



POWER SECTOR EXPANSION PROJECT

ADB LOAN N.2368

ADB GRANT N.0087

JBIC LOAN N.8232

AusAID GRANT N.0101



Quarterly Progress Report No. 13 2nd Quarter 2011 (April to June 2011)



PROJECT MANAGEMENT UNIT

&



EGIS BCEOM INTERNATIONAL

Table of Acronyms

ADB	Asian Development Bank
ADR	Arthur D Riley
APM	Acting Project Manager
AusAID	Australian Agency for International Development
CEO	Chief Executive Officer
CSO	Community Service Obligation
DSR	Debt-service Ratio
EA	Executing Agency
EARF	Environmental Assessment and Review Framework
EBI	Egis Bceom International
EPC	Electric Power Corporation
ESU	Environment and Social Unit
GoS	Government of Samoa
IA	Implementing Agency
ICB	International Competitive Bidding
IEE	Initial Environmental Examination
IRR	Internal Rate of Return
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
km	kilometre
kV	kilo Volt
kVA	kilo Volt-Ampere
kW	Kilo Watt
LARF	Land Acquisition and Resettlement Framework
LARSF	Land Acquisition and Resettlement Screening Form
MCIL	Ministry of Commerce, Industry and Labour
MNRE	Ministry of Natural Resource and Environment
MOF	Ministry of Finance
MOU	Memorandum of Understanding
MWCSD	Ministry of Women Community and Social Development
NCB	National Competitive Bidding
NPV	Net Present Value
PEAR	Preliminary Environmental Assessment Report
PM	Project Manager
PMC	Project Management Committee

PMU	Project Management Unit
PPMS	Project Performance Monitoring System
PSC	Project Steering Committee
PUMA	Planning & Urban Management Agency
REA	Rapid Environmental Assessment
SLC	Samoa Land Corporation
SMEC	Snowy Mountain Engineering Consultant
STEC	Samoa Trust Estate Corporation
SWA	Samoa Water Authority
TA	Technical Assistance
TER	Tender Evaluation Report
USD	American Currency

Distribution List

Hon. Manualesagalala Enokati Posala	Minister of Works, Transport and Infrastructure (CHAIRMAN EPC BOARD)
Anthony Maxwell	Team Leader Asian Development Bank
Heather Dixon	2 nd Secretary Development Cooperation Australian High Commission
Yoshifusa Shikama	Resident Representative JICA
Sachie Terasaki	Pacific Division JICA
Hon. Afoafouvale J. Moors	Associate Minister EPC
Tologata T. Tuimalealiifano	Acting General Manager Electric Power Corporation (EPC BOARD MEMBER)
Tupai Iulai Lavea	Chief Executive Officer Ministry of Finance (EPC BOARD MEMBER & PSC CHAIRPERSON)
Vaaelua Nofo Vaaelua	Chief Executive Officer MWTI (EPC BOARD MEMBER)
Auelua Samuelu Enari	Chief Executive Officer MCIL (EPC BOARD MEMBER)
TBA	EPC Board Member
TBA	EPC Board Member
TBA	EPC Board Secretary
TBA	EPC Board Member
Aumua Ming Lang Wai	Attorney General (PSC MEMBER)
Taulealea Malua	Chief Executive Officer MNRE (PSC MEMBER)
Tainau Taputoa Titimaea	General Manager SWA (PSC MEMBER)
Kuiniselani Toelupe Tago	Chief Executive Officer MWCSO (PSC MEMBER)
Vui Lance Lameko	Manager, Corporate Services, EPC (PMC MEMBER)
Tapusoa Moa Setefano	Acting Manager, Retailing. EPC (PMC MEMBER)
Lafai Johnny Pereira	Manager, Distribution Section, EPC (PMC MEMBER)
Leilani	Acting Manager, Savaii EPC (PMC MEMBER)
Tony Atilua	Manager, Generation, EPC (PMC MEMBER)

Table of Contents

1. EXECUTIVE SUMMARY	7
2. INTRODUCTION.....	13
2.1 Vision	13
2.2 Mission.....	13
2.3 Objectives	13
2.4 Rationale.....	14
2.5 Sector Loan Data.....	15
2.6 Key Loan and Asian Development Bank (ADB) Mission Dates	15
2.7 Estimated Project Cost and Financing Plan	15
2.8 Project Financing and Counterpart Funding.....	17
3. PROJECT IMPLEMENTATION	18
3.1 Project Management Unit Staff Movement.....	18
3.3 Implementation Consultants Personnel Movement	21
3.4 Egis Bceom International Personnel Remaining Man-months at end of 4 th Quarter, 2010.	22
3.5 - Egis Bceom International Personnel Movement during this Quarter and Plan for next Quarter	23
3.6 Implementation Progress	25
A.Core Subprojects:.....	25
1.Hospital Feeder Upgrading Project Stage 1	25
2.Single and Three-Phase Prepayment Metering (PPM)	25
B. Candidate Subprojects:.....	28
1. Upolu.....	28
a. Generation	28
b. Transmission	29
2. Savaii	30
a. Generation	30
b. Transmission	31
3. Measurement Equipment:.....	31
SCADA	31
4. RISKS AND ISSUES.....	32
A.PMU Organization Structure	32
B. Staff Recruitment	32
C. Prepayment Meters.....	32
D. Cabinet Policy.....	33

E. Meter Heights	33
F. Vending and Card System	33
H. Access Road to Fiaga	33
I. Water Supply to Fiaga Power Plant	Error! Bookmark not defined.
J. Land transfer to EPC	33
K. Vehicles.....	Error! Bookmark not defined.
L. Draftsman	Error! Bookmark not defined.
5. EPC PERFORMANCE MONITORING	34
6. COMPLIANCE WITH LOAN COVENANTS (Beneficiary)	38
7. LOAN EFFECTIVE MILESTONES (Electric Power Corporation)	39
8. RESETTLEMENT (updated quarterly)	40
9. ENVIRONMENT (updated quarterly)	43
10. LOAN DRAW DOWN TO DATE (31 December 2010)	48
11. PROJECT FORECAST FOR 4 th QUARTER 2010 AGAINST ACTUAL.....	50
12. PROJECTED FORECAST YEAR TO DATE AGAINST ACTUAL	53
13. LAST ADB REVIEW MISSION	56
14. APPENDICES	57
Appendix 1 – Revised Project Estimates	57
Appendix 2 – Project Progress Monitoring.....	58
Appendix 3 – Revised Procurement Plan	72
Appendix 4 - Revised Project Schedule	78
Appendix 5 - Revised Disbursement Projections.....	79
Appendix 6 - Electricity Receivables	80
Appendix 7 – Prepayment Meter Installation Projection & Actuals	81
Appendix 8 - System Average Interruption Duration Index (SAIDI) Monitoring.....	82
Appendix 9 – System Average Interruption Frequency Index (SAIFI).....	85
Appendix 10 – Memorandum of Understanding of ADB REVIEW Mission in October 2008	88
Appendix 11- Revised PMU Organisational Structure.....	98
Appendix 12 - Withdrawal Applications Register to date	99
Appendix 13 - Withdrawal Applications by Contract as of December 31, 2010	100
Appendix 14 - Withdrawal Applications Disbursement Advice to date	103

1. EXECUTIVE SUMMARY

This is the Quarterly Progress Report No. 14 and it covers the project activities and progress for the 3rd Quarter 2011 from July 1 to September 30, 2011.

The purpose of this report is to provide quarterly progress as well as any issues confronting the Project Management Unit in the implementation of the subprojects under the Samoa Power Sector Expansion Project to enable the EPC Board of Directors, Project Steering Committee, Project Management Committee and Asian Development Bank to monitor the project progress, become aware of the issues and assess whether the immediate project objectives will be met.

The Government of Samoa received a loan of USD26.60 million and a grant of USD15.40 million from the Asian Development Bank (ADB), a loan of USD38.00 from JICA and a grant of USD8.00 million through the AusAID and the Electric Power Corporation contributes USD12.00 million making up the total cost of USD100.00 million for the Samoa Power Sector Expansion Project. The loan was approved on December 11, 2007 and became effective on June 16, 2008.

There was a ADB/JICA/AussieAid Mission this Quarter. They ran through status of each subproject. There were extensive discussions between Mission Team and PSEP PMU and EPC as well as Attorney General. ADB Anti-corruption Committee started their review of PSEP in June, this Quarter. Committee consists of 2 ADB officials, 3 from accounting firm Price Waterhouse from New Zealand and official from Government Audit Office. Committee reviewed 2 projects; Fiaga Power Plant, Access Road to Fiaga Power Plant and Upgrade Stage 1 of Alaoa Feeder and Hospital Feeder.

Implementation Consultant (IC) continued to fulfil its tasks and responsibilities under its Contract to assist PMU with implementation of various subprojects under the PSEP. Implementation Consultant also continued with the preparation of feasibility studies of hydro schemes in Upolu and Savaii. Study now focuses on five schemes; namely Faleseela, Tafitoala, Tiapapata and Fuluasou in Upolu and Faleata in Vailoa, Palauli, Savaii. ADB reviewed and submitted its comments on FS of Faleseela Hydro Scheme. IC is completing this FS.

Construction of the upgrades of the Alaoa Feeder and Hospital Feeder Stage 1 from 6.6 to 22 KV by Bluebird Ah LAL JV are completed and the contract closed. Final payment is still pending. Issue is variation which exceeded allowable percentage without ADB approval. ADB is still reviewing and have not submitted its decision. EPC paid final payment to avoid payment of penalty for late payment.

Construction continued on Hospital Feeder Upgrade Stage 2 to upgrade the feeder from 6.6kV to 22kV. Feeder high voltage cable is underground from Tanugamanono power plant to Savalalo and continued overhead to Mulinuu. Overhead mounted transformers will be left overhead except replacing 6.6kv transformers with 22kv ones. LV network will also remain overhead. Contractor is Bluebird Ah LAL JV. Construction and installation of cables to tie the feeder to switchgear inside power plant is carried out by EPC. About 90% of trenching and installation of conduits is complete. Most of vaults and road crossings are also completed. Construction is a very challenging because it is done in middle of most busy business area of Apia. There were no major land issues other than carrying our surveys to determine legal boundaries. Some families have encroached legal boundaries. Arrangements were made for them to move their fences out of legal boundary of the road. There are some variations to contract due to extra work.

Construction of 650 meters of underground section of Alaoa and Fale Ole Fee transmission line is 60% complete.

Construction continued on Reconductoring of Upolu 22kV Powerlines. There are 5 feeders included; West Coast Feeder, South Coast Feeder; East Coast Feeder; 33kv tie from Lalomauga hydro to the Tanugamanono power plant; and Transmission line from Alaoa and Fale Ole Fee hydro plants to Tanugamanono power plant. Contractor is GMA. 40% of the work is completed.

Contractor for reconductoring of the Puapua to Asau 22kV Powerline in Savaii has been completed and final payment made.

Refurbishment of the Alaoa hydro plant by Tenix is complete and machine is in operation. Silva Transport Ltd have not completed all of the civil work contract. Outstanding work is repair of access road to the headpond.

On installation of prepayment meters; conversion to PPM is continuing. All new installations are installed with prepayment meters. ____ customers were installed with PPM during this 3rd Quarter 2011. ____ are new electric installations and ____ are conversion from induction meters.

The ____ customers converted and installed with Prepayment Meters this Quarter brought the total number of customers converted to Cash Power under ADR's contract to 18,922 meters; this is 90.1% of the total 21,000 meters to be converted to Cash Power under A D Riley's contract. This left only 2,078 meters to be converted to complete ADR's contract. Project is ahead of schedule. Two of the subcontractors already completed installation of their allocations. Only one subcontractor is installing meters now. Total number of electric customers with Cash Power meters at end of this Quarter is 23,688 or 64.67% of total number of electric meters of 36,634. Total number of electric customers is being verified. If this figure is correct, we may not achieve the 75% of total number of customers with the remaining number of Cash Power meters left to be installed by A D Riley. EPC needs to order 1,782 more Cash Power meters in order to meet the 75% requirement. But if total number of active meters is less than the figure above, we may achieve the 75% with remaining meters to be installed in A D Riley's contract. There is an increasing number of defective meters under A D Riley's contract. At end of June this year over 600 meters are defective. Most of defective meters have blank screens. This is a major concern because these defective meters with blank screens continue to supply power to these consumers without topping up. Problem has been brought up to A D Riley but so far, they have not come up with a solution. Because of this problem and cost of meters from A D Riley, PMU is seeking other supply of cash power meters. PMU solicited quotes from 3 suppliers to supply 2,000 single phase meters and 100 three phase meters without current transformers.

A total of ____ Cash Power meters were lowered this quarter. Total number of meters lowered so far is 3,590 or about 32.6% of total number of meters to be lowered under A D Riley contract. Subcontractors lowered these meters as they are converted to Cash Power or during maintenance of meters. For all new installations, consumers install their meters at 1.6 meters, so it did not require subcontractors to lower them. EPC have taken over installation of Cash Power meters for new installations. Lowering of meters is covered under Variation 1 to A D Riley's contract. Variation 1 has not been signed. Variation 1 only covers labor cost. Cost of bulk supply of materials to lower the meters has been paid under the loan. Subcontractors were supplied with these materials. Left over materials are returned to EPC.

Scratch cards are widely used now with more outlets set up by EPC in villages to sell these cards. EPC is signing a contract with National Bank of Samoa for bank to introduce a new system where by customers with accounts with NBS could buy top up tokens through texting the bank. Cost of token will be deducted directly from customer's bank account. Customers don't need to leave their houses to purchase top up tokens.

Remaining new 22kv switchgear for Lalomauga hydro has arrived. Installation by Northpower Nz Ltd is scheduled in October this year. This is part of Taelefaga/Lalomauga/Samasoni/Tanugamanono 22kv Switchgear replacement contract.

For refurbishment of Tanugamanono diesel generators Units 5A and 9A, later is completed. Work on 5A has not started. Unit 7A, not part of contract, failed from damaged crankshaft. Because of urgency to get 7A repaired, EPC requested ADB for approval to use overhaul parts of Unit 5A on 7A. ADB approved it. EPC bought a replacement crankshaft for Unit 7A. Unit 5A is still running. EPC will later buy overhaul parts for 5A after 7A is back in operation.

Construction of Fiaga's Power Plant Lot A continued. All engine concrete pads, floor, tie beams of floor, building column footings have been poured. All structure steel has been received. Contractor is targeting October 29 to complete engine foundations and building ready for arrival of engines and generators to start installation. Factory testing of alternators in Hyundai factory in South Korea and 4 new engines in Mitsubishi factory in Yokoama were successfully completed. Four of EPC's maintenance staff attended a 3-long week long training in Japan during factory testing. They have returned. EPC did not send any engineers for factory testing of engines and alternators eventhough they were supposed under the contract. There was a misunderstanding with contractor.

All Medium Voltage equipment for Lot B contract of the Fiaga's New Power Plant arrived in Apia. Because switchgear room of power house is not complete, switchgear will be placed on storage. 415 volt distribution panel, backup generator, and concrete ducting for cable installation also arrived from NZ. These will be put on storage.

Construction of Hospital Feeder Upgrade Stage 2 continued. Contractor is Bluebird Ah LAL JV. About 90% of all trenching and laying of electrical conduits is complete; same with installation of vaults. Construction of this project has been very challenging because the underground runs through the business area of town. Work is carried out during business hours from Monday to Friday. Little work is done on weekends. Included with this project is trenching and installation of conduits for a section of the 33kv underground tieline from Fuluasou substation and Tanugamanono as well as 22kv transmission underground line from Samasoni hydro to Tanugamanono power plant. Underground still uses pole mounted transformers; but existing 6.6kv transformers will be replaced with new 22kv units. Installation and termination of cables is scheduled to start in August.

Construction continued on reconductoring and repair of all 22kV powerlines in Upolu. Contractor is GMA. Five distribution feeders will be upgraded under this contract. They are; South Coast, West Coast, East Coast, Vaitele, and Lalomauga 33kV tie. Also the new Alaoa /Fale ole Fee transmission line will be constructed under this project to connect the Alaoa and Fale ole Fee hydro plants direct to Tanugamanono power plant instead of connecting to East Coast

distribution feeder. Construction period is one year. Scope covers replacing existing conductors to a large one, replace rotten poles and cross arms, straighten leaning poles, and relocation of about 7.0 kilometers of the Lalomauga 33kV tie line from mountain to the side of the main east coast road for ease of access for maintenance. 30% of total work is complete and about same percentage of contract time is used up. Work is progressing well. Contractor only uses two crews of 10 men each. Contractor is supposed to use 3 crews and he has been told to provide a 3rd crew. Contractor has a shutdown each day, Monday to Friday.

For the Upolu Low Voltage System Improvements, materials and related equipment have started to arrive. Construction has not started. EPC will carry out construction in house.

Feasibility Study of the Savaii new power plant in Vaiaata to replace the Salelologa power plant is revised based on ADB comments. New power plant will house two new medium speed base load machines and three existing generators from Salelologa refurbished before installing them in Vaiaata. Salelologa will be turned into a substation where feeder from Vaiaata will be redistributed into smaller feeders. This will greatly improve power reliability. With new power plant located in Vaiaata, a mini control center will be located in EPC's depot in Salelologa to monitor and control the system. A telecommunication link will be made from Upolu National Control Center to Vaiaata and mini control center in Salelologa so that system in Savaii can be monitored from EPC national control center in Fuluasou.

There was no activity in Vaipu pump assisted system subproject this Quarter. This project will put additional water in the Afulilo Dam to increase power generated from the Taelefa power plant. Decision is waiting on outcome of investigation by SMEC where the dam is safe after the 2009 earthquake.

Table 1 below provides a summary of Withdrawals Application and Disbursements at end of this Quarter for different subprojects:

Table 1: WA's Disbursements - FAALEPO TO UPDATE THIS WA disb

Latest status of items identified from previous and current quarterly reports:

- (i) Lowering of the first 10,500 meters converted to cash power without lowering - Variation to A D Riley's contract to lower meters was approved after these meters were converted to Cash Power. ADR's base contract did not include lowering of meters. EPC is only lowering meters for consumers who requested them.*
- (ii) Number of EPC active electric meters – EPC is still working on this. This is not an easy task because EPC has to reconcile and inspect just about all electric meters shown on computer system to find out if they really exist. The number of active meters is needed to correctly determine the number of additional prepayment meters to be installed to achieve the 75% mark of total number of electric consumers on prepayment meters.*
- (iii) Drilling a new water well in Fiaga for new power plant water supply – No activity.*
- (iv) Loan Buy Back Agreement between MOF and EPC – No activity.*

2. INTRODUCTION

This is the Quarterly Progress Report No. 13 and it covers the project activities and progress for the period from April to June 2011 (1st Quarter 2011 Progress Report).

The purpose of this report is to provide quarterly progress as well as any issues confronting the Project Management Unit in the implementation of the subprojects under the Samoa Power Sector Expansion Project to enable the EPC Board of Directors, Project Steering Committee, Project Management Committee, and Asian Development Bank to monitor the project progress and become aware of the issues and assess whether the immediate project objective will be met.

2.1 Vision

Provide reliable, affordable electricity for Samoa.

2.2 Mission

To provide quality electricity services in partnership with customers and stakeholders, be financially viable by adopting the most economical use of our resources and continued pursuit of technology and innovation to achieve excellent services, through technical, commercial and environmentally sound work practices.

2.3 Objectives

- (i) Improve the capacity of the sector to meet growing electricity demand and improve quality, reliability, and cost-effectiveness of power supply.
- (ii) Support and implement EPC's investment plan to meet growing demand.
- (iii) Improve the operational efficiency of EPC.
- (iv) Improve the financial performance of EPC.
- (v) Assist in establishing effective regulation of the power sector.

