

control areas; (5) discussion and interviews with IA's project accountant/bookkeeper; and (6) review and evaluation of internal controls including compliance.

C) Auditor's Opinion

The following is our opinion on the adherence of the implementing agencies to project document specifications and AID regulations pertaining to the handling and accounting of funds as well as on the adequacy of the implementing agencies' internal accounting control system applicable to the NonConventional Energy Development project.



C. Auditor's Opinion

USAID-FUNDED NONCONVENTIONAL ENERGY DEVELOPMENT PROJECT

We have performed a financial and compliance audit of the books and records of USAID, Bureau of Energy Development (BED) and its sub-implementing organizations to the extent necessary to meet the objectives and scope described in section I-B and to satisfy ourselves on the local releases and disbursements of project funds for the seventeen sub-projects as of June 30, 1987, as summarized in the accompanying Schedule of Fund Releases, Disbursements and Unliquidated Advances. Except for the limitations described in Section I-B, our examination was made in accordance with generally accepted auditing standards, including the U.S. Comptroller General's audit standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstance.

In our opinion, except for the findings discussed in section I-D and for the effects of such adjustments, if any as might have been determined had we been able to examine the unavailable records and documents pertaining to certain sub-projects, (a) the accompanying Schedule of Fund Releases, Disbursements and Unliquidated Advances presents fairly the local releases and disbursements of funds of the USAID-Funded NonConventional Energy Development Project for the seventeen sub-projects as of June 30, 1987, in conformity with generally accepted accounting principles and (b) the accounting of funds, methods of disbursements and use of funds and liquidation procedures of BED and its sub-implementing organizations substantially complied with the project's documentation specifications and AID regulations.

*Joaquin Coronado & Co.*

October 20, 1987  
Makati, Metro Manila

USAID-funded NonConventional Energy Development Project  
 Schedule of Fund Releases, Disbursements and Unliquidated Advances  
 BED and its Sub-Implementing Agencies  
 As of June 30, 1997

DISBURSEMENTS

Project Number	Project Code	Name of Project	Local Fund Release 1/		Funds Received by Sub-IA	Direct Payments by BED	Sub-Implementing Agencies				Unliquidated Cash Advance (Disbursement in Excess of Cash Advance) by the Sub-IA
			USAID	GOP-BED			BED Approved Liquidation	Liquidation Under Review	Total Disbursements	Refunds to BED	
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	7803-L	Rice Hull Fed Thermal Power Plant	P 352,546	P 397,900	P 750,446	P 352,546	P -	P 403,564	P 756,110	-	(P 5664)
2	7805.1-L	Medium Scale Wind Power System	80,750	449,321	529,081	-	211,738	277,959	499,707	-	39,374
3	7806-L	Solar Powered Pumping System	-	461,975	461,975	-	-	312,135	312,135	-	149,840
4	7807-L	IVES	2,872,505	926,316	3,799,421	56,335	150,643	3,432,492	3,639,450	-	159,951
5	8201-L	Post Graduate Program	924,000	1,368,050	2,292,050	-	-	2,131,112	2,131,112	-	150,939
6	8203-L	Gasification of Densified Rice Hulls	1,352,279	219,329	1,551,607	-	-	1,355,177	1,355,177	-	186,430
7	8301-L	Direct Heat Gasifier	1,613,935	151,872	1,765,707	-	1,119,133	435,845	1,557,978	-	207,729
8	8403-L	Pilot Scale Fermentation	-	337,221	337,221	-	-	285,412	285,412	-	50,809
9	8402-L	Cogeneration System 3/	-	-	-	-	-	-	-	-	-
10	8401-L	Development Alternative Final Strategies 4/	219,546	547,406	766,952	-	697,362	79,590	766,952	-	-
11	8204-L	Biomass Assisted/Powered Rural Ref.	640,152	513,449	1,353,601	-	-	1,073,488	1,073,488	-	290,113
12	8205.1-L	Biomass Consultancy 5/	-	-	-	-	-	-	-	-	-
13	8205.2-L	Solar/Wind Consultancy 5/	-	-	-	-	-	-	-	-	-
14	7801.1-L	Solar Crop Dryer	323,270	69,420	992,690	-	670,135	254,279	934,414	58,276	-
15	7801.2-L	Solar Lumber Dryer 5/	208,952	59,350	268,292	-	169,622	85,569	256,291	-	11,911
16	7804-L	Association of Engine for Fuel Inter.	603,900	1,695,815	2,499,715	-	-	978,423	978,423	-	1,521,292
17	7816-3/L	NonCon Energy Promo. Program	369,317	370,000	739,317	61,657	-	224,720	286,377	-	452,940
TOTAL in Pesos			P 10,340,962	P 7,757,023	P 18,107,985	P 470,538	P 3,008,533	P 11,354,855	P 14,234,036	P 59,276	P 3,215,673
Percent to Total Funds Received			57%	42%	100%						
Total in US Dollars			\$ 652,193	\$ 473,252	\$ 1,125,460			\$ 510,335			