- (vi) Develop a demand-side management strategy to promote energy efficiency and conservation.
- (vii) Provide accurate and timely reports to Lending Agencies, Stakeholders, Sponsors and customers.
- (viii) Collaboratively work as a team with Lending Agencies, Stakeholders, Sponsors and customers to ensure timely delivery of the Power Sector Expansion Project.

2.4 Rationale

Reliable power supply is essential for enhancing the quality of life of all Samoans. Good performance of the power sector and reliable electricity services are vital for promoting private sector investments to diversify the economy and achieve sustainable economic growth. The performance of the power sector is increasingly becoming a hindrance to economic growth. High system losses and voltage drops, insufficient generating capacities for reserve, and insufficient maintenance resulting in equipment failure have resulted in poor reliability and quality of electricity supply. As a consequence, consumers are resorting to more expensive self-generation or loss of production and damage to electrical equipment.

2.5 Sector Loan Data

ADB Sector Loan Number:	2368
ADB Grant Number:	0087
JBIC Loan Number:	8232
AUSAID Grant Number:	0101
Project Title:	Power Sector Expansion Project
Borrower:	The Government of Samoa
Executing Agency:	Ministry of Finance
Implementing Agency:	Electric Power Corporation
Lending Agencies:	Asian Development Bank (ADB) Japan Bank for International Cooperation (JBIC) Australian Agency for International Development (AusAID)

2.6 Key Loan and Asian Development Bank (ADB) Mission Dates

Loan Approval Date:	21 st November 2007
Date Loan Signed:	11 th December 2007
Date of Loan Effectiveness:	19 th June 2008
Loan Closing Date:	31 st December 2016
Last ADB Mission:	Last full ADB mission was in February 2011; ADB, JICA and Aussie Aid officers were present.

2.7 Estimated Project Cost and Financing Plan

Source	Total USD	%
Asian Development Bank ADF Loan:	26.61	26.61
Asian Development Bank ADF Grant:	15.39	15.39
Japan Bank for International Cooperation:	38.00	38.00
Government of Australia:	8.00	8.00
Electric Power Corporation:	12.00	12.00
Total	100.00	100.00

The estimated Project cost, as presented in the ADB RRP, is US\$100 million comprised of:

- US\$80 million as Investment Costs;
- US\$14.8 million as Contingencies; and
- US\$5.2 million as Financial Charges during Implementation.

The ADB will finance 26.61% under the ADF Loan, and 15.39% under the ADF Grant. This covers 42% of the total Project cost which is anticipated to cover Civil Works, Equipment Supply and Installation, and Consultant Services. JBIC/JICA will finance 38% of the total Project cost to cover the 42.2% of Civil Works and 47% of Equipment Supply and Installation. AusAID will finance 8% of the total Project cost to cover 35% of Land Acquisition and Resettlement and 15% of Equipment Supply and Installation. The Electric Power Corporation finances 12% of the total Project costs; which is USD\$12 million. EPC's contribution covers 65% for Land Acquisition and Resettlement cost, 10.3% of Civil Works, 5.1% of Consultant Service, and 20% on taxes and interest of loan repayment during implementation. All local taxes and import duty and interest is paid by EPC. Please refer to Appendix 1 for Revised Project Estimates.

2.8 Project Financing and Counterpart Funding

Detailed Cost Estimate by Financier at 19 June 2008 - (US\$ millions)

	ADF Loan		ADF Grant		JBIC Loan		Government of Australia		EPC		Cost
	\$	%	\$	%	\$	%	\$	%	\$	%	
A. Investment Cost											
1. Land Acquisition and Resettlement	0.00	0.0	0.00	0.0	0.00	0.0	1.53	35.0	2.84	65.0	4.38
2. Civil Works	3.47	47.5	0.00	0.0	3.09	42.2	0.00	0.0	0.75	10.3	7.31
3. Equipment Supply and Installation	18.99	30.8	8.42	13.7 ^a	28.98	47.0	5.22	8.5 ^a	0.00	0.0	61.61
4. Consultant Services	0.00	0.0	4.57	94.9	0.00	0.0	0.00	0.0	0.25	5.1	4.82
5. Taxes and Duties	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	1.89	100.0	1.89
Subtotal (A)^b	22.46		12.99		32.07		6.76		5.73		80.00
B. Contingencies											
1. Physical ^c	1.31	28.1	0.76	16.2	1.87	40.1	0.39	8.4	0.33	7.2	4.67
2. Price ^d	2.84	28.1	1.64	16.2	4.06	40.1	0.85	8.4	0.72	7.2	10.12
Subtotal (B)	4.15		2.40		5.93		1.25		1.06		14.79
C. Financing Charges During Implementation^e											
1. Interest During Construction	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	5.21	100.0	5.21
Subtotal (C)	0.00		0.00		0.00		0.00		5.21		5.21
Total Project Costs (A+B+C)^f	26.61		15.39		38.00		8.00		12.00		100.00
% Total Project Costs		26.6		15.4		38.0		8.0		12.0	

ADF = Asian Development Fund, EPC = Electric Power Corporation, JBIC = Japan Bank for International Cooperation.

^a The overall financing percentage will be 22.2% for the ADF grant and the Government of Australia grant. The financing percentage for the ADF and Government of Australia grant proceeds will be changed over years as follows: (i) the financing percentage for the ADF grant will be 7.7% (rounded to 7%) for FY2008–FY2012 and 22.2% (rounded to 22%) thereafter; and (ii) the financing percentage for the Government of Australia grant will be 14.5% (rounded to 15%) for FY2008–FY2012 and zero thereafter. For disbursement purposes, the financing percentages will be rounded.

^b In May 2007 prices.

^c Computed at 14% for hydropower, 10% for system control and data acquisition, and 5% for other subprojects.

^d Computed at average annual rate of 1.7% on foreign exchange costs and 3.9% on local currency costs over the 2008–2015 investment plan.

^e Includes interest during construction, computed at the 6.5% relending rate from the Government to the Electric Power Corporation and including an interest rate of 1% during grace period and 1.5% thereafter, which will be settled through cash payments on the Asian Development Fund loan portion.

^f Includes taxes and duties of \$2.18 million. Interest during construction for the ADF loan will be settled through cash payments.

Source: ADB estimates.

3. PROJECT IMPLEMENTATION

3.1 Project Management Unit Staff Movement

PMU has 14 core staff, 4 for the materials store, and 2 for Cash Power meter inspection. Included in PMU 14 staff are 4 graduate engineers; which are three electrical and one civil. Two other graduate engineers (1 civil and 1 electrical) are assigned to PMU from EPC Renewable Section.

From time to time, hydrological staff with EPC Renewable Division is assigned to work with Implementation Consultants related to data collection for hydro scheme study. EPC PMU submitted a further request to JICA for two additional volunteers; one is a telecommunication engineer or technician experienced in fibre optic work and second volunteer is a machinist to assist with setting up a mechanical maintenance workshop in Fiaga new diesel power plant and training of EPC maintenance staff in use of equipment and tools to repair major components and require engine parts for overhaul.

EPC advertised for two senior experienced engineers; a power generation and a power distribution engineer. No appointment was made.

ADB approved to hire three independent consulting engineers (1 civil, 1 generation and 1 power distribution) for PMU seeing that Implementation Consultant's contract is coming to an end in May. The advertisement for the 3 positions closed on March 31, 2011.

Fifteen (15) subprojects are now in construction phase concurrently. The status of construction of each subproject at end of 1st Quarter 2011:

1. Access road and water pipeline to Fiaga new power plant – 90% completed.
2. Levelling and preparation of site for new power plant – 80% completed.
3. Construction of security fence around Fiaga property – 10% completed.
4. Upgrading of the Hospital Feeder to 22kv and undergrounding medium voltage cable from Tanugamanono power plant to Apia – 20% completed.
5. Reconductoring of all 22kv overhead line feeders in Upolu – 30% completed.
6. Refurbishment of the Alaoa hydro plant and civil work – 100% completed.
7. Reconductoring of Puapua to Asau 22kv Overhead line – 95% completed.
8. Refurbishment of the two generators in Tanugamanono.
9. Replacing of 22kv switchgear in Tanugamanono, Samasoni, Lalomauga and Taelefaga power stations - 100% is completed except for additional switchgear for Lalomauga hydro plant.
10. Fiaga New Power Plant and Generators – re-started work on site, manufacture of generators and associated equipment are about 50% completed. Recent tsunami disaster in Japan followed with nuclear plant meltdown did not affect delivery time of the engines and equipment. Delivery is still on scheduled to arrive in Apia on October.
11. Electrical switchgear – switchgear was successfully tested in factory in Germany. Equipment is now being shipped to Apia.
12. Construction of 33kv underground cables from Fiaga to Fuluasou substation and Tanugamanono is delayed due to change in design which would change materials required. For the two 33kv circuits, one will be underground as originally planned and other circuit remain aerial but using concrete poles.
13. 22kv underground cable from Fuluasou to Apia wharf – 70% of installation of electrical conduits is completed. This was done as part of the 4 lane road corridor project with Ott Transport as main contractor. Materials are being ordered.

14. 33kv underground transmission line from Fiaga new power plant to Fuluasou substation and continuing to Tanugamanono power plant – line was redesigned to underground one 33kv circuit and overhead the other circuit and using concrete poles. Bid for cables and poles were cancelled. These items will be rebided.
15. Prepayment meters – 90% completed. There is an increasing number of defective meters with blank screens. Contractor, A D Riley has been notified for a solution but they have come up with a solution.

These require good experienced inspectors and construction managers to maintain quality of works.

Implementation Consultant's (Egis International) contract ended at end of May 2011 and is not being extended except for the extension of Team Leader's contract for 6 months to end in November to allow for completion of the feasibility studies of 5 hydro schemes and tender documents of 3 schemes which is currently being prepared by IC. TD/Generation engineer's contract ends at end of July. Administrative Assistant contract was extended from May till end of August.

Hydro feasibility study of 5 schemes by the Implementation Consultant is progressing well. The Study started in September. Study now focuses on preparation of estimate costs. IC will then submit an interim report in mid January recommending the top 3 schemes to be designed first for tendering. Because detailed design is not part of IC's Variation for the hydro feasibility studies, IC submitted a formal proposal to EPC to carry out detailed designs of 3 schemes. EPC wanted the hydro projects to be designed before bidding. IC plans to start on detailed designs immediately after EPC and ADB approves recommendation and IC proposal to perform this work.

3.2 PMU Actual Personnel Movement during this Quarter and Plan for next Quarter

		2nd QUARTER 2011 ACTUAL		3rd QUARTER 2011 PLAN		
NAME	DESIGNATION	START	FINISH	START	FINISH	COMMENTS
Tologatā Tile Tuimalealiifano	Project Manager	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Taulealea Aumalaga Tiotio	Transmission& Distribution Engineer	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Tupai Mau Simanu	Generation Electrical Engineer	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Nuulopa Pereira	Graduate Engineer - Power System Planner	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Faalepo Solofa	Project Accountant	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Mathew Lemisio	Legal Environment Advisor	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Seukeva Asi Tuuau	Land Acquisition Specialist	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Seumalo Afele Faiilagi	Environment Specialist	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Moetuasivi Asiono	PRCS	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Raema Schuster	Graduate Engineer – SCADA	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Sila	Electrical Inspector	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Posi Moe	Linesman	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Elisapeta Collins	Secretary	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter
Alfred Matatia	Graduate Civil Engineer	1 Apr. 2011	30 Jun 2011	1 Jul 2011	30 Sept. '11	Will be available for whole 3 rd quarter

3.3 Implementation Consultants Personnel Movement

The Implementing Consultants continued to fulfil their tasks under the contract to assist PMU. A total of 6 staff from IC worked on the Project during 2nd Quarter, 2011. Only 3 were fulltime. Rest worked from IC's home office. This included additional experts involved with hydro development feasibility study under Variation 2. IC's TD/Generation Engineer's contract will end at end of July. He will return to New Zealand. Team Leader's contract ends at end of November 2011. Administrative Assistant's contract ends at end of August.

Table below provides number of days worked in each month and combined for 2nd Quarter 2011 for each of IC personnel.

No.	Team Members	Contract man-month	Days work in Apr.	Days worked in May	Days work in June	Days worked on 2nd Quarter
1	Team Leader / Construction Engineer: PERELINI, Perelini	36	19	22	20	61
2	Generation Engineer: HEGERTY, Brendan	4	0	0	0	0
3	T&D Engineer: HEGERTY, Brendan	12	17	21	20	58
4	SCADA Engineer: PONS, Bernard	3	0	0	0	0
5	Environment Specialist: ADAMSON, Charles	4	0	0	0	0
6	Resettlement Specialist: WILLIAMS, Jean	4	0	0	0	0
7	Administrative Assistant: POE, Penelope	36	18	22	20	60
8	Hydro Expert/Coordinator: GIRAUD, Dominique	4.3	9	6	7	22
9	Hydro Expert: GINON, Laetitia	2.87	5	0	3	8
10	Hydrologist 1: DAVAL, Emmanuel	2.75	0	0	0	0
11	Hydrologist 2: PYRON, Nelly	2	0	0	0	0
12	Civil Engineer (Int): GUERPILLON, Herve	3.58	0	0	0	0
13	Civil Engineer (National); PERELINI, Peri T	4.75	5	5	2	12
14	Environment Specialis (National): SESEGA, Sam	3.17	5	0	1	6
15	Land Resettlement (National): SESEGA, Sam	3.17	5	1	1	7

Implementation Consultant had 3 full time staff in office here during this Quarter when TD/Generation Engineer moved to live in Apia. The 3 full time staff are; Team Leader, Transmission Distribution & Generation Engineer and Administrative Assistant. To maintain continuity of work by IC, Team Leader worked on preparation and review feasibility studies, tender documents, evaluation reports, monthly and quarterly reports, and plans subprojects assisted by Generation/Distribution Engineer.

There are no major outstanding environmental issues related to any of the original subprojects. During construction, EPC's local environmental staff will handle all environmental matters. IC is using a local firm for environmental and resettlement part of hydro study.

Team Leader/Construction Engineer of IC continued to assist PMU Project Manager with various activities; such as preparation of monthly and quarterly reports, preparation of Cabinet and EPC Board submission, in addition to planning, and preparation of feasibility studies, tendering documents of various generation and power distribution subprojects and evaluation of bids. He was also greatly involved in the supervision and management of construction projects to assist PMU engineers assigned by Project Manager to coordinate each of projects. This is same with the TD/Generation Engineer. Administrative Assistant filled in for PMU secretary who was on maternity leave during this quarter.

3.4 Egis Bceom International Personnel Remaining Man-months at end of 2nd Quarter, 2011

	Expert	Contract man mns	Days worked Q2 2011	Remaining man-mn Q2
1	Team Leader / Construction Engineer: PERELINI, Perelini	36	61	4.8
2	Generation Engineer: HEGERTY, Brendan	4	0	0
3	T&D Engineer: HEGERTY, Brendan	12	58	1.05
4	SCADA Engineer: PONS, Bernard	3	0	0
5	Environment Specialist: ADAMSON, Charles	4	0	0
6	Resettlement Specialist: WILLIAMS, Jean	4	0	0
7	Administrative Assistant: POE, Penelope	36	60	2.09
8	Hydro Expert/Coordinator: GIRAUD, Dominique	4.3	22	0.626
9	Hydro Expert: GINON, Laetitia	2.87	8	0.03
10	Hydrologist 1: DAVAL, Emmanuel	2.75	0	0
11	Hydrologist 2: PYRON, Nelly	2	0	0
12	Civil Engineer (Int): GUERPILLON, Herve	3.58	0	0
13	Civil Engineer (National); PERELINI, Peri T	4.75	12	1.28
14	Environment Specialis (National): SESEGA, Sam	3.17		0.26

3.5 - Egis Bceom International Personnel Movement during this Quarter and Plan for next Quarter

2ND QUARTER 2011 ACTUAL				PLAN for 3rd QUARTER 2011		
NAME	DESIGNATION	START	FINISH	START	FINISH	COMMENTS
Perelini S. Perelini	Contract/Construction Engineer (Team Leader)	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	Available for whole of 3rd Quarter 2011. Prepared feasibility studies, tenders, evaluation reports, and reviewed same various subprojects which included Fiaga new diesel power station, access road to new Fiaga power station; 33 kV transmission from Fiaga to Fuluasou and 22 kV feeder from Fuluasou to Lepea and Fiaga diesel power station; 22 kV underground from Fuluasou substation to Apia wharf; prepared monthly and quarterly report. Assist prepared board papers and attended EPC Board, Project Steering Committee and Project Management Committee meetings with Project Manager to present status reports of the Project. Coordinator of Fiaga power plant subproject now under construction and assisted with managing of construction of other subprojects. His contract with Egis International expires at end of November 2011.
Dominique Giraud	Power System Planner	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	He continues to monitor project and has 1.24 man-mnths left in his contract to complete hydro feasibility study reports and tenders of 3 schemes.
Brendan Hegerty	Transmission and Distribution Engineer/	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	His contract will end at end of July and he plans to move back to New Zealand.
Brendan	Generation Engineer	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	His contract will end at end of July

Hegerty						and he plans to move back to New Zealand.
Charles Adamson	Charles Adamson	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	He completed his involvement with project.
Jean Williams	Resettlement Spec	01 Apr 2011	31 Jun. 2011			She completed her involvement with project.
Bernard Pons	SCADA Engineer					He completed his involvement with project.
Penelope Poe	Administrative Assistant	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	Her present contract with Implementation Consultants ends at end of Aug. this year.
Dominique Giraud	Hydro Expert & Coordinator	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	He continued to direct project and coordinates preparation of feasibility studies and completion of FS reports for 5 hydros and tender of 3 selected hydros.
Ginon Laetitia	Hydro expert	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	She continued to assist with preparation of feasibility studies of 5 hydros and tender document of 3 schemes.
Emmanuel Daval	Hydrologist					He completed his work on Project
Nelly Pyron	Hydrologist					She completed her work on Project.
Herve Guerpillon	International Civil Engineer	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	Continues to assist with hydro feasibility studies.
Peri Perelini	National Civil Engineer	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	Worked and continues to work on hydro study and tender documents.
Sam Sesega	National Environmentalist	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	Worked on hydro feasibility studies
Sam Sesega	National Resettlement Specialist	01 Apr 2011	31 Jun. 2011	01 Jul. 11	30 Sept 11	Worked on hydro feasibility studies

3.6 Implementation Progress

All implementation activities or tasks are reflected in measuring implementation progress against the subprojects implementation schedules and referred to as “project progress”. All pre-implementation activities or tasks are considered in calculating subproject implementation progress. These activities or tasks include preparation of the Subproject Outline, Feasibility Study, Rapid Environmental Assessment, Initial Environmental Examination, Screening for Land Acquisition and Resettlement, Tender documents, Evaluation of tenders and preparation of awards and contracts. Each task in the implementation schedule is weighted according to its overall contribution (using time as a reference) to progress of subproject implementation. These weights are used to calculate the percentage of subproject progress along the entire time span of the project. This is to provide a holistic view of the pace on implementation. Due to the magnitude of the Power Sector Expansion Project and the number of its subprojects, it is not practical to list all the tasks or activities. Therefore only milestones are listed for the purpose of simplicity of subprojects progress but more details can be obtained from the Project Schedule Gantt Chart of each respective subproject. Please refer to Appendix 2 for Project Monitoring.

A. Core Subprojects:

1. Hospital Feeder Upgrading Project Stage 1

Construction completed in 2010. Making final payment for additional work is still outstanding. ADB disapproved payment because PMU did not get prior approval. PMU argued that their understanding is that contract is a unit cost contract based on actual units built by contractor. ADB in its Mission in February agreed to approve payment as a one case due to misunderstanding between their office and PMU related to contract cost. Final payment still has not been made to Contractor at end of this Quarter.

2. Single and Three-Phase Prepayment Metering (PPM)

A total of 273 prepayment meters were installed by A D Riley’s subcontractors during this Quarter. This number of prepayment meters is made up of 51 new installations and 222 customers converted from induction to prepayment meters. This brought the total number of meters installed under this contract at end of the 2nd Quarter is 18,922; which is 90.1% of 21,000 meters to be converted under this Contract in AD Riley Contract.

The total overall number of customers with prepayment meters at end of June 2011 is 23,688; which is 64.67% of total number of EPC electric customers of 36,634.

All new meter installations of prepayment meters were referred to A D Riley’s subcontractors to install until new installations were referred back to EPC in June. ADR continues with meter conversions. EPC carry out pre-inspection and now installing new meters. Only one subcontractor is now installation PPMs for ADR.

Besides converting to PPMs, contractor also lowered the meters. 131 meters were lowered to 1.6 meters this Quarter. This is carried out under Variation 1 to A D Riley’s contract.

Here are some remaining and outstanding matters with prepayment meters:

(i) Lowering of 10,500 meters not covered under A D Riley's Variation 2 Contract; these are meters converted to Cash Power before approval of Variation 2. PMU/IC submitted costs to ADB to lower these meters. Approval by ADB is pending.

(ii) Increasing number of defective meters with blank screens. Major problem is that these blank screen meters will continue to supply power without recharging with credits. THIS IS SERIOUS. Matter has been brought up to ADR but they have not come up with a technical solution other than replacing them with new ones. Problem is the possible large number of defective meters out there resulting in EPC losses. Until ADR come up with a solution, EPC must monitor monthly purchases of tokens by consumers on prepayment meters to find those who have not made any purchases of recharge tokens and then follow up to find out if meters are defective.

(iii) Getting true count of active meters.

Need to buy and install more Cash Power meters after the 21,000 are installed, in order for EPC to achieve 75% of its customers on Cash Power. It is estimated that we would need 1,453 meters purchased to meet the 75% requirement. PMU requested cost of 2000 single phase meters and 100 three phase meters.

Meters originally installed by EPC without weatherproofed boxes and need to reinstall inside these boxes. This is not part of A D Riley's contract. There are cases of ADR installed meters not installed inside the weatherproof boxes. This will shorten lives of these meters now that they are lowered and more exposed to weather and rain.

All new installations with single phase meters are fitted with prepayment meters. There are customers that are impractical to be on Cash Power meters as long as they are current with their electric bills. This includes Government, some church organizations, and large businesses. The most important goal is that customers pay their bills on time whether they are on prepayment or induction meters. EPC reports showed a marked improvement in collection of arrears since introduction of prepayment meters under this project.

At end of this 2nd Quarter 2011, there is 1,782 meters remained to be installed to complete ADR's contract and 4002 meters to be installed to achieve 75 % figure of consumers on prepayment meters.

Table below shows meters installed by each sub-contractor during the 1st 2010 and 2nd Quarters 2011:

No.	Subcontractors	Meters installed in Jan 2011	Meters installed in Feb 2011	Meters installed in Mar 2011	Meters installed in Apr. 2011	Meters installed in May 2011	Meters installed in June 2011
1	All Electrical	0	0	0	0	0	0
2	McLean Electrical	192	131	127	131	59	83
3	Telecom. Tronics Ltd.	0	0	0	0	0	0
Total meters installed each month		192	131	127	131	59	83

Breakdown below are meter lowered during 1st Quarter 2010 and 2nd Quarter 2011:

Categories	Cable length	Q1 - 2011 Quantity	Q2 – 2011 Quantity
1	0-5 meters	134	94
2	5-10 meters	36	19
3	➤ 10 meters	2	3
4	no cable needed	0	0
	Lowered during maintenance		15
	Total meters lowered	172	131

Included in meter count above are meters that were lowered during maintenance.

Only 3,590 meters or 32.6% have been lowered of total number of meters converted to Cash Power. So there is still a lot of meters to be lowered. Beside ADR's subcontractor lowering meters as they convert them, EPC is lowering meters already converted on request by consumers. All new meters are installed at 1.6 meters.

Variation 1 in ADR's contract covered lowering of meters. Cost of Variation 1 is based on unit prices of materials and labour involved. ADR supplied materials bulk to its three subcontractors and billed EPC accordingly. Invoices of bulk materials supplied to lower meters were paid in full under the loan. Labour costs were paid in accordance with unit costs as agreed on in Variation 1.

Here are unit prices for labour and materials under Variation 1 of A. D. Riley's contract to lower meters:

Categories	Length of Cables Meters	Labor Unit Cost Samoan Tala
1	0 – 5m	\$20.00
2	5 – 10m	\$38.00
3	Over 10m	\$55.00
4	Attend meter recently installed and lower to 1.6m; only by request by PMU.	\$89.00

All materials required to lower meters are supplied by ADR and paid for my EPC as lump sum.

B. Candidate Subprojects:

1. Upolu

a. Generation

(i). Tanugamanono Power Station Noise & Emission Control

Work started on Feasibility study; not finished.

(ii). Refurbishment of Alaoa Hydro Power Station

Installation and civil work are completed and machine is in operation.

(iii). Fiaga Diesel Power Station

Powerhouse and Generators(Lot A)

Bluebird Ah LAL JV had mobilized on site setting up site offices. They started on earthwork and construction of building footing and generator foundations. Planned completion date is October 29, when the 4 engines and generators arrive.

Design and preparation of construction drawings is 50% complete.

Manufacture of generators and associated equipment by MHI is 50% complete. Factory testing is scheduled in August and September, shipment in September and equipment arriving at end of October.

Fiaga power station electrical switchgear (Lot B)

All medium volt switchgear was successfully tested in factory in Germany in May. Equipment is now being shipped. Transformers is made in Indonesia but have not confirmed when they will be ready for factory testing.

Fiaga access road and water pipeline and fence

Construction continued. Contractor, Silva Transport Ltd, completed 90% of the access road and pipeline. They started constructing fence.

Road was officially dedicated in June by the Prime Minister and coincided with the groundbreaking of start of construction of the powerhouse.

Water source

Investigation of where to drill a new well is on hold. Hydrological information available so far is inadequate to rightly locate where to drill the new well. In meantime water for the power plant will be collected from rain. Million liter storage tanks will be built to store rainwater collected from roof of the power plant.

(iv) Refurbishment of 9A and 5A Generators at Tanugamanono Power Plant

MAN, contractor, completed refurbishment of first generator, Unit 9A. Generator is back in operation. EPC has not scheduled when MAN starts overhaul of Unit 5A until Alaoa hydro plant is back in operation.

Replacement of 22kv switchgear in Taelefaga, Lalomauga, and Samasoni hydro plants and Tanugamanono power plant by Northpower is complete. There is a variation to replace rest of 22kv equipment in Lalomauga hydro plant. New switchgear has not arrived.

b. Transmission

(i). Upgrade of Alaoa 6.6kV Transmission Line to 22kV

This project was completed in 2010. It was combined with Hospital Feeder Upgrade Stage 1. Final payment for extra work still outstanding. ADB did not approve payment due to some procedural matter. ADB during February Mission agreed to approve payment as a one case only. Final payment is still outstanding at end of this Quarter. Contractor has written numerous letters to PMU to follow up payment. Anti Corruption review of the power sector project is also reviewing this project and outstanding payment.

(ii). 33 kV Underground Cable from Fiaga Power Station to Fuluasou Substation

Contracts were awarded in the last Quarter Q1 2011 for the supply materials for the project. Due to change in design of the transmission line, cables, poles, and hardware materials will be rebided. Change on design will have one circuit of the 33kv TL built underground and second circuit is built overhead using concrete poles. EPC will do the work.

(iii). Hospital Feeder Upgrading Stage 2

This subproject upgrades the rest of Hospital Feeder from 6.6 to 22 kV and underground the HV cables from Tanugamanono power plant to Savalalo. This includes improvement of power supply to the National Health Service and TTMN hospital. Construction has started. Contractor is Bluebird Ah LAL JV. Contract includes pulling and termination of cables, change out of pole structures from 6.6 to 22kv and changing of transformers. Construction continued.

90% of trenching and laying of electrical conduits and installation of vaults is complete. Contractor is planning pulling of cable and splicing it. Contractor brought in one cable splicer to assist with installation of cables.

(iv) 22kV Fuluasou Substation

Bid closed for design built contract of the substation. Evaluation report is finalized for submission to ADB for review and approval. Four bids were received. Contract includes; all 415volts, 11, 22, and 33kv electrical switchgear, substation transformers, two story building, paved road and civil work, undergrounding of incoming and outgoing cables and connection to feeders and transmission lines, standby generator, National Control Center and related furniture and equipment, security fence, and outdoor lights. ADB approved recommendation by Committee who to award contract to Northpower and the submitted a No Objection Letter. Government Tender's Board and Cabinet approved it. Notice of award has been submitted to Northpower NZ Ltd.

(v). Upolu Low Voltage Network Improvements

Materials for this subproject are currently on order. EPC will do construction.

(vi). Fuluasou Substation to Apia Wharf Area 22kV Underground Cable

Contracts have been awarded for supply of materials. EPC will carry out work. Part of electrical conduits for this project have been installed under construction of Vaitele Road. This project will underground all high voltage powerlines along Vaitele Road and then remove these high voltage powerlines. All cables to consumers along side of Vaitele Road will be installed underground. We received vehicles and equipment to be used by EPC for construction.

(vii). Fuluasou Substation to Leulumoega via Vaigaga 22kV Underground Cable

This subproject is removed from Project. All powerlines will be installed overhead for this feeder.

(viii). 22kV Overhead Conductor Upgrading Program

The feeders involved in this project are; West Coast, Lalomauga 33 KV line, East Coast, South Coast, Vaitele, Beach Road, and Alaoa transmission line. All materials are here.

Construction continued. Contractor is GMA. They completed about 35% of the total work. Two crews of 10 men each are currently being used. More trained linemen is needed to set up another crew. GMA and EPC sorted out problem that caused delays in switching power off during shutdowns. GMA schedule a shutdown each working day. There are no shutdowns on Saturdays.

2. Savaii

a. Generation

(i) Hydropower Scheme

Since disapproval by the village of Sili of developing a hydro scheme in their village, **hydro scheme subproject in Savaii** has been combined under a new subproject, *Hydro Development*. This includes potential schemes in Upolu and Savaii. Five schemes were

selected for feasibility study. They are: Faleata in Vailoa Savaii, and Faleseela, Tafitoala, Fuluasou, and Tiapapata in Upolu. There is only one scheme in Savaii under this Study.

b. Distribution

(i). Puapua-Asau 22kV Distribution Line Reconductoring

Contractor is Tenix NZ Ltd. They subcontracted a local contractor for the works. Tenix only has construction supervisor on site. About 90% of the work is completed. Contract will be completed at end of August.

(ii). Power Factor (PF)

This project is complete. There is no more activity required done on this.

(iii). Low Voltage Network Improvement Program in Savaii

Feasibility study is being prepared.

3. Measurement Equipment:

(i). Steam Flow Gauging Equipment

Installation of stream flow gauges is complete. EPC renewable department and MNRE continue to collect data, carry out maintenance and monitor these gauges monthly.

(ii). HV Testing Equipment

PMU continued to use this equipment for their work.

SCADA

Project is being tendered. Tender closes on 15th of August. Over 14 companies bought tender documents.

New Subprojects

Listed as follows are new subprojects:

(i). Public Dissemination

Public awareness and dissemination and consultations are continuing for all subprojects.

(ii). Vending System Expansion

Scratch card system is fully operational. Cash Power consumers buy top up cards from various shops in villages in both Upolu and Savaii. National Bank of Samoa proposed a new system using their bank for consumers to buy top up tokens without using scratch cards or buying from EPC outlets. NBS has a multi million law suite against EPC related to this new system. Office of Attorney General has taken over discussions with the bank attorney to settle the case outside of court.

(iii). Power System Planning Software

EPC continued to use software to check on system voltage and feeder loads.

(iv). Refurbishment of Salelologa Power Station

EPC's Salelologa power plant will not be refurbished. Instead, a new 8 MW diesel power plant will be built in Vaiaata to replace the Salelologa power plant. EPC will still maintain a depot in Salelologa for its power distribution, customer service and administration office. With the power plant located in Vaiaata, a new substation will be built in Salelologa to introduce

additional distribution feeders. A Mini Control Center will be set up in Salelologa to monitor and operate the Savaii network. Feasibility Study for all these works is being prepared.

Planning of the new power plant tender has started. Survey of the Vaiaata property is completed. It was discovered that most of the land of the 100 acres lot is not suitable for the new power plant. There is very little flat land. Plus there are large natural culverts for streams through the property. PMU wrote to Samoa Land Corporation for permission to acquire part of neighboring land for the power plant. No response has been received from SLC.

(v). Refurbishment of Taelefaga and other power plant 22kV Switchgears

This work is complete in all 4 power plants. Plants are now running with new state of the art 22kv switchgear. For Taelefaga new switchgear is housed inside an aircondition room.

(vi). Refurbishment of Tanugamanono Diesel Generators

Generator 9A is complete and is back on line. This is the one that crankshaft was replaced. Overhaul of generator 5A is pending until Alaoa hydro plant is back in service.

(vii). Vaipu Pumping Station

Still no decision this Quarter whether to go ahead with this project or not.

EPC is waiting on outcome of the study by SMEC on the integrity of the dam after the 2009 earthquake. Report is complete. Outcome of study is that the dam is safe.

This is an excellent project. It will generate more power from Taelefaga hydro plant. Payback is very short. Money is already budgeted for construction. There are no major environmental issues.

4. RISKS AND ISSUES

A. PMU Organization Structure

There is no further action on this. Egis International contract is winding down to finally complete in November 2011.

B. Staff Recruitment

EPC is hiring 3 experienced engineers to add to PMU. Engineers are; civil, distribution, and generation engineers.

C. Prepayment Meters

Installation continued during the 1st Quarter. Only one subcontractor is involved. Most critical issue is blank screen defect of meters. Number of blank screen defective meters is increasing. Problem is that when meters screens turned blank, they will continue to supply power even if customer credit runs out. So there will be a lot of customers with blank screens receiving free power. This problem has been brought to A D Riley, but they have not come up with a solution. What is needed is, if meter screen turns blank, it should automatically switch off power to customer. Until ADR comes up with a technical solution to this, EPC needs to closely monitor customers who have not purchased top up credits and send inspectors to check on these customers' meters.

The blank screen problem is becoming very serious as the number of defective meters reported is increasing. There are over 600 defective meters now. Biggest problem is the number of unreported defective meters still being used by consumers.

D. Cabinet Policy

There have been no further discussions on this.

E. Meter Heights

Lowering of meters by A D Riley subcontractor continued. New installations are all lowered. There is still no decision how to lower the first 10,000 or more meters first installed by ADR before variation to lower meters came into affect.

F. Vending and Card System

Scratch cards are widely used now. EPC is working with a local bank to use this bank dial up system for their bank consumers with EPC accounts to buy tokens without leaving his house. Consumer will text this bank using a 627 number and request EPC token. Bank system will process token and deduct amount from consumer account and bank get token number from EPC electronically and then text back to consumer. This is a very convenient method to buy top up tokens.

H. Access Road and Pipeline to Fiaga Power Plant and Fence

Road and pipeline is 90% complete. This work was dedicated by the Prime Minister in June during ground breaking for start of construction of the new Fiaga power plant.

I. Land transfer to EPC

Government approved transfer of land in Fiaga and Vaiaata to EPC for new power plants. Transfer has not been done. Office of Attorney General will check on status.

5. EPC PERFORMANCE MONITORING

Design Summary	Performance Targets/Indicators	Current Status
Impact Access to sustainable and reliable electricity services at affordable prices	Consumer satisfaction ratings of EPC's services Complaints to EPC's consumer service division	Initial Consumer Confidence Survey (CCS) is scheduled for 2011 EPC to reactivate service order tracking system in Daffron System.
Outcome Improved quality, reliability, and cost-effectiveness of power supply	System Average Interruption Duration Index (SAIDI) Baseline established and verified on 4th Quarter of 2008 and reduced by 20% by 2015 System Average Interruption Frequency Index (SAIFI) Baseline established and verified on 4th quarter 2008 and reduced by 20% by 2015 Cost of generation	<u>Baseline SAIDI established on 3rd Quarter 2008:</u> Annual SAIDI for Upolu: 1515 min Annual SAIDI for Savaii: 2622 min Quarterly SAIDI for Upolu: 379 min Quarterly SAIDI for Savaii: 656 min <u>2nd Quarter 2011 SAIDI:</u> Annual SAIDI for Upolu: Annual SAIDI for Savaii: Quarterly SAIDI for Upolu: Quarterly SAIDI for Savaii: <u>Baseline SAIFI established on 3rd Quarter 2008</u> Annual SAIFI for Upolu: 26 Annual SAIFI for Savaii: 44 Quarterly SAIFI for Upolu: 6.5 Quarterly SAIFI for Savaii: 11 <u>SAIFI on 2nd Quarter 2011</u> Annual SAIFI for Upolu: Annual SAIFI for Savaii: Quarterly SAIFI for Upolu: Quarterly SAIFI for Savaii: Refer to Appendix 8 for SAIDI monitoring Refer to Appendix 9 for SAIFI monitoring

Design Summary	Performance Targets/Indicators	Current Status
	established and published by 1st Quarter of FY 2009	Cost of Generation established and reported to EPC Board as part of FY 2008 Budget process
Outputs		
1. EPC's investment plan meets demand requirements	Power system capacity for energy and power meets demand requirements on Savai'i and Upolu	Project Implementation Plans meet estimated demand per survey. Planned expansion of power generation is based on N-2 criteria.
2. Operational efficiency of EPC improves	<p>Baselines for technical system losses are established and verified by 4th Quarter of 2008 and are to be reduced by 10% by 4th Quarter 2010 and 20% by 4th Quarter 2012</p> <p>Baseline for non-technical system losses established and verified by 4th quarter 2008 and reduced by 10% by 2010.</p>	<p>Baselines figures of Total System losses established on a 12 month moving average at September 2008 are:</p> <p>Upolu: 15.7%</p> <p>Savaii: 18.2%</p> <p>EPC : 15.9%</p> <p>Updated 12 month moving average of total system losses now reported monthly to the Board. End of December 2008 are:</p> <p>Upolu: 17.1%</p> <p>Savaii: 18.2%</p> <p>EPC : 17.2%</p> <p>Not possible to calculate Technical losses due to lack of metering and dedicated resources.</p> <p>Not possible to calculate non-technical losses - this can only be calculated as "<i>total system loss – technical loss</i>"</p> <p>Technical loss is established to be 13.5% from studies by the Japanese Volunteer and PMU in 4th Quarter 2008.</p> <p>Change in non technical loss can be monitored as technical loss level generally remains static</p> <p>Finance Department have begun diagnostic review of causes of non-technical loss as basis for implementation of reduction measures</p>