NOTE:

- Local fund releases do not include USAID direct payments on specific goods and services.
- a + b = c; g + h + i = c; d + c + f = g
- Fund releases to this project were made directly by USAID in the form of loans.
- Payments to this project were made directly by BED to the suppliers of services/commodities; this project was handled directly by BED.
- Payments to these projects were made directly by USAID to the suppliers of services/commodities.
- The unliquidated cash advance represents the unaccounted difference between receipts and reported disbursements. Documents supporting expenditures/other disposal of funds were not available.
- USAID provided dollar project funds (57% of total project funds - Item a) reflected in Philippine pesos were reconverted to US dollars using Central Bank of the Philippines rates (1979-77.38; 1980-87.52; 1981-87.90; 1982-88.30; 1983-91.4; 1984-91.8; 1985-91.8; 1986-92.30; 1987-92.49). GOP-BED provided funds committed in Philippine pesos (Item b), however, were simply translated to US dollars to afford appreciation of total funds released at dollar values (Item c).
- Where the project funds cannot be broken down and translated to dollar values by year, the average of the applicable year-end dollar/peso conversion rates were used. Period covered was from project inception to June 30, 1997. Fifty-seven (57) percent of project disbursements (Item g) was also translated into US dollars to establish the corresponding dollar values of project disbursements essentially funded by USAID as appearing in Item a. Difference between Items a and g is accounted for by: (a) the timing of the project disbursements, e.g., funds released in a year are disbursed in the following year with obviously different rates; and (b) the unaccounted for 57% of Item i still to be translated into dollar values.

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USAID-FUNDED NONCONVENTIONAL ENERGY DEVELOPMENT PROJECT  
AUDITOR'S REPORT ON THE INTERNAL CONTROL SYSTEM

We have performed a financial and compliance audit of the USAID-Funded NonConventional Energy Development Project implemented by the Bureau of Energy Development (BED) from 1979 to June 30, 1987 and have issued our report thereon dated October 20, 1987. As part of our examination, we made a study and evaluation of the system of internal accounting control of the BED and its implementing agencies to the extent we considered necessary solely to determine the nature, timing and extent of the other auditing procedures necessary to express an opinion on the project fund releases and disbursements as of June 30, 1987 and on the compliance with project documentation specifications and AID regulations in the accounting for the project funds and the use or disposition thereof. Accordingly, we do not express an opinion on the system of internal accounting control of the BED and its implementing agencies taken as a whole. However, during our examination, we did not become aware of any conditions indicating a more than relatively low risk (a) that error and irregularities in amounts material to the Project may occur and not be detected within a timely period and (b) that the existing system of internal accounting control does not provide adequate safeguards against unauthorized use or disposition of project funds.

*Josephine C. ... Co.*

October 20, 1987  
Makati, Metro Manila



D) Findings and Recommendations

1. Accounting for Funds at the BED

a. Finding

As of 30 June 1987, recorded fund releases to the project by USAID amounted to a total of \$5.817 million (\$3.879 million loans and \$1.938 million grants). These accumulated releases include direct payments made by USAID to suppliers of goods and services other than funds directly released to BED.

BED records, on the other hand, only showed funds released to IAs amounting to ₱10.341 (or approximately US\$.652 million) for USAID funding and ₱7.767 million (or approximately US\$.473 million) for GOP-BED funding. The USAID funding released by BED to the project excludes direct payments made by USAID for goods and services procured.

b. Recommendation

BED should request on a regular basis (e.g., quarterly) from USAID a summary of funds released for the project including direct payments made by USAID to provide Project Management complete information on project cost/funds status.