<p>3. The financial performance of EPC improves</p>	<p>Consistent application of disconnection policy</p> <p>Fuel audits conducted on all EPC's diesel power stations</p> <p>Timeliness of tariff adjustments in response to cost</p> <p>EPC's collection performance improves such that accounts receivables are below 2 months of sales</p> <p>Government consumers' share of EPC's accounts receivables reduced from 55% in 2007 to less than their share of total sales by 31 December 2009</p>	<p>Procedures reviewed in August 2008 and revised procedures implemented. WE NEED TO REPORT ACCOUNTS AGING..</p> <p>Fuel Audit's at both Upolu and Savaii Generation Stations introduced 1 May 2008 and now routinely conducted monthly. Results reported monthly to Board.</p> <p>WE SHOULD REPORT Q2 2011 AVERAGE.</p> <p>Tariff Increase of 10% from 1 September 2008 incorporated in FY 2009 approved Budget not yet implemented – implementation now anticipated as 1st January 2009.</p> <p>Customers' arrears on 2nd Quarter of 2011 were: Debtor days as = days % Government Debt (of total debt) = % % Government Sales (of total sales) = %</p> <p>Debt/Sales Ratio: % Reference Appendix 5</p>
---	---	---

4. Effective regulation of the power sector is established	<p>Electricity Act Reform to govern the power sector was established by 31 December 2009</p> <p>Amendments of the EPC Act consistent with the Electricity Act by 31 December 2009</p> <p>Regulatory agency established by 31 December 2010.</p>	Not within Scope of this Project
5. Energy demand-side management	Energy conservation and demand-side management public awareness campaign implemented	Not within Scope of this Project
6. Development of clean energy	<p>Number of projects by energy subsector financed by the clean energy fund</p> <p>Number of projects by energy subsector eligible for clean development mechanism</p> <p>Electricity produced by clean energy resources (baseline of 45</p>	Not within Scope of this Project

6. COMPLIANCE WITH LOAN COVENANTS (Beneficiary)

Covenant	Status	Comments
The Beneficiary shall carry out the project with due diligence and efficiency and in conforming with sound administrative, financial, engineering, environmental and public utilities practices	Complied	PMU is carrying out project with due diligence
In carrying out of the Project and operation of the project facilities the Beneficiary shall perform or cause to be performed, all obligations set forth in schedule 5 of the Financing Agreement	Complied	PMU office is being provided with all facilities
The Beneficiary shall make available promptly, as needed, the funds, facilities, services, land and other resources which are required in addition to the proceeds of the ADB Loan and Grant, and the JBIC Loan and the Government of Australia Grant, for carrying out of the Project and for the operation and maintenance of the Project facilities.	Complied	Beneficiary committed personnel, funds, etc support the project.
The Beneficiary shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the ADB Loan and the Grant and the JBIC Loan and the Government of Australia Grant, and any relevant records and documents.	Complied	There was a full ADB Mission this Quarter. ADB, JICA and Aussie Aid participated.
The Beneficiary shall take all action which shall be necessary on its part to enable EPC to perform it's obligations under the Project Agreement and shall take or permit any action which would interfere with the performance of such obligations.	Complied	
The Beneficiary shall exercise its rights under the Subsidiary Financing Agreement in such a manner as to protect the interests of the Beneficiary and ADB and to accomplish the purpose of the Loan and Grant, and the JBIC Loan and the Government of Australia Grant.	Complied	
No rights or obligations under the Subsidiary	Complied	One outstanding

Financing Agreement shall be assigned, amended, or waived without the prior concurrence of ADB.

issue with variation in Hospital Feeder Stage 1 and Alaoa feeder upgrade contract. Final payment to contractor is still pending ADB final approval.

7. LOAN EFFECTIVE MILESTONES (Electric Power Corporation)

Details	Status
Settlement of Government arrears as of 30 September 2007	Complied
Subsidiary Financing Agreement with EPC	Complied
Establishment of the Project Steering Committee (PSC)	Complied
Establishment of the Project Management Committee (PMC)	Complied
Establishment of Project Management Unit	Complied
Hire of Implementation Consultant	Complied
Project Manager	Complied
Restructure of PMU	Cancelled.
Project Accountant	Complied
Generation Engineer	Complied
Transmission & Distribution Engineer	Complied

Power System Planner	Complied
Public Relation & Community Liaison Specialist	Complied
SCADA Engineer	Complied
PMU Secretary	Complied
Establishment of Environment and Social Unit	Complied
Legal / Environment Advisor	Complied
Environment Specialist	Complied
Land & Acquisition Specialist	Complied
Effectiveness of the JBIC Loan Agreement	Complied
Commitment of the Government of Australia Grant	Complied
Legal Opinion from the Attorney General's Office	Complied

8. RESETTLEMENT (updated quarterly)

There has been no activity this quarter related to officially transferring Fiaga 97 acres and Vaiaata 100 acres to EPC for the new power plants. This is still pending.

Status of land acquisition and resettlement for subprojects at end of 2nd Quarter 2011:

Subproject	Temporary Land Acquisition	Permanent Land Acquisition	Percentage Obtained %	Commentary on Negotiations and Compensation paid
1) Hospital Feeder Upgrading Stage 1	N/R	N/R	N/R	N/R
2) Single & Three Phase PPM	N/R	N/R	N/R	N/R
3) Tanugamanono Power Station Noise & Emission Control	N/R	N/R	N/R	N/R
4) Refurbishment of Alaoa Hydropower Station	N/R	N/R	N/R	N/R
5) Fiaga Diesel Power Station	NO	YES	50%	Official transfer of land to EPC is still outstanding
6) Upgrade of Alaoa 6.6 kV Transmission Line to 22kV	N/R	N/R	N/R	N/R
7) Fiaga Diesel Power Station to Fuluasou Substation 33KV Underground Cable	N/R	N/R	N/R	N/R, cable installed inside road reserve
8) Hospital Feeder Upgrading Stage 2	N/R	N/R	N/R	UG is built inside road reserve, but there are families who have encroached legal reserves.
9) 22kV Fuluasou Substation	NO	YES	50%	Use old EPC Hydropower Station land & requesting Land Board for extra land to Golf Course fence and right of way for underground cables to substation
10) Low Voltage Network	N/R	N/R	N/R	N/R

Improvement Program				
11)Fuluasou Substation to Apia Wharf Area 22kV Underground Cable	N/R	N/R	N/R	Underground feeder will terminate at corner of Vaitele and Falealili Road
12) Fuluasou Substation to Leulumoega via Vaigaga 22kV Underground Cable	N/R	N/R	N/R	N/R
13) 22kV Overhead Conductor Upgrading Program	N/R	N/R	N/R	N/R
14) Hydro Scheme	YES	YES	YES	YES
15) Puapua-Asau Transmission Line 22kV Reconductoring	N/R	N/R	N/R	N/R
16)Power Factor Improvement Program	N/R	N/R	N/R	N/R
17)Low Voltage Network Improvement	N/R	N/R	N/R	N/R

18)Stream Flow Gauging Equipment				
19)HV/LV Testing Equipment	N/R	N/R	N/R	N/R
20)Supply, Installation & Operation of SCADA System	NO	YES	50%	NCC included in Fuluasou Substation at old Fuluasou hydro site.
21)Public Dissemination	N/R	N/R	N/R	N/R
22)Vending System Expansion				
23)Power System Planning Software	N/R	N/R	N/R	N/R
24) Refurbishment of Salelologa Power Station	N/R	N/R	N/R	Old power plant will be replaced with a new plant at Vaiaata. Old plant will be converted to a substation and a mini Control Center for Savaii system.
25) Refurbishment of Taelefaga Switchgears	N/R	N/R	N/R	N/R
26)Refurbishment of Samasoni Switchgears	N/R	N/R	N/R	N/R
27) Refurbishment of Tanugamanono Generators	N/R	N/R	N/R	N/R
28)Vaipu Pumping Scheme				

9. ENVIRONMENT (updated quarterly)

PUMA approved development consents of all subprojects that are now under construction. PMU is monitoring construction in accordance the DC and reported to PUMA. Inspectors from PUMA also visited construction sites to carry out their own independent inspection of these projects.

Only subprojects that PUMA has not approved Development Consent is new power plant in Vaiaata in Savaii and proposed hydro plants.

Subproject	Constraints	Activities	Action Taken	Comments
1) Hospital Feeder Upgrading Stage 1	NIL	NIL	NIL	Completed
2) Single & Three Phase PPM	NIL	NIL	NIL	To decide how to lower 10,500 meters, funding and who does it. Defective meters.
3) Tanugamanono Power Station Noise & Emission Control	NIL	NIL	NIL	Started Feasibility Study
4) Refurbishment of Alaoa Hydropower Station	NIL	NIL	NIL	Monitor EMMP during construction currently in progress.
5) Fiaga Diesel Power Station	NIL	YES	YES	Relocate fences of two leases affected by new access road. Saved 3 Aoa trees in road and more at quarry site. Cleared trees in plant site. Lots of excavation at site and access road. Also relocated fences that have encroached 15m legal road reserve.
6) Upgrade of Alaoa 6.6kV Transmission Line to 22kV	NIL	NIL	NIL	Completed
7) Fiaga New Diesel Power Station to Fuluasou Substation Underground Cable	NIL	NIL	NIL	Contracts are awarded for supply of materials. EPC will do construction

8)Hospital Feeder Upgrading Stage 2	NIL	NIL	NIL	Construction started; 90% of trenching and installation of ducts is complete.
9) 22kV Fuluasou Substation	YES	NIL	NIL	MNRE approved to use back access for underground cable. PMU requested Land Board to transfer extra land to Golf Course fence for Substation to fit refurbishment of old hydro with new penstock and powerhouse.
10) Low Voltage Improvement Program	NIL	NIL	NIL	Contract awarded for supply of materials. No IEE required
11) Fuluasou Substation to Apia Wharf Area 22kV Underground Cable	NIL	NIL	NIL	Contracts were awarded for supply of materials. Vehicles and other materials have arrived.
12) Fuluasou Substation to Leulumoega via Vaigaga 22kV Underground Cable	NIL	NIL	NIL	NIL
13) 22kV Overhead Conductor Upgrading Program	NIL	NIL	NIL	Construction continued. 30% is complete.
14) Hydro Scheme				Feasibility Study reports are finalized.
15) Puapua-Asau Transmission Line 22kV Reconductoring	NIL	NIL	NIL	Rapid Environmental Assessment and Dev. Consent approved. Construction continued. 90% of work is complete.

16) Power Factor Improvement Program	NIL	NIL	NIL	Assessment completed. PF is good. No further work required.
17) Low Voltage Improvement program	NIL	NIL	NIL	Rapid Environmental Assessment has been prepared and submitted to ADB. No IEE required
18) Stream Flow Gauging Equipment	NIL	NIL	NIL	Completed.
19) HV/LV Testing Equipment	NIL	NIL	NIL	NIL
20) Supply, Installation & Operation of SCADA System	NL	NIL	NIL	It is being tendered. Tender closes on 15th of Aug, 2011.
21) Public Dissemination	NIL	NIL	NIL	NIL
22) Vending System Expansion				
23) Power System Planning Software	NIL	NIL	NIL	NIL
24) Refurbishment of Salelologa Power Station	YES	YES	YES	Feasibility study is almost done. Includes new plant in Vaiaata and Substation and Mini Control Center in Salelologa.
25) Refurbishment of Taelefaga Switchgears	NIL	NIL	NIL	NIL
26) Refurbishment of Samasoni Switchgears	NIL	NIL	NIL	NIL
27) Refurbishment of Tanugamanono Generators	NIL	NIL	NIL	NIL

28) Vaipu Pump Assisted Scheme	NIL	NIL	NIL	Awaiting EPC decision. SMEC study confirmed that dam is safe.
29) Upolu hydro schemes				Implementation Consultant completed Faleseela Feasibility study and continued with rest of FS for other 4 schemes and tender of 3 schemes.

10. LOAN DRAW DOWN TO DATE (31 March 2011)

10. LOAN DRAW DOWN TO DATE (31 December 2010)

No.	TITLE OF SUBPROJECTS	ADB categ*	Schedule Date Contract Award	Revised Contract Budget	Actual Contract Price	Contract Number	Actual Date Contract Awarded	Draw Down to date	Balance
	ADB Loan			USD\$M					
	ADB Grant			26.61					
	JICA Loan			15.39					
	Ausaid Grant			38.00					
	EPC			8.00					
				12.00					
				100.00					
	CORE SUBPROJECTS								
1	Project Manager (0.37 + 0.38 unallocated)	4	Q4 2007	0.75	0.37	CON-0108	30th Oct 2007	0.06	0.69
2	Project implementation consultant: EBI (73 man-months)	4	Q1 2008	2.67	2.67	CON-05058	2 May 2008	1.74	0.93
3	Hospital Feeder Upgrading Project – Stage 1	3	Q1 2009	0.60		SAM-PSEP-02		1.94	-1.34
4	Single- and Three-Phase Prepayment Metering Project	3	Q3 2008	5.67	5.89	PPM1207	30 July 2008	4.90	0.77
	CANDIDATE SUBPROJECTS								
	UPOLU Generation								
5	Tanugamanono Power Station Noise and Emission Control Program	3	Q4 2009	0.17				0.00	0.17
6	Refurbishment of Alaoa Hydropower Station	3	Q3 2009	1.34		SAM-PSEP-03		0.00	1.34
7	Fiaga New Diesel Power Station Project	3	Q1 2010	22.27	35.88	SAM-PSEP-08		6.10	29.78
	UPOLU Transmission								
8	Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project	3	Q3 2009	1.14		SAM-PSEP-02			-0.80
9	Upolu Diesel Power Station to Fuluasou Substation Underground Cable Project	3	Q1 2010	3.12					3.12
10	Hospital Feeder Upgrading Project - Stage 2	3	Q4 2009	3.20		SAM-PSEP-09		0.84	2.36
11	22 kV Fuluasou Substation Project	3	Q2 2010	2.93					2.93
12	Low-Voltage Network Expansion Program	3	Q2 2010	1.29					1.29
13	Fuluasou Substation to Apia Wharf Area 22 kV Underground Cable Project	3	Q2 2012	0.00					0.00
14	Fuluasou Substation to Leulumoega via Vaigaga 22 kV Underground Cable Project	3	Q2 2012	2.78					2.78
15	22 kV Overhead Conductor Upgrading Program	3	Q3 2009	6.03		SAM-PSEP-09		0.41	5.62
	SAVAII Generation								
16	Hydropower Scheme	3	Q3 2012	10.65					10.65
	SAVAII Transmission								0.00
17	Puapua-Asau Transmission Line 22 kV Reconductoring Project	3	Q3 2009	1.24		SAM-PSEP-02			1.24
18	Low-Voltage Network Expansion Program	3	Q2 2010	0.56					0.56
	Measurement Equipment								
19	Stream Flow Gauging Equipment	3	Q3 2008	0.05		SAM-PSEP-04	23rd Oct 08	0.06	-0.01
20	Electrical Test Equipment	3	Q3 2008	0.06		SAM-PSEP-05	23rd Oct 08	0.07	-0.01
21	SCADA	3	Q4 2009	3.48					3.48
	CORE AND CANDIDATE SUBTOTAL			70.00	44.81			16.12	53.88
	APPROVED NEW SUBPROJECTS								
22	Vending System	3	Q1 2009	0.25				0.10	0.15
23	Public Dissemination	3	Q1 2009	0.10					0.10
24	Power System Planning Software	3	Q3 2008	0.06		SAM-PSEP-06	23rd Oct 08	0.06	0.00
25	Refurbishment of Taalefaga and Samasoni Switchgear	3	Q2 2009	1.60		SAM-PSEP-07		1.97	-0.37
26	Refurbishment of Salelologa Power Station	3	Q2 2009	5.90		SAM-PSEP-10			5.90
27	Refurbishment of Tanugamanono Two Generators	3	Q3 2009	0.75		SAM-PSEP-08		0.47	0.28
28	Upolu Hydro	3	Q1 2010	3.51					3.51
29	Contingency (Vaipu Assisted Pumping Scheme)	3	Q1 2010	0.50					0.50
	NEW SUBPROJECTS SUBTOTAL			12.67	0.00			2.60	10.07
	GRAND TOTAL			82.67	44.81			18.72	63.95