2. Accounting for Funds at the IAs

a. Finding

No separate bank account is maintained specifically for the project. Funds received by the IA are deposited in a general fund/account of the IA; however, a subsidiary record is maintained for the Noncon project funds received from BED. These funds received are reported quarterly to BED together with the project expenditures by funding sources, e.g., USAID-local or BED-GOP.

b. Recommendation

IAs should maintain separate bank accounts for the project funds in addition to the subsidiary ledger. In this way, any income in terms of interest earned on the fund can be easily traced and accounted for.



3. Use and Disbursement of Funds at the IA

a. Findings

Our review of project expenditures revealed that disbursements were made based on the requirements of the project. Disbursements tested were duly supported by necessary invoices and other documents. These disbursements were also compared against budget. The following, however, were noted during the review:

1. There were unsigned checks and check vouchers totalling ₱285,009.20 or approximately US\$13,909 (dated September 30, 1987) intended for the local purchase of equipment and supplies for the subproject Graduate Program in Energy Engineering and Management. As most equipment are procured from abroad, and all those procured have been endorsed to the project leader (project is nearing completion), there appears to be no need for the above additional local purchases. Total budget of the project was set at ₱3.486 million. Expenditures as of the date of audit was established at ₱2.130 million. Although they could be valid expenditures, these will have to be approved by BED as all planned purchases/procurement for the project have already been made.
2. On the completed subproject Solar Crop Dryer, there is an expenditure of ₱23,500 or approximately US\$1.305 which was part of the liquidation report dated December 1984, charged to Contingency, which was subsequently disapproved by the BED. As of the audit date, no resolution has been made on whether or not the amount should be refunded to BED although several written requests for liquidation had been sent by BED to the Project Leader.

b. Recommendations

1. The unsigned checks and check vouchers for local purchase have to be cancelled if purchases are no longer necessary.
2. BED should immediately demand for the refund of ₱23,500 since this expenditure



has been disallowed. Follow up on the refund should be accelerated.

#### 4. Monitoring/Liquidation of Funds

In the earlier part of project execution (first three years) funds provided to the IAs were booked by BED as outright charges to the appropriations from the Office of Budget and Management (OBM).

BED-Accounting disburses/releases funds to the IAs based on disbursement schedules and upon request of BED-NCRD. At present, fund releases to the IAs are recorded as cash advances subject to liquidation.

##### a. Finding

In reviewing funds released to and liquidated by the implementing agencies, our evaluation revealed the following:

- 1) Frequency of reporting although provided in the MOA's, are not observed by the IAs. Reports are submitted late to BED (e.g., 3 months, 6 months, or 9 months late, others have incomplete report files at BED). Delayed or irregular submission of liquidation reports also delayed the release of subsequent funds. This, in turn, also affects the timely completion of on-going subprojects.
- 2) Due to the delayed submission of liquidation reports, the BED records show outstanding cash advances. As of 30 June 1987 the unliquidated cash advances total P3,215 million or approximately US\$.230 million (or 17% of the total funds released equivalent to P18.108 million). Refer to the Schedule of Fund Releases, Disbursements and Unliquidated Advances for details.
- 3) There were liquidation reports submitted by the implementing agencies to BED which were returned by BED-Accounting to BED-NCRD for follow-up/clarification of some supporting documents from the IAs. These liquidation reports amounted to P11.355 million (or 62% of the total funds released amounting to P18.108 million).



It appears that some IAs are not fully aware of the supporting documentation requirements for liquidation of cash advances or do not fully understand pertinent government/COA rules and regulations which BED, as a government agency, has to strictly enforce.

As of 30 September 1987, the audit team established that only ₱7 million out of ₱11.355 million liquidations under review by BED as of 30 June 1987 have been passed for liquidation. The balance of ₱4.355 million still remained to be reviewed for liquidation approval.

b. Recommendations

BED should strictly require the IAs to adhere to the provisions of the contract covering the submission of financial/liquidation reports on time. Up-to-date reports will reduce, if not eliminate, huge unliquidated cash advances. This will also help expedite processing of fund releases.

Moreover, to prevent delays in the processing of liquidation reports and disallowances of certain expenditures by BED-Accounting, BED should comprehensively discuss with project leaders or project accountants of the IAs and explain their (and COA) financial/liquidation reporting requirements. Also, easy to read and understand written guidelines, to include consistent report formats, should be developed by BED for the IAs.