TOTAL DISBURSEMENTS SUMMARY AS AT 31ST DECEMBER 2010

	PROJECT	PAYEE <small>Exchange Rate (29/12/2010)</small>	CONTRACT NO. 2.4044	TOTAL	LOANS			TOTAL LOANS	GOVT CAPITAL	COUNTERPART	TOTAL LOANS +	TOTAL	Remainder	
				DISBURSEMENT SAT\$	ADB Loan	ADB Grant	JICA		AUSAID	EPC	GOVT CAPITAL+ EPC C/PART	AWARDS SAT	(Variance)	
													\$	%
	TOTAL PROJECT APPROVED FUNDS		USD	\$ 88,000,000	\$ 26,610,000	\$ 15,390,000	\$ 38,000,000	\$ 80,000,000	\$ 8,000,000	\$ 12,000,000	\$ 100,000,000	\$ 2,180,000.00		
	TOTAL ESTIMATED PROJECT FUNDS		SAT\$	\$ 211,587,200	\$ 63,981,084	\$ 37,003,716	\$ 91,367,200	\$ 192,352,000	\$ 19,235,200	\$ 28,852,800	\$ 240,440,000	\$ 5,241,592		
1	SINGLE AND THREE PHASE PREPAYMENT METERS:	Arthur D. Riley & Co. Ltd.	PPM1207	\$ 11,792,007	\$ 3,655,522	\$ 825,441	\$ 5,542,243	\$ 10,023,206	\$ 1,768,801	\$ -	\$ 11,792,007	\$ 15,139,803	\$ 3,347,795	22%
2	POWER SYSTEM PLANNING SOFTWARE:	Digilent Pacific Pty Ltd	SAM-PSEP-06	\$ 134,810	\$ 41,791	\$ 9,437	\$ 63,361	\$ 114,589	\$ 20,222	\$ -	\$ 134,810	\$ 136,126	\$ 1,316	1%
3	STREAM FLOW GAUGING EQUIPMENT:	NIWA	SAM-PSEP-04	\$ 145,397	\$ 45,073	\$ 10,178	\$ 68,337	\$ 123,588	\$ 21,810	\$ -	\$ 145,397	\$ 163,988	\$ 18,591	11%
4	HV TEST EQUIPMENT :	Electrotest Ltd.	SAM-PSEP-05	\$ 163,443	\$ 50,667	\$ 11,441	\$ 76,818	\$ 138,927	\$ 24,516	\$ -	\$ 163,443	\$ 153,341	\$ 10,102	-7%
5	EGIS BCOEM IMPLEMENTATION	EGIS BCOEM International	CON0508	\$ 4,004,841		\$ 4,004,841		\$ 4,004,841		\$ 184,659	\$ 4,189,500	\$ 7,105,010	\$ 2,915,510	41%
6	EPC REIMBURSEMENTS:												\$ -	
6.1	A. PROJECT MANAGER	EPC	CON0108	\$ 140,851		\$ 140,851		\$ 140,851		\$ 249,338	\$ 390,189	\$ 612,000	\$ 221,811	36%
6.2	B. 22 KV OVERHEAD UPGRADING	EPC	SAM-PSEP-09	\$ 991,727	\$ 307,435	\$ 69,421	\$ 466,112	\$ 842,968	\$ 148,759	\$ -	\$ 991,727	\$ 991,727	\$ 0	0%
7	C. UPGRADING OF SUPRIMA VENDING MACHINES:	EPC		\$ 244,218	\$ 75,708	\$ 17,095	\$ 114,782	\$ 207,585	\$ 36,633	\$ -	\$ 244,218	\$ -	\$ 244,218	#DIV/0!
	UPGRADING HOSPITAL FEEDER STAGE 1, ALAOA DIST. LINE & ASAU 22KV RECONDUCTORING:												\$ -	
7.1	TRANSFORMERS	Etel Limited	SAM-PSEP-02/01-D	\$ 543,527	\$ 168,493	\$ 38,047	\$ 255,458	\$ 461,998	\$ 81,529	\$ -	\$ 543,527	\$ 571,118	\$ 27,591	5%
7.2	CABLES & CONDUCTORS	Olex Australia Pty Ltd.	SAM-PSEP-02/01-C	\$ 683,914	\$ 212,013	\$ 47,874	\$ 321,439	\$ 581,327	\$ 102,587	\$ -	\$ 683,914	\$ 684,687	\$ 773	0%
7.3	POLES & CROSSARMS	Bluebird/Ahlal JV	SAM-PSEP-02/01-B	\$ 88,804	\$ 27,529	\$ 6,216	\$ 41,738	\$ 75,483	\$ 13,321	\$ -	\$ 88,804	\$ 102,124	\$ 13,321	13%
7.4	SUPPLY OF GALVANISED LINE HARDWARE	South Austral Pty Ltd.	SAM-PSEP-02/01-A	\$ 2,743,428	\$ 850,463	\$ 192,040	\$ 1,289,411	\$ 2,331,914	\$ 411,514	\$ -	\$ 2,743,428	\$ 154,689	\$ 2,588,740	-1674%
7.5	PROCUREMENT OF WORKS & RELATED SUPPLIES	Bluebird/Ahlal JV	SAM-PSEP-02/02-A	\$ 491,223	\$ 152,279	\$ 34,386	\$ 230,875	\$ 417,540	\$ 73,683	\$ 101,680	\$ 592,903	\$ 154,690	\$ 438,214	-283%
8	REFURBISHMENT OF ALAOA HYDRO POWER STATION	Tenix New Zealand	SAM-PSEP-03	\$ 657,916	\$ 203,954	\$ 46,054	\$ 309,221	\$ 559,229	\$ 98,687	\$ -	\$ 657,916	\$ 3,432,945	\$ 2,775,029	81%
9	HOSPITAL FEEDER STAGE 2 & 22KV UPGRADING:													
9.1	SUPPLY OF MATERIALS	Etel Limited	SAM-PSEP-09/01-A	\$ 768,178	\$ 238,135	\$ 53,772	\$ 361,043	\$ 652,951	\$ 115,227	\$ -	\$ 768,178	\$ 768,178	\$ 0	0%
9.2	SUPPLY OF MATERIALS	South Austral Pty Ltd.	SAM-PSEP-09/01-B	\$ 1,251,531	\$ 387,975	\$ 87,607	\$ 588,220	\$ 1,063,801	\$ 187,730	\$ -	\$ 1,251,531	\$ 4,625,858	\$ 3,374,327	73%
10	REFURBISHMENT OF TAELEFAGA, LALOMAUGA, SAMASONI & TANUGAMANONO SWITCHGEARS:	Northpower Ltd.	SAM-PSEP-07	\$ 4,730,718	\$ 1,466,523	\$ 331,150	\$ 2,223,438	\$ 4,021,110	\$ 709,608	\$ -	\$ 4,730,718	\$ 5,390,576	\$ 659,858	12%
11	REFURBISHMENT OF TANUGAMANONO GENERATORS 5A AND 9A:	Man Diesel & Turbo Australia	SAM-PSEP-08	\$ 1,138,081	\$ 352,805	\$ 79,666	\$ 534,898	\$ 967,369	\$ 170,712	\$ -	\$ 1,138,081	\$ 2,855,377	\$ 1,717,296	60%
12	CONSTRUCTION OF PUAPUA FEEDER	Tenix New Zealand	SAM-PSEP-02/02-B	\$ 125,163	\$ 38,801	\$ 8,761	\$ 58,827	\$ 106,389	\$ 18,774	\$ -	\$ 125,163	\$ -	\$ 125,163	#DIV/0!
13	REFURBISHMENT OF ALAOA HYDRO POWER STATION	Silva Transport Company	SAM-PSEP-03/01	\$ 272,636	\$ 84,517	\$ 19,085	\$ 128,139	\$ 231,741	\$ 40,895	\$ 41,018	\$ 313,654			
14	FIAGA ACCESS ROAD AND FENCING	Silva Transport Company	SAM-PSEP-12/02-A&C	\$ 300,521	\$ 93,162	\$ 21,036	\$ 141,245	\$ 255,443	\$ 45,078	\$ 45,164	\$ 345,685			
15														
16	FIAGA DIESEL POWER STATION	Bluebird /Mitsubishi A/Woods	SAM-PSEP-12/03	\$ 14,079,945	\$ 4,364,783	\$ 985,596	\$ 6,617,574	\$ 11,967,953	\$ 2,111,992	\$ -	\$ 14,079,945			
17	FIAGA SITE LEVELING	PPG Engineering	SAM-PSEP-12/02-B	\$ 70,324										
17	ELECTRICAL DUCTING-VAITELE ROAD WIDENING	OIT Transport	SAM-PSEP-10/01	\$ 325,682										
	TOTAL DISBURSEMENTS AS AT 30TH NOVEMBER 2010		SAT\$	\$ 45,888,887	\$ 12,817,629	\$ 7,039,995	\$ 19,433,179	\$ 39,290,803	\$ 6,202,078	\$ 621,859	\$ 46,114,740	\$ 24,210,886	\$ 21,903,854	
	INTEREST DURING CONSTRUCTION (IDC):		Interest rate											
	Interest Due		6.50%		\$ 833,145.86	\$ 457,599.68	\$ 1,263,156.63	\$ 2,553,902.18						
	less Interest paid				\$ 114,942.65	\$ 63,131.46	\$ 174,267.89	\$ 352,342.00		\$ 352,342.00	\$ 352,342.00	\$ 352,342.00	\$ -	0%
	Total Interest Outstanding as at 31st December 2010				\$ 718,203.22	\$ 394,468.21	\$ 1,088,888.75	\$ 2,201,560.18			\$ -	\$ 2,201,560.18	\$ 2,201,560.18	-100%
	TOTAL DISBURSEMENTS + IDC		SAT\$	\$ 45,888,887	\$ 13,535,832	\$ 7,434,463	\$ 20,522,068	\$ 41,492,363	\$ 6,202,078	\$ 974,201	\$ 46,467,082	\$ 26,764,788	\$ 19,702,294	
	% of funds disbursed as at 31st December 2010			22%	21%	20%	22%	22%	32%	3%	19%			
	TAXES AND DUTIES (GOVERNMENT CONTRIBUTION - MOF)									\$ 3,845,254.17	\$ 3,845,254.17	\$ 5,241,592	\$ 1,396,337.83	-27%
	TOTAL DISBURSEMENTS + IDC + TAXES & DUTIES		SAT\$	\$ -	\$ 13,535,832	\$ 7,434,463	\$ 20,522,068	\$ 41,492,363	\$ 6,202,078	\$ 4,819,455	\$ 50,312,336	\$ 32,006,380	\$ 18,305,956	
	% of funds disbursed as at 31st December 2010			0%	21%	20%	22%	22%	32%	17%	21%			
	Remaining Balance as at 31st December 2010		SAT\$	\$ 165,698,313	\$ 50,445,252	\$ 29,569,253	\$ 70,845,132	\$ 150,859,637	\$ 13,033,122	\$ 24,033,345	\$ 190,127,664			
	Remaining Balance as at 31st December 2010		USDS	\$ 68,914,620	\$ 20,980,391	\$ 12,297,976	\$ 29,464,786	\$ 62,743,153	\$ 5,420,530	\$ 9,995,569	\$ 79,074,889			
	% of funds remaining as at 31st December 2010		%	78%	79%	80%	78%	78%	68%	83%	79%			

11. PROJECT FORECAST FOR 2nd QUARTER 2011 AGAINST ACTUAL

SAMOA POWER SECTOR EXPANSION PROJECT															
ADBL-2368; ADBG-0087; JICAL-8232 / SAM-P1, & AUS-0101															
QUARTERLY REPORT															
1 APRIL 2009 - 30 JUNE 2009															
PROJECT COMPONENT	PROJECT ACTUALS FOR QUARTER LAPROS-300UNE09					PROJECT ESTIMATES FOR QUARTER LAPROS-300UNE09					VARIANCE (QUARTERLY)				
	FOREIGN COMPONENT				LOCAL COMPONENT	FOREIGN COMPONENT				LOCAL COMPONENT	FOREIGN COMPONENT				LOCAL COMPONENT
	ADB LOAN	ADB GRANT	JICA	AUSAID	EPC/GOVT	ADB LOAN	ADB GRANT	JICA	AUSAID	EPC/GOVT	ADB LOAN	ADB GRANT	JICA	AUSAID	EPC/GOVT
	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)
CORE SUBPROJECTS															
Project Manager (0.37 + 0.38 unallocated)															
Consultant Services	-	-	-	-	-	-	18,113.93	-	-	973.46	-	18,113.93	-	-	973.46
Unallocated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	18,113.93	-	-	973.46	-	18,113.93	-	-	973.46
Project implementation consultant: EBI (73 man-months)															
Consultant Services	-	253,151.50	-	-	13,604.56	-	211,267.80	-	-	11,353.70	-	41,883.70	-	-	2,250.86
Subtotal	-	253,151.50	-	-	13,604.56	-	211,267.80	-	-	11,353.70	-	41,883.70	-	-	2,250.86
Hospital Feeder Upgrading Project - Stage 1															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	2,100.00	3,900.00	-	-	-	2,100.00	3,900.00
Civil Works	-	-	-	-	-	2,137.50	-	1,899.00	-	463.50	2,137.50	-	1,899.00	-	463.50
Equipment Supply & Installation	-	-	-	-	-	43,245.00	9,765.00	65,565.00	20,925.00	-	43,245.00	9,765.00	65,565.00	20,925.00	-
Subtotal	-	-	-	-	-	45,382.50	9,765.00	67,464.00	23,025.00	4,363.50	45,382.50	9,765.00	67,464.00	23,025.00	4,363.50
Single- and Three-Phase Prepayment Metering Project															
Equipment Supply & Installation	68,949.73	15,569.29	104,536.69	33,362.77	-	68,563.21	20,223.95	135,789.38	43,337.04	-	20,613.48	4,654.66	31,252.69	9,974.26	-
Subtotal	68,949.73	15,569.29	104,536.69	33,362.77	-	68,563.21	20,223.95	135,789.38	43,337.04	-	20,613.48	4,654.66	31,252.69	9,974.26	-
CANDIDATE SUBPROJECTS															
UPOLU Generation															
Tarugamanono Power Station Noise and Emission Control Program															
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refurbishment of Alaea Hydropower Station															
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Upolu Diesel Power Station Project															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UPOLU Transmission															
Upgrade of the Alaea 6.6 kV Transmission Line to 22 kV Project															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Upolu Diesel Power Station to Fulusou Substation															
Underground Cable Project															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hospital Feeder Upgrading Project - Stage 2																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 KV Fuluasou Substation Project																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-Voltage Network Expansion Program																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuluasou Substation to Leulumoea via Vaigaga 22 KV Underground Cable Project																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 KV Overhead Conductor Upgrading Program																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAVAI Generation																				
Hydropower Scheme																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAVAI Transmission																				
Puapua-Asau Transmission Line 22 KV Reconductoring Project																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-Voltage Network Expansion Program																				
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measurement Equipment																				
Stream Flow Gauging Equipment																				
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Electrical Test Equipment Equipment																
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SCADA																
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CORE AND CANDIDATE SUBTOTAL	68,949.73	268,720.79	104,536.69	33,362.77	13,604.56	134,945.71	259,370.68	203,253.38	66,362.04	16,680.65	65,995.98	-	9,350.11	98,716.69	32,999.26	3,086.09
APPROVED NEW SUBPROJECTS																
Refurbishment of Savail Diesel Power Station																
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vending System																
Equipment Supply & Installation	-	-	-	-	-	38,750.00	8,750.00	58,750.00	18,750.00	-	38,750.00	8,750.00	58,750.00	18,750.00	-	-
Subtotal	-	-	-	-	-	38,750.00	8,750.00	58,750.00	18,750.00	-	38,750.00	8,750.00	58,750.00	18,750.00	-	-
Public Dissemination																
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	7,000.00	13,000.00	-	-	-	7,000.00	13,000.00	-
Subtotal	-	-	-	-	-	-	-	-	7,000.00	13,000.00	-	-	-	7,000.00	13,000.00	-
Taalefaga and Samasoni Switchgears																
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power System Planning Software																
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL (A-Z)	68,949.73	268,720.79	104,536.69	33,362.77	13,604.56	173,695.71	268,120.68	262,003.38	92,112.04	29,680.65	104,745.98	-	600.11	157,466.69	58,749.26	16,086.09
APPROVED EPC, NOT ADB NEW SUBPROJECTS																
Vaipu Pumping Scheme																
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refurbish 2 only Timono Diesel Generators																
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NOT YET APPROVED EPC/ADB NEW SUBPROJECTS																
Upolu Hydro Generation																
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal																
Taxes and Duties	-	-	-	-	-	-	-	-	-	52,500.00	-	-	-	-	-	52,500.00
Physical Contingeny	-	-	-	-	-	36,451.94	21,015.00	52,018.61	10,886.67	9,340.00	36,451.94	21,015.00	52,018.61	10,886.67	9,340.00	-
Price Contingency	-	-	-	-	-	78,992.22	45,540.00	112,725.58	23,613.33	20,240.00	78,992.22	45,540.00	112,725.58	23,613.33	20,240.00	-
Interest During Construction	-	-	-	-	-	-	-	-	-	144,722.22	-	-	-	-	-	144,722.22
Subtotal	-	-	-	-	-	115,444.17	66,555.00	164,744.17	34,510.00	226,802.22	115,444.17	66,555.00	164,744.17	34,510.00	226,802.22	-
TOTAL PROJECT COSTS	68,949.73	268,720.79	104,536.69	33,362.77	13,604.56	289,139.88	334,675.68	426,747.55	126,622.04	256,482.88	220,190.14	65,954.89	322,210.85	93,259.26	242,888.32	-

12. PROJECTED FORECAST YEAR TO DATE AGAINST ACTUAL

SAMOA POWER SECTOR EXPANSION PROJECT															
ADBL-2368; ADBG-0087; JICAL-8232 / SAM-P1, & AUS-0101															
YTD FINANCIAL REPORT															
30-Jun-09															
PROJECT COMPONENT	PROJECT ACTUALS YTD ENDING 30JUNE09					PROJECT ESTIMATES FOR YTD ENDING 30JUNE09					VARIANCE (YTD)				
	FOREIGN COMPONENT				LOCAL COMPONENT	FOREIGN COMPONENT				LOCAL COMPONENT	FOREIGN COMPONENT				LOCAL COMPONENT
	ADB LOAN	ADB GRANT	JICA	AUSAID	EPC/GOVT	ADB LOAN	ADB GRANT	JICA	AUSAID	EPC/GOVT	ADB LOAN	ADB GRANT	JICA	AUSAID	EPC/GOVT
	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)
CORE SUBPROJECTS															
<i>Project Manager (0.37 + 0.38 unallocated)</i>															
Consultant Services	-	54,918.57	-	-	5,799.80	-	108,683.58	-	-	5,840.74	-	53,765.02	-	-	40.94
Unallocated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	54,918.57	-	-	5,799.80	-	108,683.58	-	-	5,840.74	-	53,765.02	-	-	40.94
<i>Project implementation consultant: EBI (73 man-months)</i>															
Consultant Services	-	752,387.18	-	-	40,433.88	-	845,071.21	-	-	45,414.79	-	92,684.03	-	-	4,980.91
Subtotal	-	752,387.18	-	-	40,433.88	-	845,071.21	-	-	45,414.79	-	92,684.03	-	-	4,980.91
<i>Hospital Feeder Upgrading Project – Stage 1</i>															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	2,100.00	3,900.00	-	-	-	2,100.00	3,900.00
Civil Works	-	-	-	-	-	2,137.50	-	1,899.00	-	463.50	2,137.50	-	1,899.00	-	463.50
Equipment Supply & Installation	-	-	-	-	-	43,245.00	9,765.00	65,565.00	20,925.00	-	43,245.00	9,765.00	65,565.00	20,925.00	-
Subtotal	-	-	-	-	-	45,382.50	9,765.00	67,464.00	23,025.00	4,363.50	45,382.50	9,765.00	67,464.00	23,025.00	4,363.50
<i>Single- and Three-Phase Prepayment Metering Project</i>															
Equipment Supply & Installation	389,620.52	87,978.83	590,714.98	188,526.06	-	358,252.84	80,895.80	543,157.53	173,348.15	-	31,367.68	7,083.02	47,557.45	15,177.91	-
Subtotal	389,620.52	87,978.83	590,714.98	188,526.06	-	358,252.84	80,895.80	543,157.53	173,348.15	-	31,367.68	7,083.02	47,557.45	15,177.91	-
CANDIDATE SUBPROJECTS															
<i>UPOLU Generation</i>															
<i>Tanugamanono Power Station Noise and Emission Control Program</i>															
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Refurbishment of Alaoa Hydropower Station</i>															
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Upolu Diesel Power Station Project</i>															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>UPOLU Transmission</i>															
<i>Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project</i>															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Upolu Diesel Power Station to Fulusasou Substation</i>															
<i>Underground Cable Project</i>															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hospital Feeder Upgrading Project - Stage 2															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 kV Fulusou Substation Project															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-Voltage Network Expansion Program															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fulusou Substation to Leulumoega via Vaigaga 22 kV Underground Cable Project															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 kV Overhead Conductor Upgrading Program															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAVAII Generation															
Hydropower Scheme															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAVAII Transmission															
Puapua-Asau Transmission Line 22 kV Reconductoring Project															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	1,050.00	1,950.00	-	-	-	1,050.00	1,950.00	-
Civil Works	-	-	-	-	-	3,534.00	-	3,139.68	-	766.32	3,534.00	-	3,139.68	-	766.32
Equipment Supply & Installation	-	-	-	-	-	112,083.60	25,309.20	169,933.20	54,234.00	-	112,083.60	25,309.20	169,933.20	54,234.00	-
Subtotal	-	-	-	-	-	115,617.60	25,309.20	173,072.88	55,284.00	2,716.32	115,617.60	25,309.20	173,072.88	55,284.00	2,716.32
Low-Voltage Network Expansion Program															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measurement Equipment															
Stream Flow Gauging Equipment															
Equipment Supply & Installation	13,429.11	3,032.38	20,360.26	6,497.95	-	15,500.00	3,500.00	23,500.00	7,500.00	-	2,070.89	467.62	3,139.74	1,002.05	-
Subtotal	13,429.11	3,032.38	20,360.26	6,497.95	-	15,500.00	3,500.00	23,500.00	7,500.00	-	2,070.89	467.62	3,139.74	1,002.05	-

Electrical Test Equipment															
Equipment Supply & Installation	14,695.99	3,318.45	22,281.02	7,110.97	-	18,600.00	4,200.00	28,200.00	9,000.00	-	3,904.01	881.55	5,918.98	1,889.03	-
Subtotal	41,554.20	9,383.21	63,001.54	20,106.87	-	18,600.00	4,200.00	28,200.00	9,000.00	-	3,904.01	881.55	5,918.98	1,889.03	-
SCADA															
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	56,250.20	12,701.66	85,282.56	27,217.84	-	-	-	-	-	-	-	-	-	-	-
CORE AND CANDIDATE SUBTOTAL	500,854.03	920,401.82	759,359.33	242,348.72	46,233.68	553,352.94	1,077,424.80	835,394.41	268,157.15	58,335.35	135,607.32	175,789.40	202,038.15	66,022.17	12,101.66
APPROVED NEW SUBPROJECTS															
Refurbishment of Savaii Diesel Power Station															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vending System															
Equipment Supply & Installation	-	-	-	-	-	38,750.00	8,750.00	58,750.00	18,750.00	-	38,750.00	8,750.00	58,750.00	18,750.00	-
Subtotal	-	-	-	-	-	38,750.00	8,750.00	58,750.00	18,750.00	-	38,750.00	8,750.00	58,750.00	18,750.00	-
Public Dissemination															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	7,000.00	13,000.00	-	-	-	7,000.00	13,000.00
Subtotal	-	-	-	-	-	-	-	-	7,000.00	13,000.00	-	-	-	7,000.00	13,000.00
Taaefaga and Samsoni Switchgears															
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power System Planning Software															
Equipment Supply & Installation	11,995.14	2,708.58	18,186.18	5,804.10	-	18,600.00	4,200.00	28,200.00	9,000.00	-	6,604.86	1,491.42	10,013.82	3,195.90	-
Subtotal	11,995.14	2,708.58	18,186.18	5,804.10	-	18,600.00	4,200.00	28,200.00	9,000.00	-	6,604.86	1,491.42	10,013.82	3,195.90	-
SUBTOTAL (A-Z)	512,849.17	923,110.40	777,545.51	248,152.82	46,233.68	610,702.94	1,090,374.80	922,344.41	302,907.15	71,335.35	180,962.18	186,030.82	270,801.97	94,968.07	25,101.66
APPROVED EPC, NOT ADB NEW SUBPROJECTS															
Vaipu Pumping Scheme															
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refurbish 2 only T/nono Diesel Generators															
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NOT YET APPROVED EPC/ADB NEW SUBPROJECTS															
Upolu Hydro Generation															
Land Acquisition and Resettlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Civil Works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment Supply & Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consultant Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taxes and Duties	-	-	-	-	15,263.58	-	-	-	-	315,000.00	-	-	-	-	299,736.42
Physical Contingency	-	-	-	-	-	218,711.67	126,090.00	312,111.67	65,380.00	56,040.00	218,711.67	126,090.00	312,111.67	65,380.00	56,040.00
Price Contingency	-	-	-	-	-	473,953.33	273,240.00	676,353.33	141,680.00	121,440.00	473,953.33	273,240.00	676,353.33	141,680.00	121,440.00
Interest During Construction	-	-	-	-	-	-	-	-	-	868,333.33	-	-	-	-	868,333.33
Subtotal	-	-	-	-	15,263.58	692,665.00	399,330.00	988,465.00	207,060.00	1,380,813.33	692,665.00	399,330.00	988,465.00	207,060.00	1,345,549.75
TOTAL PROJECT COSTS	512,849.17	923,110.40	777,545.51	248,152.82	61,497.26	1,303,367.94	1,489,704.80	1,910,809.41	509,967.15	1,432,148.68	873,627.18	585,360.82	1,259,266.97	302,028.07	1,370,651.42

13. LAST ADB REVIEW MISSION

ADB had a full Mission in February this 1st Quarter 2011 representatives from ADB, JICA, and Aussie Aid attended. Also Anti corruption committee of ADB started their review of project in June:

Matters discussed and reviewed:

- a) Status of each subproject;
- b) Payment of variation costs of contract for construction of Hospital Feeder Stage 1 and Alaoa Feeder Upgrades. ADB Mission decided to recommend approval of payment as a one time case, due to misunderstanding between PMU and ADB related to contract cost.
- c) Anti Corruption Committee review of 2 subprojects; Fiaga power plant and Fiaga Access Road. They are also reviewing Upgrade of Alaoa Feeder and Hospital Feeder Stage 1 subproject Committee includes 2 ADB people, 3 Price Waterhouse people and representative from local government audit office.
- d) Improvement in process to speed up payment of contractor invoices.
- e) Verifying of total number EPC's electric consumers so that it can be accurately determined if additional Prepayment Meters are needed to be purchased and installed to meet PSEP objective of having 75% of electric consumers on Prepayment Meters.
- f) Hydro study; feasibility studies of 5 schemes; budget and funding; proposal from Implementation Consultant for detailed design as required by EPC.
- g) Recruit of 3 independent consultant engineers; 1 civil, 1 generation, and 1 power distribution engineer.

ADB next Mission is not known when.

14. APPENDICES

Appendix 1 – Revised Project Estimates

Appendix 1 - Revised Project Estimates March 2009

TITLE OF SUBPROJECTS	ADB categ*		Award Date	Revised Budget	L.A.R	CW	ESI	CS
	Grant	Loan		USD\$M				
	Proceeds	Proceeds						
ADB Loan	1 = ESI	1 = CW		26.61	0.00%	47.50%	31.00%	0.00%
ADB Grant	2 = CS	2 = ESI		15.39	0.00%	0.00%	7.00%	94.90%
JICA	3 = Unallocated	3 = Unallocated		38	0.00%	42.20%	47.00%	0.00%
Ausaid Grant				8	35.00%	0.00%	15.00%	0.00%
EPC				12	65.00%	10.30%	0.00%	5.10%
				100	100.00%	100.00%	100.00%	100.00%
CORE SUBPROJECTS								
Project Manager (0,37 + 0,38 unallocated)	2		Q4 2007	0.75				0.75
Project implementation consultant: EBI (73 man-months)	2		Q1 2008	2.67				2.67
Hospital Feeder Upgrading Project – Stage 1	1	2	Q1 2009	0.60			0.60	
Single- and Three-Phase Prepayment Metering Project	1	2	Q3 2008	5.67			5.67	
CANDIDATE SUBPROJECTS								
UPOLU Generation								
Tanugamanono Power Station Noise and Emission Control Program	1	2	Q4 2009	0.17			0.17	
Refurbishment of Alaoa Hydropower Station	1	1 & 2	Q3 2009	1.34		0.27	1.07	
Upolu Diesel Power Station Project	1	1 & 2	Q1 2010	22.27	1.67	1.67	18.93	
UPOLU Transmission								
Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project	1	2	Q3 2009	1.14			1.14	
Upolu Diesel Power Station to Fulusou Substation Underground Cable Project	1	2	Q1 2010	3.12			3.12	
Hospital Feeder Upgrading Project - Stage 2	1	2	Q4 2009	3.20			3.20	
22 kV Fulusou Substation Project	1	2	Q2 2010	2.93			2.93	
Low-Voltage Network Expansion Program	1	2	Q2 2010	1.29			1.29	
Fulusou Substation to Apia Wharf Area 22 kV Underground Cable Project	1	2	Q2 2012	0.00			0.00	
Fulusou Substation to Leulumoega via Vaigaga 22 kV Underground Cable Project	1	1 & 2	Q2 2012	2.78			2.78	
22 kV Overhead Conductor Upgrading Program	1	2	Q3 2009	6.03			6.03	
SAVAII Generation								
Hydropower Scheme	1	1 & 2	Q3 2012	10.65		5.33	5.32	
SAVAII Transmission								
Puapua-Asau Transmission Line 22 kV Reconductoring Project	1	1 & 2	Q3 2009	1.24			1.24	
Low-Voltage Network Expansion Program	1	1 & 2	Q2 2010	0.56			0.56	
Measurement Equipment								
Stream Flow Gauging Equipment	1	1 & 2	Q3 2008	0.05			0.05	
Electrical Test Equipment Equipment	1	1 & 2	Q3 2008	0.06			0.06	
SCADA	1	1 & 2	Q4 2009	3.48			3.48	
CORE AND CANDIDATE SUBTOTAL				70.00	1.67	7.26	57.65	3.42
APPROVED NEW SUBPROJECTS								
Refurbishment of Savaii Diesel Power Station	1	2	Q2 2009	5.90			5.90	
Vending System	1	2	Q1 2009	0.25			0.25	
Public Dissemination			Q1 2009	0.10	0.10			
Taalefaga and Samasoni Switchgears	1	2	Q2 2009	1.60			1.60	
Power System Planning Software	1	1 & 2	Q3 2008	0.06			0.06	
Approved EPC, Not Yet Approved ADB, New Subprojects								
Vaipu Pumping Scheme	1	1 & 2	Q1 2010	0.50		0.15	0.35	
Refurbish 2 Only Tanugamanono Diesel Generators	1	2	Q3 2009	0.75			0.75	
Not Yet Approved EPC/ADB, New Subprojects								
Upolu Hydro Generation	1	1 & 2	Q1 2010	3.51		1.76	1.76	
				4.76	0.00	1.91	2.86	0.00
GRAND TOTAL				82.67	1.77	9.17	68.31	3.42

Appendix 2 – Project Progress Monitoring

TASKS / MILESTONES	TARGET DATE	ACHIEV DATE	ASS WT	AC PR	WT PR	COMMENTS
A. CORE SUBPROJECTS			%	%	%	
1. Hospital Feeder Upgrading Project -Stage 1						
2. Approved Outline	15.08.08	25.08.08	2.0	100	2.0	EPC Board approved outline on 25 August 2008. Feasibility Study was reviewed and endorsed by ADB in October 2008. This was submitted and approved by the EPC Board in November 2008. Tender is combined with Upgrade of Alaoa 6.6 Transmission Line to 22kV and Puapua-Asau Transmission Line 22kV Reconductoring. PMU prepared 2 separate tenders; ICB-Goods & NCB-Labour. 4 contracts for supply of all materials were awarded. All materials received. Needed more materials; included LV materials; were not included in bid. Contract of Works awarded to Bluebird. Contract signed. Construction is complete. Outstanding is final payment of extra cost to contract. Extra cost is 335,284 Tala.
3. Approved Feasibility Study	05.12.08	27.11.08	5.0	100	5.0	
4. Settle all Environmental issues	10.04.09	27.11.08	5.0	100	5.0	
5. Settle all Land Issues	13.02.09	27.11.08	5.0	100	5.0	
6. Approved Tender Documents	13.02.09	10.3.09	5.0	100	5.0	
7. Approved Tender Evaluation Report	29.05.09	29.05.09	5.0	100	5.0	
8. Award Contract	11.09.09	30.09.09	5.0	100	5.0	
9. Receive Materials	04.12.09		20.0	100	20.0	
10. Complete Construction	26.02.10	31.10.10	43.0	100	0	
11. Final Report	26.03.10	30.11.10	5.0	100	43.0	
					5.0	
		Total Wt	100			
		Imp.Prog			100	
1. Single and Three-phase Prepayment Metering Project						
1. Approved Outline			2.0	100	2.0	273 meters were installed this 2nd Quarter 2011 bringing total number of meters installed by A D Riley to 18,922 since project started in 2008. Total number of meters installed included new customers and customers converted from induction meters to PPM. Installation is ahead of schedule by 12 months. Overall total number of customers installed with PPM is 23,688. This is 64.67% of total number of electric customers of 36,634. Total number of meters lowered during this quarter is
2. Approved Feasibility Study			5.0	100	5.0	
3. Settle all Environmental Issues			5.0	100	5.0	
4. Settle all Land Issues			5.0	100	5.0	
5. Approved Tender Documents			5.0	100	5.0	
6. Approved Tender Evaluation Report			5.0	100	5.0	
7. Award Contract	31.12.08	31.12.08	5.0	100	5.0	
8. Install 1-1650 meters	31.03.09	31.03.09	5.0	100	5.0	
9. Install 1651-3238	30.06.09	30.06.09	5.0	100	5.0	
10. Install 3239-4826	30.09.09	30.09.09	5.0	100	5.0	
11. Install 4826-6414	31.12.09	20.11.09	5.0	100	5.0	

12. Install 6415-8000	31.03.10	31.12.09	4.0	100	4.0	131. This brings the total number of meters lowered to 3,590.
13. Install 8001-9250	30.06.10	31.01.10	4.0	100	4.0	
14. Install 9251-10500	30.09.10	29.02.10	4.0	100	4.0	
15. Install 10500-11750	31.12.10	31.03.10	4.0	100	4.0	
16. Install 11750-13000	31.03.11	31.05.10	4.0	100	4.0	
17. Install 13001-14250	30.06.11	30.06.10	4.0	100	4.0	
18. Install 14251-15500	30.09.11		4.0	100	4.0	
19. Install 15501-16750	31.12.11		4.0	100	4.0	
20. Install 16751-18000	31.03.12	31.12.10	2.0	50	1.0	
21. Install 18001-18750	30.06.12	31.3.11	2.0	13	0.3	
22. Install 18751-19500	30.09.12		2.0			Installation is over 12 months ahead of schedule.
23. Install 19501-20250	31.12.12		2.0			
24. Install 20250-21000	31.02.12		3.0			
25. Final Report						
		Total Wt	100			
		Imp.Prog			90.3	
B. CADIDATE SUBPROJECTS						
1. Upolu						
a. Generation						
(i) Tanugamanono Power Station Noise & Emission Control Program						
1. Approved Outline	11.09.09		2.0	100	2.0	There was no activity on this subproject during this Quarter. PMU started on preparation of Feasibility Study this Quarter.
2. Approved Feasibility Study	01.01.10		5.0	20	1.0	
3. Settle all Environment Issues	07.05.10		5.0			
4. Settle all Land Issues	12.03.10		5.0			
5. Approved Tender Documents	12.03.10		5.0			
6. Approved Tender Evaluation Report	25.06.10		5.0			
7. Award Contract	15.10.10		5.0			
	14.01.11		20.0			

8. Receive Materials	27.05.11		43.0			
9. Complete Construction	24.06.11		5.0			
10. Final Report						
		Total Wt	100			
		Imp.Prog			3.0	
(ii) Refurbishment of Alaoa Hydropower Station						
1. Approved Outline	15.08.08	25.07.08	2.0	100	2.0	Construction and installation of generator and equipment are completed. Plant is commissioned and put into service.
2. Approved Feasibility Study	05.12.08	27.11.08	5.0	100	5.0	
3. Settle all Environment Issues	24.04.09	27.11.08	5.0	100	5.0	
4. Settle all Land Issues	16.01.09	27.11.09	5.0	100	5.0	
5. Approved Tender Documents	06.03.09	10.06.09	5.0	100	5.0	
6. Approved Tender Evaluation Report	03.07.09	30.09.09	5.0	100	5.0	
	06.11.09	31.12.09	5.0	100	5.0	
7. Award Contract	23.04.10					
8. Receive Materials/Equipment	23.04.10		20.0	100	20.0	
9. Complete Construction	21.05.10		43.0	100	43.0	
10. Final Report			5.0	100	5.0	
		Total Wt	100			
		Imp.Prog			100.0	
(iii) Fiaga Diesel Power Station Project						
1. Approved Outline	08.08.08	25.07.08	2.0	100	2.0	Construction of powerhouse started. Official groundbreaking by Prime Minister was held in June. Factory testing of engines and generators schedule at end of Aug and Sept. 2011. Engines and equipment will arrive at end of October 2011.
2. Approved Feasibility Study	17.04.09	30.09.09	5.0	100	5.0	
3. Settle all Environment Issues	04.09.09	30.06.09	5.0	100	5.0	
4. Settle all land issues	26.06.09	31.01.10	5.0	100	5.0	
5. Approved Tender Documents	24.07.09	31.01.10	5.0	100	5.0	
6. Approved Tender Evaluation Report	01.01.10		5.0	100	5.0	
	12.03.10		5.0	100	5.0	
7. Award Contract	27.08.10		20.0		20.0	
8. Receive Materials	14.02.14		43.0		0	
9. Complete Construction	14.03.14		5.0			
10. Final Report						
		Total Wt	100			
		Imp.Prog			52.0	
b. Transmission						

(i) Upgrade of Alaoa 6.6KV Transmission Line from 6.6 to 22kV Project						
1. Approved Outline	10.10.08	25.07.08	2.0	100	2.0	Construction was completed in 2010. Contractor, Bluebird Ah LAL is waiting on final payment. ADB is reviewing variation to contract which is included in last payment. Anti Corruption Committee of ADB is reviewing this contract and payment.
2. Approved Feasibility Study	30.01.09	27.11.08	5.0	100	5.0	
3. Settle all Environment Issues	12.06.09	27.11.08	5.0	100	5.0	
4. Settle all Land Issues	27.03.09	27.11.08	5.0	100	5.0	
5. Approved Tender Documents	24.04.09	10.03.09	5.0	100	5.0	
6. Approved Tender Evaluation Reports	21.08.09		5.0	100	5.0	
	15.01.10		5.0	100	5.0	
7. Award Contract	09.04.10	30.09.09	5.0	100	5.0	
8. Supply Materials	30.07.10		20	100	20	
9. Complete Construction	27.08.10	30.09.09	40	100	40	
10. Final Report			3	100	3	
		Total Wt	100			
		Imp.Prog			100	
(ii) Fiaga Diesel Power Station to Fuluasou Substation 33KV Underground Cable Project						
1. Approved Outline	08.05.09		2.0	100	2.0	Feasibility Study is complete and approved by ADB. Tender for Goods and Materials closed in December, 2010. Evaluation report was submitted to ADB for approval. Award contracts for supply of materials and equipment. Construction will be done by EPC crew.
2. Approved Feasibility Study	28.08.09		5.0	100	5.0	
3. Settle all Environment Issues	01.01.10		5.0	100	5.0	
4. Settle all Land Issues	09.10.09		5.0	100	5.0	
5. Approved Tender Documents	06.11.09		5.0	100	5.0	
6. Approved Tender Evaluation Report	10.02.10		5.0	100	5.0	
7. Award Contract for materials.	04.06.10					Award of contract for supply of materials was cancelled due to delay and change in design of the transmission line. 33kv line is changed to underground one circuit and built other circuit overhead using concrete poles. Underground cables and aerial conductor, hardware, poles and other materials will be retendered.
8. Supply Materials	09.04.10		5.0	100	5.0	
9. Complete Construction	11.02.11		20	0	0	
10. Final Report	11.03.11		43	0	0	
			5	0	0	
		Total Wt	100			
		Imp.Prog			32.0	
(iii) Hospital Feeder Upgrading Project Stage 2						
1. Approved Outline	07.08.09	28.3.09	2.0	100	2.0	Project is implemented in two parts. Part 1 is purchase of materials and Part 2 is construction and installation of cable and related equipment. Supply of materials is 90% complete. Rest of materials was rebided. Contract has
2. Approved Feasibility Study	27.11.09	31.3.09	5.0	100	5.0	
3. Settle all Environment Issues	02.04.11	31.03.09	5.0	100	5.0	
4. Settle all Land Issues	08.01.10	31.03.09	5.0	100	5.0	

5. Approved Tender Documents	19.02.10	30.09.09	5.0	100	5.0	been awarded for rebid materials. Construction is awarded to Bluebird Ah LAL JV. Construction started in December 2010 and continuing. 90% of trenching and laying of electrical and fiber optic conduits, and installation of vaults are complete.
6. Approved Tender Evaluation Report	04.06.10		5.0	100	5.0	
7. Award Contract	17.09.10		5.0	100	5.0	
8. Receive Materials	10.12.10					
9. Complete Construction	27.05.11		20.0	90	20	
10. Final Report	24.06.11		43	100	4	
			5	0	0	
		Total Wt	100			
		Imp.Prog			57	
(iv) 22KV Fuluasou Substation Project						
1. Approved Outline	06.11.09	28.3.09	2.0	100	2.0	ADB approved feasibility study and tender as a turnkey project. Tender was advertised in December 2010. Tender closes in February 2011. Evaluation report ready to submit to ADB. ADB approved award and issued No Objection Letter. Govt Tender's Board and Cabinet also approved to award contract to Northpower NZ Ltd. Notice of award has been issued to contractor.
2. Approved Feasibility Study	26.02.10		5.0	100	5.0	
3. Settle all Environment Issues	02.07.10		5.0	100	5.0	
4. Settle all Land Issues	09.04.10		5.0	100	5.0	
5. Approved Tender Documents	21.05.10		5.0	100	5.0	
6. Approved Tender Evaluation Report	03.09.10		5.0			
7. Award Contract	17.12.10		5.0			
8. Supply Materials	10.03.11		20.0			
9. Complete Construction	26.08.11		43.0			
10. Final Report	23.09.11		5.0			
		Total Wt	100			
		Imp.Prog			22.0	
(v) Low Voltage Network Improvement Program						
1. Approved Outline	06.11.09	31.3.09	2.0	100	2.0	Materials were tendered separately. Construction is done by EPC. PMU issued ICB tender for supply of materials. Contract was awarded for materials supply. Materials started to arrive and stored in project store.
2. Approved Feasibility Study	26.02.10		5.0	100	5.0	
3. Settle all Environment Issues	02.07.10		5.0	100	5.0	
4. Settle all Land Issues	09.04.10		5.0	100	5.0	
5. Approved Tender Documents	21.05.10		5.0	100	5.0	
6. Approved Tender Evaluation Report	03.09.10		5.0	100	5.0	
7. Award Contract	17.12.10		5.0	100	5.0	
8. Supply Materials	11.03.11		20.0			
9. Complete Construction	26.08.11		47.5			
10. Final Report	23.09.11		5.0			
		Total Wt	100		32.	