5. Reporting to USAID by BED

a. Finding

The grant agreement provides that BED should furnish USAID information and reports relating to the project as AID may reasonably request. Based on our review of project records, copies of documents and liquidation reports provided to AID, the following were noted:

1. frequency (monthly and quarterly) of reporting has not been clarified; and



2. detailed information to be provided on reports were not specified.

b. Recommendation

For proper project and financial monitoring purposes, AID should specify in the grant agreement (such as frequency and quality of information) submission of periodic reports from BED to contain specific details such as fund status, project expenditures, accomplishments, planned activities for the next quarter and timetable. Such report would provide AID information in planning and anticipating fund releases to the project.

6. Periodic Review/Audit of Transactions

BED-Accounting and COA conduct post audit of all liquidations submitted by the IAs to BED. The assigned project accountant of BED-NCRD reviews the liquidation reports before forwarding them to BED-Accounting.

a. Finding

This type of review may be inadequate in ensuring that all weaknesses in the overall handling of releases/liquidation/disallowances over project funds are uncovered.

b. Recommendations

Aside from COA and BED Accounting staff, financial audits on a periodic basis, and not only at the time of project completion or termination should be performed. Project management (e.g., USAID project officers and implementing agency's project managers) should also anticipate periodic and surprise audits. This will provide a comprehensive/thorough review of the project.

Also, it should conduct management and operations audit to assess overall efficiency of project management. This will adequately relate the results of the financial audit to the efficiency of project management and implementation.



## II. Survey/Physical Inventory

### A) Objectives, Scope and Methodology

The objectives of the survey/physical inventory are to identify location and condition of equipment and to assess their utilization in meeting project objectives.

The physical inventory covered the twelve (12) ongoing and five (5) closed subprojects. Except for two (2) consulting projects, project equipment/installation sites were visited. Also, interviews with project beneficiaries and project personnel were conducted. Existence and condition of project equipment located at various sites were substantiated through ocular inspection, physical counts and location of appropriate AID insignia.

### B) Findings

Various equipment in project sites visited were inspected and accounted for, based on the BED-provided listings of various equipment. Equipment and parts on site not forming part of the list were also inventoried and accounted for. The results of the physical inspection of AID-procured equipment are summarized in Exhibit I.

1. A few project equipment have been non-operational or uninstalled and at present a majority are wanting in major/minor repairs or replacements. Common reasons propounded were the following:
  - a) Inability of the supplier to deliver the equipment on time. In addition, there were delays in releasing delivered equipment from customs custody. The contractor for the Rice Hull-Fed Thermal Power Plant in Cabanatuan, Ray Burner Co., incurred problems in releasing equipment items from customs. At one time, some items were lost from customs custody which necessitated the replacement of lost items which further delayed project completion.
  - b) A major equipment supplier in the US has gone out of business (suffered bankruptcy). Enertech Corporation, the supplier of the wind turbine-generator for the



Medium Scale Wind Powered project, went bankrupt while equipment installation was on-going. This situation may be a highly exceptional case, but the bankruptcy of the supplier further delayed project completion. It is also reflective of the quality of competitive selection of the supplier of the equipment.

- c) Inadequacy or lack of budget to install delivered equipment resulted in the extension of project timetable.
2. An inspection of major project equipment revealed that, aside from being non-operational and idle, there were also cases of missing or unlocated equipment, parts and accessories.
3. Within the context of project cost management, no records are readily available to assess or establish the following:
  - a. cost required to install equipment
  - b. additional cost required to operationalize the equipment
  - c. technology transfer to prepare staff or project representative on basic trouble shooting and routine maintenance
  - d. maintenance/care required prior to equipment installation/operationalization
  - e. frequency of equipment breakdown for those set up and operated successfully
4. Project equipment were not insured. This violates the specific provision in the Memorandum of Agreement to insure project equipment upon receipt considering their relatively high value.
5. AID insignias were not seen on many equipment purchased (out of the AID grant and/or loans). On those equipment with AID insignia, it was noted that they have been newly pasted apparently to prepare for the audit.