					0	
		Imp.Prog				
(vi) Fuluasou Substation to Apia Wharf Area 22kV Underground Cable Project						
1. Approved Outline	06.11.09	30.06.09	2.0	100	2.0	Feasibility study was completed and approved by ADB. Materials supply was tendered separately. Construction will be done by EPC. Work of undergrounding electrical conduits and vaults from Lepea to Malifa has started as part of Vaitele Road widening project. EPC, Tender Board and ADB approved contract with Ott to start this work. Ott completed construction. There are a few items to be corrected by Ott. Contract for installation of cables to feed street lights and control panel for street lights was awarded to All Electrical. Work is complete. Evaluation Report for supply of cables and other related materials was submitted to ADB. ADB and Tender's Board granted their approval. Contracts were awarded.
2. Approved Feasibility Study	26.02.10		5.0	100	5.0	
3. Settle all Environment Issues	02.07.10		5.0	100	5.0	
4. Settle all Land Issues	07.05.10		5.0	100	5.0	
5. Approved Tender Documents	21.05.10		5.0	100	5.0	
6. Approved Tender Evaluation Report	03.09.10		5.0	100	5.0	
7. Award Contract	17.12.10		5.0	100	5.0	
8. Supply Materials	11.03.11		20.0			
9. Complete Construction	27.07.12		43.0			
10. Final Report	24.08.12		5.0			
		Total Wt	100			
		Imp.Prog			32	
(vii) Fuluasou Substation to Leulumoea via Vaigaga 22kV Underground Cable Project						
1. Approved Outline	05.08.11		2.0			This subproject is cancelled from PSEP. Powerlines for West Coast feeder will remain overhead.
2. Approved Feasibility Study	25.11.11		5.0			
3. Settle all Environment Issues	30.03.12		5.0			
4. Settle all Land Issues	03.02.12		5.0			
5. Approved Tender Documents	17.02.12		5.0			
6. Approved Tender Evaluation Report	01.06.12		5.0			
7. Award Contract	14.09.12		5.0			
8. Supply Materials	07.12.12		20.0			
9. Complete Construction	25.04.14		43.0			
10. Final Report	23.05.14		5.0			
		Total Wt	100			
		Imp.Prog			0.0	
(viii) 22kV Overhead Conductor Upgrading Program						
1. Approved Outline	06.02.09	23.10.08	2.0	100	2.0	Materials were supplied under separate contracts. All materials have arrived. Works was tendered separately.
2. Approved Feasibility Study	29.05.09	28.02.09	5.0	100	5.0	
3. Settle all Environment Issues	02.10.09	31.3.09	5.0	100	5.0	

4. Settle all Land Issues	07.08.09	31.3.09	5.0	100	5.0	Feeders included in this subproject are: Lalomauga Feeder, East Cost Feeder, South Coast Feeder, Alaoa transmission line, West Coast Feeder, Beach Road and Vaitele Feeders. Construction was tendered. ADB approved to award contract to GMA. Contract was signed in December 2010. Contractor is yet to provide performance bond, advance payment bank security, and advance payment invoice. Construction started in Feb, 2011 and continuing. 30% of work is completed for 30% of contract time.
5. Approved Tender Documents	21.08.09	30.09.09	5.0	100	5.0	
6. Approved Tender Evaluation Report	04.12.09		5.0	100	5.0	
7. Award Contract	19.03.10		5.0	100	5.0	
8. Supply Materials	11.06.10		20.0	100	20.0	
9. Complete Construction	11.04.14		43.0			
10. Final Report	09.05.14		5.0			
		Total Wt	100			
		Imp.Prog			52.0	
2. Savaii						
a. Generation						
(i) Hydro Scheme						
1. Approved Outline	05.08.11		2.0	100	2.0	Hydro in Sili is put on hold due to land dispute. Faleata scheme at Vailoa, Palauli is included under subproject Hydropower Development. There are 5 schemes being studied under this project. There are 4 hydro schemes selected in Upolu.
2. Approved Feasibility Study	13.04.12		5.0			
3. Settle all Environment Issues	31.08.12		5.0			
4. Settle all Land Issues	22.06.12		5.0			
5. Approved Tender Documents	30.07.12		5.0			
6. Approved Tender Evaluation Report	23.11.12		5.0			
7. Award Contract	08.02.13		5.0			Implementation Consultant is conducting Feasibility Studies of 5 hydropower schemes. From 5 schemes, 3 will be selected for detailed design and tender preparation. IC submitted a proposal and EPC to perform detailed designs of three schemes. This subproject is combined with Hydro Development.
8. Receive Materials	26.07.13		20.0			
9. Complete Construction	13.01.17		43.0			
10. Final Report	10.02.17		5.0			
		Total Wt	100			
		Imp.Prog			2.0	
b. Transmission						
(i) Puapua-Asau Transmission Line 22kV Reconductoring Project						
1. Approved Outline	15.08.08	25.07.08	2.0	100	2.0	ADB approved Feasibility Study and tender. Materials are supplied under separate contracts which were
2. Approved Feasibility Study	05.12.08	27.11.08	5.0	100	5.0	

3. Settle all Environment Issues	10.04.09	27.11.08	5.0	100	5.0	combined with materials for Alaoa and Hospital Feeder Upgrades. All materials for this subproject have arrived and shipped to Savaii. Contract for construction was awarded to Tenix New Zealand. Contract has been signed. Construction started at end of March 2011. Contract subcontracted a local contractor. 90% of work is complete.	
4. Settle all Land Issues	13.02.09	27.11.08	5.0	100	5.0		
5. Approved Tender Documents	27.02.09	10.3.09	5.0	100	5.0		
6. Approved Tender Evaluation Report	12.06.09		5.0	100	5.0		
7. Award Contract	25.09.09		5.0	100	5.0		
8. Supply Materials	18.12.09		20.0	100	20.0		
9. Complete Construction	12.03.10		43.0	80	35.0		
10. Final Report	09.04.10		5.0				
		Total Wt	100				
		Imp.Prog			87.0		
(ii) Power Factor Improvement Program							
1. Approved Outline	15.08.08	25.07.08	2.0	100	2.0	PF improvement for high voltage lines in Savaii has been removed from PSEP. PF is high and in an acceptable level. There is another PF correction project to improve PF inside large consumers. This is not part of PSEP. PMU and Implementing Consultant is managing implementation of this project. No further work is required.	
2. Approved Feasibility Study	05.12.08	05.01.09	5.0	100	5.0		
3. Settle all Environment Issues	10.04.09	05.01.09	5.0	100	5.0		
4. Settle all Land Issues	13.02.09	05.01.09	5.0	100	5.0		
5. Approved Tender Documents	27.02.09		5.0				
6. Approved Tender Evaluation Report	12.06.09		5.0				
7. Award Contract	25.09.09		5.0				
8. Receive Materials	18.12.09		20.0				
9. Complete Construction	12.02.10		43.0				
10. Final Report	12.03.10		5.0				
		Total Wt	100				
		Imp.Prog			100		
(iii) Low Voltage Network Improvement Program							
1. Approved Outline	06.11.09	31.03.09	2.0	100	2.0	ADB approved Feasibility Study and tender. Contracts have awarded for supply of materials. Construction will be carried out by EPC. Construction has not started.	
2. Approved Feasibility Study	26.02.10		5.0	100	5.0		
3. Settle all Environment Issues	02.07.10		5.0	100	5.0		
4. Settle all Land Issues	07.05.10		5.0	100	5.0		
5. Approved Tender Documents	21.05.10		5.0	100	5.0		
6. Approved Tender Evaluation Report	03.09.10		5.0	100	5.0		
7. Award Contract	17.12.10		5.0	100	5.0		
8. Receive Materials	11.03.11		20.0	100	20.0		
9. Complete Construction	27.07.12		43.0				

10. Final Report	24.08.12		5.0			
		Total Wt	100			
		Imp.Prog			52.0	
3. Measurement Equipment						
(i) Stream Flow Gauging Equipment						
1. PMU prepare subproject outline	17.07.08	15.07.08	5.0	100	5.0	Outline was approved by the EPC Board of Directors on 25 Jul 2008. PMU notified ADB and PSC on 11 Aug 2008. Delay in notification is due to official approval of the Board can only be available and confirmed when the minutes of the previous meeting are approved in the proceeding meeting. This subproject does not need a Feasibility Study and prior review and endorsement of ADB. PMU prepare equipment specification and called tenders for the supply of equipment. Tender Evaluation Report was completed on 18 Sept 2008. ADB endorsed TER on 23 Oct 2008. EPC Board approved Tender Evaluation Report during its meeting on 23 Sept 2008. Withdrawal application for payment is now with ADB. Equipment has not been received. 8 gauges have been installed; 1 left to be installed. Installation of rain gauges will be added to this project.
2. EPC Board approves Outline	31.07.08	25.07.08	10.0	100	10.	
3. PMU notify ADB	07.08.08	11.08.08	2.0	100	0	
4. PMU notify PSC	07.08.08	11.08.08	2.0	100	2.0	
5. PMU prepares Equipment Specs	07.08.08	01.08.08	10.0	100	2.0	
6. PMU prepares Tender Documents	14.08.08	08.08.08	10.0	100	10.	
	11.09.08	05.09.08	5.0	100	0	
7. PMU calls tenders	18.09.08	09.09.08	5.0	100	10.	
8. PMU evaluate tenders	25.09.08	16.09.08	10.0	100	0	
9. PMU prepares TER	09.10.08	23.10.08	10.0	100	5.0	
10. ADB review and endorse TER	09.10.08	23.09.08	10.0	100	5.0	
11. EPC Board approves TER	23.10.08	23.10.08	2.0	100	10.	
12. PMU advise Successful bidder	04.12.08		10.0	100	0	
13. Successful Bidder supply equipment	11.12.08		2.0	100	10.	
	17.09.09		5.0	100	0	
14. Equipment hand over to REU/MNRE	20.11.08		2.0	100	10.	
					0	
15. PMU process payment					2.0	
16. PMU provide final report					10.	
					0	
					2.0	
					5.0	
					2.0	
		Total Wt	100			
		Imp.Prog			100	
(ii) HV/LV Testing Equipment						
1. PMU prepare subproject outline	18.07.08	18.07.08	5.0	100	5.0	Outline of this subproject was approved by EPC Board on 25 July 2008. PMU notified ADB and PSC on 11 Aug 2008. Delay in notification is due to official approval of the Board can only be available and confirmed when the minutes of the previous meeting
2. EPC Board approves Outline	01.08.08	25.07.08	5.0	100	5.0	
3. PMU notify ADB	08.08.08	11.08.08	2.0	100	2.0	
4. PMU notify PSC	08.08.08	11.08.08	2.0	100	2.0	
5. PMU prepares Equipment Specs	08.08.08	11.08.08	7.0	100	7.0	

6. PMU prepares Tender Documents	15.08.08	18.08.08	7.0	100	7.0	are approved in the proceeding meeting. This subproject does not need a Feasibility Study and prior review and endorsement of ADB. PMU prepared equipment specification and called tenders for the supply of equipment. Tender Evaluation Report was completed on 29 Sept 2008 and forwarded to ADB. This is yet to be endorsed due to some misunderstanding. EPC Board approved TER on 23 Oct 2008. Withdrawal application is now with ADB. Suppliers received their payments.
7. PMU calls tenders	12.09.08	22.08.08	5.0	100	5.0	
8. PMU evaluate tenders	19.09.08	22.09.08	5.0	100	5.0	
9. PMU prepares TER	26.09.08	29.09.08	10.0	100	10.0	
10. ADB review and endorse TER	10.10.08	15.10.08	5.0	50	5.0	
11. EPC Board approves TER	10.10.08	23.10.08	10.0	100	10.0	
12. PMU advise Successful bidder	24.10.08	24.10.08	2.0	100	2.0	
13. Successful Bidder supply equipment	05.12.08	29.02.09	10.0	100	10.0	
	19.12.08	31.3.09	5.0	100	5.0	
14. PMU receive equipment						
15. PMU test & use equipment	16.01.08	31.3.09	10.0	100	10.0	
16. PMU process payment	21.11.08	31.3.09	5.0	100	5.0	
17. PMU provide final report	13.02.09		5.0	100	5.0	

3. PMU notify PSC	12.09.08	01.10.08	2.5	100	2.5	the subprojects such as advertisement, awareness programs, public notices, education programs, etc are all covered under the Power Sector Expansion Project. Unfortunately when the need aroused to pay for these costs during the Prepayment Meter Core Subproject, it was realized that there is no provision for this under the loan. Preliminary discussions took place between PMU and ADB took place. ADB advised this can be added as a new subproject and PMU has to follow the process as outlined in Appendix 7 of the RRP. PMU then prepared the outline to be submitted to the EPC Board. EPC Board approved the outline of this new subproject on 23 Sept 2008. PMU notified ADB and PSC on 01 Oct 2008. ADB agreed to include advertisement of tenders under this subproject.
4. PMU to implement	19.11.15		85.0	50	34.0	
5. Final Report	17.12.15		5.0			
		Total Wt	100			
		Imp.Prog			44.0	
(ii) Vending System Expansion						
1. EPC Board approved Outline	26.12.08	23.09.08	5.0	100	5.0	Scratch card system was successfully tested in A D Riley workshop in New Zealand. New card system was successfully launched in February 2010. More than 50 shops sell cards in Upolu and Savaii. There are some problems with new card system that EPC is working to resolve. Scratch cards are widely used now.
2. PMU notify ADB	02.01.09	01.10.08	2.5	100	2.5	
3. PMU notify PSC	02.01.09	01.10.08	2.5	100	2.5	
4. ADB endorses Feasibility Study	27.03.09		10.0	100	10.0	
5. PSC endorses Feasibility Study	17.04.09		10.0	100	10.0	
6. EPC Board approves FS	30.04.09		10.0	100	10.0	
7. Implementation	24.12.10		45.0	100	45.0	
8. Final Report	24.01.11		5.0	100	5.0	
		Total Wt	100			
		Imp.Prog			100	
(iii) Power System Planning Software						
1. PMU prepare subproject outline	22.08.08	23.09.08	5.0	100	5.0	As part of Northpower's scope of work for replacement of 22kV switchgear in Taelefa, Lalomauga, Samasoni, and Tanugamanono power plants, a variation was approved for NP to conduct a load flow study and protection study of Upolu system. NP used EPC DigSilent software for the studies and used this to train 3 of EPC electrical engineers. The project is
2. EPC Board approves Outline	05.09.08	23.09.08	5.0	100	5.0	
3. PMU notify ADB	12.09.08	01.10.08	2.0	100	2.0	
4. PMU notify PSC	12.09.08	01.10.08	2.0	100	2.0	
5. PMU prepares Software Specification	12.09.08	26.08.08	5.0	100	5.0	
	19.09.08	15.08.08	5.0	100	5.0	
6. PMU prepares Tender	17.10.08	22.08.08	5.0	100	5.0	

Documents							completed. EPC will continue to model the rest of distribution feeders using the same software. What is left to be done is actual testing and recalibration of all protection replays in feeders, transmission lines and generators. NP schedules to this in Feb. 2011.
7. PMU calls tenders	24.10.08	29.08.08	2.0	100	2.0		
8. PMU evaluate tenders	31.10.08	05.09.08	2.0	100	2.0		
9. PMU prepares TER	14.11.08	05.09.08	5.0	100	5.0		
10. ADB review and endorse TER	14.11.08	17.09.08	5.0	100	5.0		
11. EPC Board approves TER	21.11.08	23.09.08	2.0	100	5.0		
12. PMU advise Successful bidder	05.12.08	26.09.08	5.0	100	5.0		
13. Successful Bidder supply software	12.12.08	15.12.08	10.0	100	10.0		
14. Successful bidder installed software	19.12.08	31.03.09	10.0	100	10.0		
15. Successful bidder provide training	02.01.09	31.03.09	10.0	100	10.0		
16. PMU take over	19.12.08	31.03.09	10.0	100	10		
17. PMU process payment	30.01.09	30.04.09	5.0	100	5.0		
18. PMU provide final report			5.0		5.0		
		Total Wt	100				
		Imp.Prog			100		
(iv) Refurbishment of Salelologa Power Station							
1. Approved Outline	07.11.08	23.10.08	2.0	100	2.0		EPC will not refurbish Salelologa Power Station. Instead, a new power station will be built in Vaiaata. Cabinet approved 100 acres of govt land for new power plant. PMU is redoing feasibility study. Topographic survey of land is completed.
2. Approved Feasibility Study	20.03.09	31.3.09	5.0	50	2.5		
3. Settle all Environment Issues	07.08.09	31.3.09	5.0	50	2.5		
4. Settle all Land Issues	23.01.09	31.3.09	5.0	50	2.5		
5. Approved Tender Documents	26.06.09		5.0				
6. Approved Tender Evaluation Report	30.10.09		5.0				
	15.01.10		5.0				
7. Award Contract	02.07.10		20.0				
8. Receive Materials	03.09.10		43.0				
9. Complete Construction	01.10.10		5.0				
10. Final Report							
		Total Wt	100				
		Imp.Prog			9.5		
(v) Refurbishment of Taelefaga/Lalomauga/Samasoni/Tanugamanono power plant 22kV Switchgears							
1. Approved Outline	26.12.08	23.10.08	2.0	100	2.0		Contract was awarded to Northpower Ltd. Original