6. Project equipment were mixed with those of other projects handled by the same project leader/implementing agency. There was no proper identification of the USAID-funded project equipment. These subprojects are:
  - o Cogeneration System and Interconnection of Independent Power Producers to the National Grid
  - o Biomass Assisted/Powered Rural Refrigeration
  - o Adaptation of Engine for Fuel Interchangeability
7. Equipment/inventory records are not maintained by the IAs. Parts listed separately per BED records could no longer be identified as they have been assembled to constitute a major equipment (e.g., Densified Rice Hull).
8. Livelihood programs like ice plant operations and electricity generation depending heavily on the project equipment, specifically the Integrated Village Energy Systems, have been severely affected by the inoperational status of the equipment.

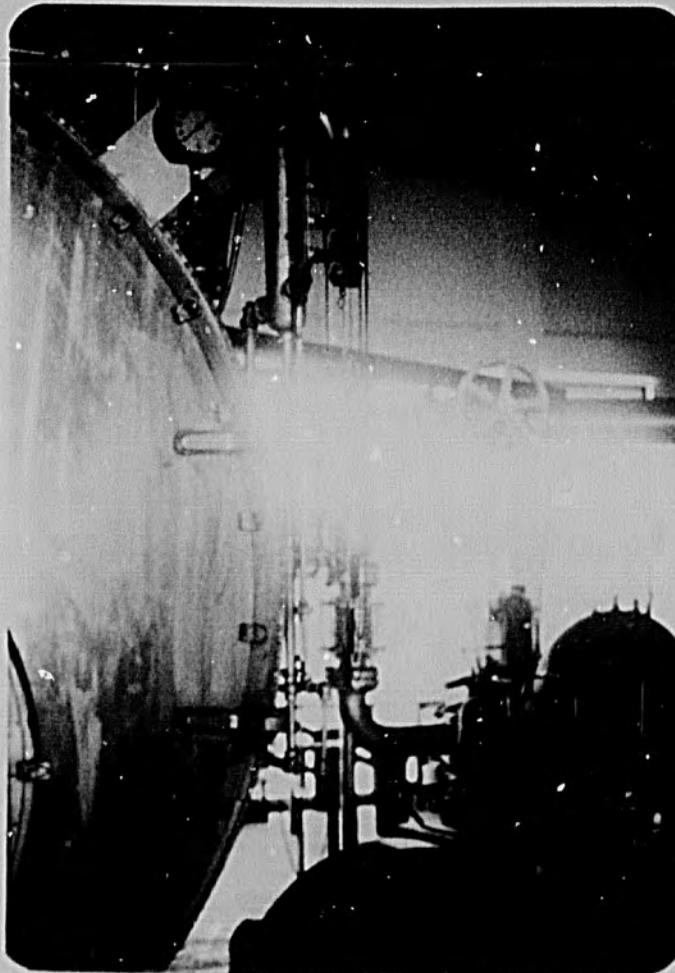
C. Suggested Management Actions

1. The procedures on selection of suppliers as well as the terms and conditions of the contract to supply the equipment should be carefully reviewed. If possible, specify in the Memorandum of Agreement, procedures to adopt in sourcing out alternative or fallback suppliers to assure reliability of equipment supply and technical service.
2. The budget and the timetable to install equipment should be reviewed. Ideally, financial and technical parameters should be clearly pre-established to enable the measurement of the rate of success/accomplishment or extent of project failure.
3. Equipment records should be maintained for project monitoring and management purposes. This record should contain data/information on equipment cost, installation, routine or major repairs done and other relevant information. This record will also be a good basis for conducting physical counts and identifying and costing missing equipment and parts.



4. Special provisions of the contract should be reviewed and validated to ensure proper project implementation. For example, as called for by the Memorandum of Agreement, project equipment should be immediately insured upon receipt. The IAs should therefore be instructed to insure all remaining insurable project equipment.
5. Project officers should consider conducting more regular visits to project installation sites to ensure that implementation is on schedule and AID pro-cured equipment are properly safeguarded, monitored and identified.
6. Project equipment funded by AID should be properly identified especially when there are several projects handled by one project leader/implementing agency. It appeared during our inspection that project equipment of various funding agencies were mixed and no proper identification was made.
7. A cost-benefit analysis should be conducted for projects that are presently inoperational but which have benefited recipient communities to provide enough rationale for rehabilitation/repair or replacement of major project equipment. USAID/BED, based on the results of the analysis, may consider using available funds to rehabilitate/repair projects such as the IVES.

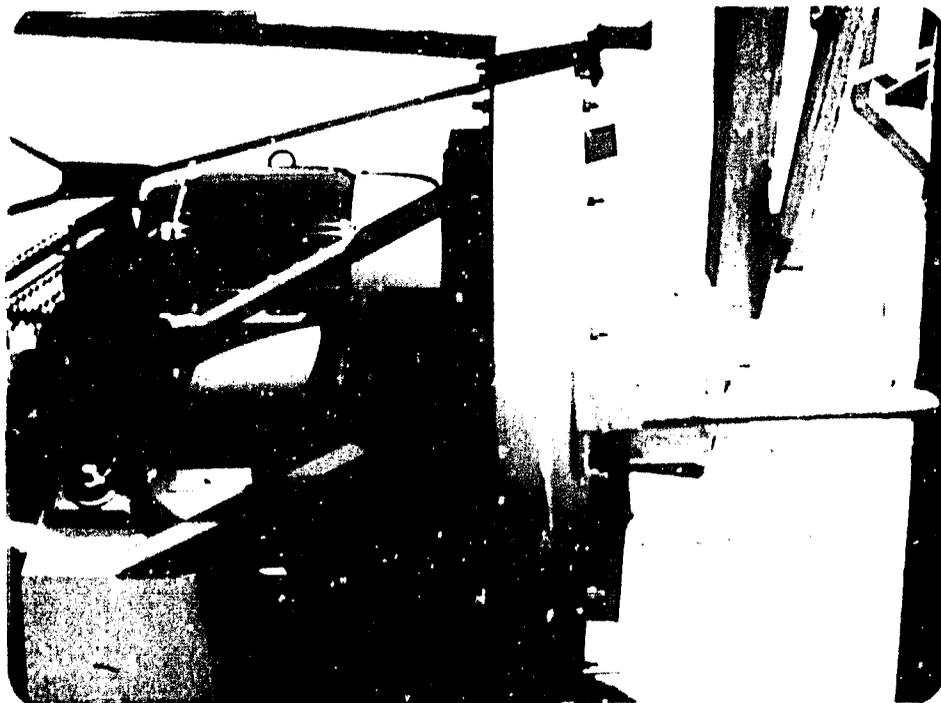
RICE HULL - FED THERMAL POWER PLANT  
Site: Cabanatuan City



BOILER PROPER. The boiler proper also includes the furnace where rice hulls are burned. Rust has started to eat on the external walls of the boiler system. Although equipment has been fully installed, the thermal is still not operational because of deficiencies in some parts of the operating system (e.g. mechanical defects, error in furnace design).

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RICE HULL-FED THERMAL POWER PLANT  
Site: Cabanatuan City



FLY ASH CYCLONE SEPARATION WITH BLOWER. This equipment was damaged by the friction caused by rice hull from surge hopper. (Please note the hole). This unit was replaced by another set.

SOLAR POWERED PUMPING SYSEM  
Site: Sitio Poo & Sitio Aguho, Sa. Rosa



Beside the water tank, water buyers cue for water at ₱0.50 per container. (The encircled container is the standard container size)

SOLAR POWERED PUMPING SYSTEM  
Site: Sitio Poo & Sitio Aguho, Sta. Rosa



Water tank with the water level meter. The plastic pipe which is being used to check water level was observed to be mossy.

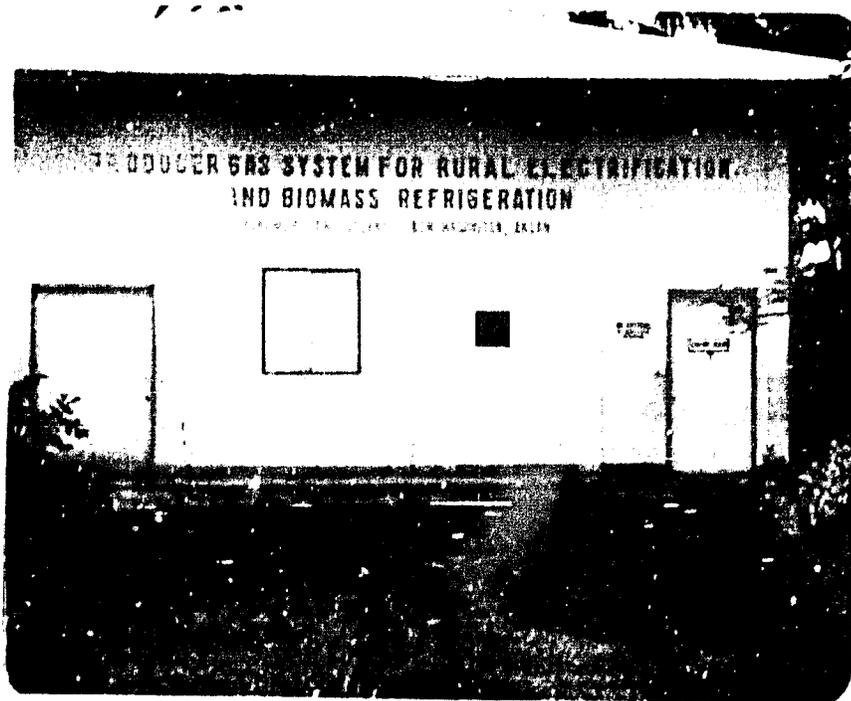
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SOLAR POWERED PUMPING SYSTEM  
Site: Sitio P00 & Sitio Aguho, Sta Rosa



Polybutelene pipe which connects the control system to the water tank, distance of 2 km. During high tide, the pipe is under water. The pipe is exposed to sabotage by unfriendly villagers.

INTEGRATED VILLAGE ENERGY SYSTEM  
Site: Pinamuk-an, New Washington, Aklan



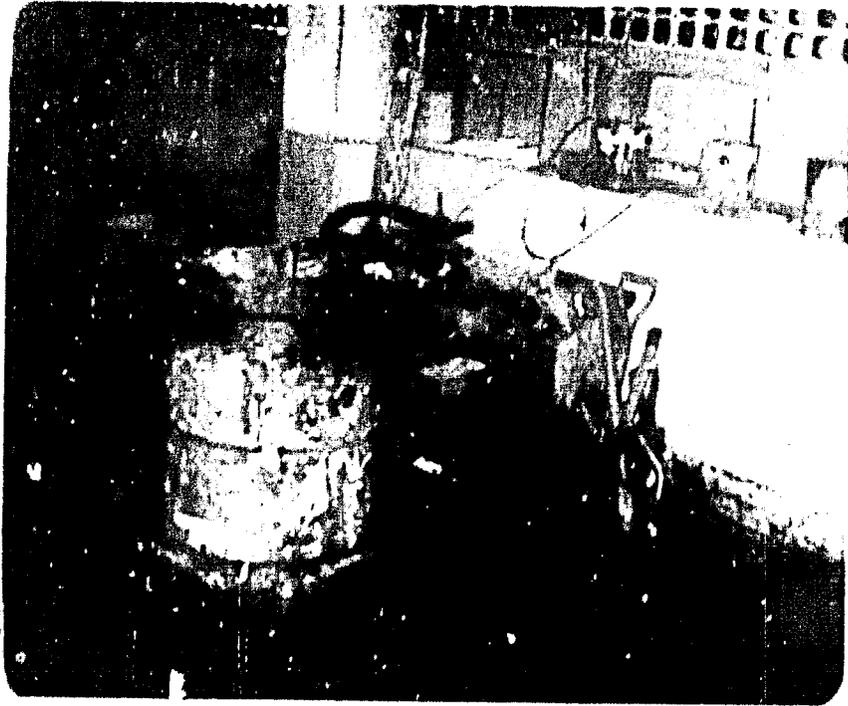
IVES Electrification and Ice Plant - a one storey structure housing the plant and the generator used to produce electricity for the island. At the time of visit (September 28) neither the electric generator nor the ice plant equipment were operating. The whole plant has been idle for the last 6 months.

INTEGRATED VILLAGE ENERGY SYSTEM  
Site: Pinamuk-an, New Washington, Aklan



The pig pens (currently empty) constructed to demonstrate biogas generated from animal wastes.

INTEGRATED VILLAGE ENERGY SYSTEM  
Site: Pinamuk-an, New Washington, Aklan



The basement of the Samahang Nayon center filled with junk<sup>n</sup> and some tools that go underwater at certain times of the year.

INTEGRATED VILLAGE ENERGY SYSTEM  
Site: Pinamuk-an, New Washington, Aklan



The inoperational heating tank where animal wastes are accumulated to generate biogas.

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INTEGRATED VILLAGE ENERGY SYSTEM  
Site: Pinamuk-an, New Washington, Aklan



The Azola ponds - 2 are empty while 2 are filled only with water serving as a good breeding place for mosquitoes.

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