2. Approved Feasibility Study	03.04.09	31.3.09	5.0	100	5.0	contract is complete. New 22kV switchgear is now in operation. A 2 nd variation to NP was approved to replace the 4 old remaining switchgear in Lalomauga hydro plant. Additional switchgear still have not arrived.
3. Settle all Environment Issues	14.08.09	31.3.09	5.0	100	5.0	
4. Settle all Land Issues	15.05.09	31.3.09	5.0	100	5.0	
5. Approved Tender Documents	08.05.09	30.09.09	5.0	100	5.0	
6. Approved Tender Evaluation Report	04.09.09		5.0	100	5.0	
	01.01.10		5.0	100	5.0	
7. Award Contract	03.12.10		20.0	100	20.0	
8. Receive Materials	03.12.10		43.0	75	35.0	
9. Complete Construction	31.12.10		5.0			
10. Final Report						
		Total Wt	100		87.0	
		Imp.Prog				
(vi) Refurbishment of Tanugamanono Power Station Generators						
1. Approved Outline	19.12.09	27.11.08	2.0	100	2.0	Contract was awarded to MAN to refurbish generators 5A and 9A. Unit 9A has a defective crankshaft; to be replaced with a new one. Work started on 9A. There was delay due to reorder of additional parts. There was a lot of reorder parts for 9A. Refurbish of 9A is completed and put on line. Start on 5A is postponed until Alaoa hydro is back in operation; this scheduled in May 2011. Alaoa hydro plant is back in service but no decision is made when to start overhaul of Unit 5A.
2. Approved Feasibility Study	03.04.09	31.3.09	5.0	100	5.0	
3. Settle all Environment Issues	21.08.09	31.3.09	5.0	100	5.0	
4. Settle all Land Issues	12.06.09	31.3.09	5.0	100	5.0	
5. Approved Tender Documents	19.06.09	25.06.09	5.0	100	5.0	
6. Approved Tender Evaluation Report	25.09.09	30.09.09	5.0	100	5.0	
7. Award Contract	11.12.09		5.0	100	5.0	
8. Receive Materials	05.02.10		20.0	100	10.0	
9. Complete Construction	30.07.10		43.0	50	22.0	
10. Final Report	27.08.10		5.0			
		Total Wt	100			
		Imp.Prog			64.0	
(viii) Vaipu Pump Assisted Scheme						
1. Approved Outline	19.12.08	18.12.08	2.0	100	2.0	Subproject is on hold until SMEC completed evaluation of dam if it is safe to take more water for storage. PMU completed Feasibility Study and IEE.
2. Approved Feasibility Study	08.05.09		5.0	50	2.5	
3. Settle all Environment Issues	25.09.09		5.0			
4. Settle all Land Issues	17.07.09		5.0			
5. Approved Tender Documents	14.08.09		5.0			
6. Approved Tender Evaluation Report	25.12.09		5.0			
	12.03.10		5.0			
7. Award Contract	27.08.10		20.0			
8. Receive Materials	29.10.10		43.0			

9. Complete Construction Final Report	26.11.10		5.0			
		Total Wt	100			
		Imp.Prog			4.5	
(ix) Upolu Hydro Investigation						
1. Approved Outline	30.06.09		2.0	100	2.0	Implementation Consultant under Variation 2 is currently doing feasibility studies of 5 hydropower schemes; Faleata, Faleseela, Tafitoala, Fuluasou and Tiapapata. Study started in March 2010. First consultations with villages concerned are done. Vailoa for Faleata and Faleseela approved for investigation of schemes to continue, pending their final decision on the Govt plan to build hydropower plants using rivers in the two villages. Estimate cost of each scheme is currently being done. Ones EPC and ADB approves top 3 schemes to be built, detailed designs and preparation of tenders for 3 schemes then start. IC submitted a proposal to EPC for detailed design.
2. Approved Feasibility Study	31.12.09		5.0			
3. Settle all Environmental Issues	31.12.09		5.0			
4. Settle all land issues	31.12.09		5.0			
5. Approved Tender Documents	30.06.10		5.0			
6. Approved Tender Evaluation Report	30.09.10		5.0			
7. Award Contract	31.10.10		5.0			
8. Received Materials & equipment			30.0			
9. Complete Construction			33.0			
10. Final Report			5.0			
		Total Wt	100			
		Imp. Prog			2.0	

a

Appendix 3 – Revised Procurement Plan

DSI	= design, supply, install and operate
DSIO	= works - design, supply, install and operate
EPC	= Electric Power Corporation
G	= Good supply
ICB	= international competitive bidding
kV	= kilovolt
QCBS	= quality – and cost-based system
SCADA	= system control and data acquisition
W-DSI	= works contract, design
W-SIM	= supply, install and maintain
W-SI	= supply and install
SS	= sole source
a	= exclusive of taxes, duties and price contingencies
b	= a single-stage, two envelope procedure will be used. Separate envelopes for technical and financial proposals will be submitted simultaneously. Bids will be evaluate using an 80:20 technical/financial weighting.
c	= EPC will prequalify in accordance with ADB's <i>Procurement Guidelines</i> (2007, as amended from time to time). Bidding for the Upolu diesel power station, inclusive of plant and control equipment, will be limited to prequalified bidders.
d	= contract to cover supply, installation and maintenance of prepayment meters until 31 December 2014.
e	= contract to cover operation, maintenance and upgrading of SCADA system until 31 December 2015.

Sources: RRP updated by PMU and Egis Bceom International, Approved by PMC, October 10th 2008

REVISED INVESTMENT PLAN ON DECEMBER 31, 2010

No.	Location	Contract Description	Procurement Method	Actual Contract or Orig Budget	Variation + (incr) or -(decr)	Actual Contract Value & Budget	Contract decr. or - incr.	Revised dates of bids Advertisement	Prior Review (Y/N)	Coordinator(s)
	CORE SUBPROJECTS									
1	Upolu	Hospital Feeder Upgrade - Stage 1	ICB Goods	0.186		0.186	0.2139	9-Apr	Y	Tau
			ICB Equip	0.125	0.067	0.192	0.0778	9-Aug	Y	Tau
2	Upolu/Savaii	Single & 3 phase Prepayment Meters ¹	ICB Goods & Works	5.583	0.115	5.698	0.8722	8-Mar	Y	Perelini
3	Upolu	Project Manager	Individual selection	0.75		0.75	0	7-Jan	Y	Tolo
4	Upolu	Project Implementation Consultants - 73 man-months	QCBS	2.67		2.67	0	7-Oct	Y	Perelini
	CANDIDATE SUBPROJECTS									
	UPOLU Generation									
5	Upolu	Tanugamanono Power Station Noise and Emission Control Program	ICB Goods	0.1		0.1	-	10-Jun	Y	Perelini
			ICB Equipment	0.07		0.07	-	10-Aug	N	Perelini
6	Upolu	Refurbishment of Alaoa Hydro Power Station	ICB Goods & Installation	1.291		1.291	0.049	9-Jul	Y	Mau, Brendan
			ICB Works	0.459		0.4591	-0.4591			Alfred
7	Upolu	Fiaga Diesel Power Station	ICB Equip. & Installation					9-Oct	Y	Perelini
		Relocate 3 Tanugamanono generators	ICB	1.5		1.5	0	10-Dec	Y	Perelini

		Access road & site survey	Shopping	0.05		0.05	0	9-Aug	Y
		Road & site design	Shopping	0		0	0.01	9-Oct	Y
		Road construction & water pipe	ICB Works	0.802	0.12	0.922	-0.322	10-Jan	Y
		Site Preparation	ICB Works	0.098	0.015	0.113	0.637	10-Jan	Y
		Water well drilling & test pumping	Shopping	0.1		0.1	-0.07	9-Sep	Y
		Water supply design & construction	ICB	0.25		0.25	0.5	10-Jan	Y
		Security Fence	ICB Works	0.211		0.211	-0.211		
		Power house & Generators	ICB Equip Supply & Install	14.65	12.031	26.681	-12.031	9-Oct	Y
		Electrical switchgear	ICB Equip & Installation	4.102	0.25	4.352	-0.459	9-Oct	Y
		Extend (UG) powerline to site	ICB Equip Supply & Install by EPC	0.2		0.2	-0.1	10-Jan	Y
		Fuel, oil, waste oil storage facilities	ICB Equip Supply & Install	1.5		1.5	-0.12	10-Feb	Y
		Land acquisition improvements		0		0	0.484	9-Nov	Y
	UPOLU Transmission								
8	Upolu	Alaoa Feeder Upgrade	ICB Equip Supply	0.186		0.253	0.377	9-Apr	Y
			ICB Equip Install	0.125	0.067	0.192	0.298	9-Aug	Y
9	Upolu	Fiaga to Fuluasou substation 33 kV underground cable	ICB Equip Supply	4.46		4.46	-1.557	10-Jul	Y
			Works by EPC	0.75	0.363	1.113	1.79	10-Sep	Y
10	Upolu	Hospital Feeder Upgrade - Stage 2	ICB Equip Supply	1.014		1.014	0.286	9-Sep	Y
			ICB Equip Install	0.741		0.741	0.059	10-Jan	Y
11	Upolu	Fuluasou Substation ³	ICB Equip Supply & Install	2.747		2.747	0	10-Jan	Y
12	Upolu	Low Voltage Network Improvements	ICB Equip Supply	0.38		0.38	0.91	9-Sep	Y
			Works by EPC						

13	Upolu	Fuluasou substation to Apia Wharf 22kV underground cable	ICB Equip Supply	0.364		0.364	0	12-Jan	Y
			Equip install by EPC	0.088		0.088	0.277		Y
14	Upolu	22kV Overhead conductor upgrade	ICB Equip Supply	1.014	0.363	1.377	2.286	9-Sep	Y
			ICB Equip Install	2.154		2.154	1.646	9-Oct	Y
	SAVAI'I Generation								
15	Savaii	Hydropower scheme	ICB	7.7		7.7	0	12-Oct	Y
	SAVAI'I Transmission								
16	Savaii	Puapua-Asau OH line reconductoring	ICB Equip Supply	0.186		0.186	0.434	9-Apr	Y
			ICB Equip Install	0.711		0.711	-0.091	9-Aug	Y
17	Savaii	Low Voltage Network Improvements	ICB Equip Supply	0.56		0.56	0	9-Sep	Y
			Works by EPC				0	10-Jan	
	Measurement Equipment								
18	Upolu/Savaii	Measurement equipment: stream flow gauging	Shopping	0.062		0.062	-0.012	8-Oct	N
19	Upolu/Savaii	Measurement equipment: electric HV/current	Shopping	0.058		0.058	0.002	8-Oct	N
20	Upolu/Savaii	SCADA	ICB Equip & Install	3.48		3.48	0	10-Jan	Y
	APPROVED NEW SUBPROJECTS								
21	Savaii	Refurbishment of Salelologa diesel power station ⁴	ICB Equip & Install	5.8		5.8	0	9-Oct	Y
22	Upolu/Savaii	Vending System ⁵	Shopping	0.2		0.2	0.25	9-Jul	N
23	Upolu/Savaii	Public dissemination		0.1		0.1	0	9-Jan	N

24	Upolu	Taelefaga, Lalomauga & Samasoni hydros & Tanugamanono power station 22 KV switchgear replacement ⁶	ICB Equip & Install	2.349	0.202	2.55	-0.202	10-Jan	Y
25	Upolu	Power System Planning Software	Shopping	0.051		0.051	0.009		N
26	Upolu	Refurbishment of Tanugamanono generators ⁸	ICB Equip & Install	1.178	0.5	1.678	-0.278	9-Jul	Y
APPROVED EPC, NOT APPROVED ADB, NEW SUBPROJECTS									
27	Upolu	Vaipu Pumping Scheme ⁷	Civil works	0.5		0.5	0	9-Dec	Y
28	Upolu	Upolu Hydro Schemes ⁹	ICB	3.51		3.51	0	10-Feb	Y
NOT YET APPROVED EPC/ ADB, NEW SUBPROJECTS									
29	ALL	Training ¹⁰	ICB	0.25		0.25	0		N
29	ALL					1			
30	Contingency:			75.414	14.092	90.574	-4.444		

NOTES:

- 1 - Prepayment meters installation contract is increased by US\$0.5m to lower 13,000 meters. EPC is seeking approval from ADB to fund materials to lower 10,500 meters.
 - 2 - 33 KV underground transmission line from Fiaga NDPS/Fuluasou Sub Station/Tanugamanono Plant; includes two 300 mm² Al circuits, direct buried, materials purchased under Loan and EPC crew will do construction.
 - 3 - Fuluasou substation includes: 22 kV switchgear with of 9 CBs (4 x600A, 3x1200A, 2x200A CBs); 2-story building; NCC center; 100KVA standby generator; 2x15-20MVA 22/33kV Xmers; and 2x100KVA local Xmers; and 33kV s/gear with 6x600A CBs
 - 4 - For Salelologa, revised investment plan is based on 2 x 2MW new generators, new power plant, new switchgear, and 1 overhauled Cat. 3516 existing generator.
 - 5 - Increase budget from US\$0.25M to US\$0.45M to cover new card system & hardware to house it; new card system was launched in Feb 2010.
 - 6 - Increase to include 12 x 22 KV circuit breakers; 5 additional & 7 replacement of rest of Fuji 22 KV switchgear at Tanugamanono. New CBs include Alaoa feeder, Alaoa transmission line, Hospital, Beach Rd, 33/22KV tie from Fuluasou substation, 33/22 KV tie from Lalomauga, bus tie, tie to 6.6 KV bus, West Coast, Vaitele, South Coast, & East Coast feeders. Budget for CBs in Alaoa and Hospital feeders upgrade removed from those subprojects and add to Taelefaga, Samasoni and Tanugamanono Switchgear subproject. Project is 50% complete on July 2010.
 - 7 - Funding for construction of pump station and pipeline ones Feasibility Study is completed and approved. Project awaiting decision by ADB and EPC to proceed with implementation.
 - 8 - Two diesel generators; Units 5A and 9A. First one is major overhaul, and second unit is replacement of crankshaft and major overhaul. Work on 9A started in July 2010.
 - 9 - Feasibility study started; selected 5 hydros (Vaisigano West Branch, Fuluasou, Tafitoala/Fausaga, Faleseela and Faleata/Seugagogo in Savaii) funding in IP is for construction; would need additional funding to be identified
- Covers both Upolu and Savaii. Note that planned hydro in Sili is still on hold due to land dispute.
- 10 - Training to include: underground cable linemen, system controllers, operators, machinists, mechanics, telecommunication, and SCADA. Other training is included as part of equipment supply.

Appendix 4 - Revised Project Schedule

TITLE OF SUBPROJECTS	2008				2009				2010				2011				2012				2013				2014			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CORE SUBPROJECTS																												
Project Manager (0,37 + 0,38 unallocated)																												
Project implementation consultant: EBI (73 man-months)																												
Hospital Feeder Upgrading Project – Stage 1																												
Single- and Three-Phase Prepayment Metering Project																												
CANDIDATE SUBPROJECTS																												
UPOLU Generation																												
Tanugamanono Power Station Noise and Emission Control Program																												
Refurbishment of Alaoa Hydropower Station																												
Upolu Diesel Power Station Project																												
UPOLU Transmission																												
Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project																												
Upolu Diesel Power Station to Fuluasou Substation Underground Cable																												
Hospital Feeder Upgrading Project - Stage 2																												
22 kV Fuluasou Substation Project																												
Low-Voltage Network Expansion Program																												
Fuluasou Substation to Apia Wharf Area 22 kV Underground Cable Project																												
Fuluasou Substation to Leulumoega via Vaigaga 22 kV Underground																												
22 kV Overhead Conductor Upgrading Program																												
SAVAII Generation																												
Hydropower Scheme																												
SAVAII Transmission																												
Puapua–Asau Transmission Line 22 kV Reconductoring Project																												
Low-Voltage Network Expansion Program																												
Measurement Equipment																												
Stream Flow Gauging Equipment																												
Electrical Test Equipment																												
SCADA																												
APPROVED NEW SUBPROJECTS																												
Refurbishment of Salelologa Diesel Power Station																												
Vending System																												
Public Dissemination																												
Taalefaga Switchgears																												
Samasoni Switchgears																												
Power System Planning Software																												
Refurbishment of Tanugamanono Power Station																												
Vaipu Pumping Scheme																												
Upolu Hydropowers																												

Appendix 5 - Revised Disbursement Projections

TITLE OF SUBPROJECTS	ADB categ*	Award Date	Revised Budget	2008				2009				2010				2011				2012				2013				2014				Total	
			(\$M)	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
CORE SUBPROJECTS																																	
Project Manager (0.37 + 0.38 unallocated)	4	Q4 2007	0.75	0.06	0.06	0.06	0.06	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625																	0.75	
Project implementation consultant: EBI (73 man-months)	4	Q1 2008	2.67			0.28	0.1445	0.1445	0.1445	0.1445	0.1445	0.2779	0.2779	0.2779	0.2779	0.2779	0.2779															2.67	
Hospital Feeder Upgrading Project – Stage 1	3	Q1 2009	0.60						0.15	0.15	0.15	0.15																				0.60	
Single- and Three-Phase Prepayment Metering Project	3	Q3 2008	5.67				0.567	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189	0.3189					5.67		
CANDIDATE SUBPROJECTS																																	
UPOLU Generation																																	
Tanugamanono Power Station Noise and Emission Control Program	3	Q4 2009	0.17									0.0255	0.0289	0.0289	0.0289	0.0289	0.0289															0.17	
Refurbishment of Alaoa Hydropower Station	3	Q3 2009	1.34								0.201	0.1627	0.1627	0.1627	0.1627	0.1627	0.1627	0.1627														1.34	
Upolu Diesel Power Station Project including 6.6kV/33kV/22kV Substation	3	Q1 2010	22.27											3.3405	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.1831	1.183	1.183	1.183	1.183	22.27		
UPOLU Transmission																																	
Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project	3	Q3 2009	1.14								0.285	0.285	0.285	0.285																		1.14	
Upolu Diesel Power Station to Fuluasou Substation Underground 33 kV Cable Project	3	Q1 2010	3.12									0.78	0.78	0.78	0.78																	3.12	
Hospital Feeder Upgrading Project - Stage 2	3	Q4 2009	3.20									0.48	0.544	0.544	0.544	0.544	0.544															3.2	
33kV/22 kV Fuluasou Substation Project	3	Q2 2010	2.93											0.7325	0.7325	0.7325	0.7325															2.93	
Low-Voltage Network Expansion Program	3	Q2 2010	1.29											0.1613	0.1613	0.1613	0.1613	0.1613	0.1613	0.1613	0.1613											1.29	
Fuluasou Substation to Apia Wharf Area 22 kV Underground Cable Project	3	Q2 2012	0.00																			0	0	0	0	0	0	0	0.000			0	
Fuluasou Substation to Lalomaua via Tanugamanono	3	Q2 2012	2.78																			0.4176	0.3944	0.3944	0.394	0.394	0.394	0.394	0.394			2.78	
22 kV Overhead Conductor Upgrading Program	3	Q3 2009	6.03	0.188	0.188						0.8481	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	0.267	6.03	
SAVAII Generation																																	
Hydropower Scheme	3	Q3 2012	10.65																					1.5974	1.293	1.293	1.293	1.293	1.293	1.293	1.293	10.65	
SAVAII Transmission																																	
Puapua–Asau Transmission Line 22 kV Reconductoring Project	3	Q3 2009	1.24								0.186	0.3513	0.3513	0.3513																		1.24	
Low-Voltage Network Expansion Program	3	Q2 2010	0.56											0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056								0.56		
Measurement Equipment																																	
Stream Flow Gauging Equipment	3	Q3 2008	0.05				0.05																										0.05
Electrical Test Equipment Equipment	3	Q3 2008	0.06				0.0577																										0.06
SCADA	3	Q4 2009	3.48									0.3164	0.3164	0.3164	0.3164	0.3164	0.3164	0.3164	0.3164	0.3164	0.3164	0.3164										3.48	
CORE AND CANDIDATE SUBTOTAL			70.00	0.25	0.25	0.34	0.88	0.53	0.68	0.68	2.20	2.70	3.39	7.68	4.89	4.83	4.05	2.47	2.30	2.30	2.30	2.56	2.22	3.44	3.14	3.14	3.14	3.138	2.743	2.476	1.293	70.00	
APPROVED NEW SUBPROJECTS																																	
Refurbishment of Savaii Diesel Power Station	3	Q2 2009	5.90							0.7375	0.7375	0.7375	0.7375	0.7375	0.7375	0.7375	0.7375															5.9	
Vending System	3	Q1 2009	0.25			0.095	0.16																									0.25	
Public Dissemination	3	Q1 2009	0.100		0.008	0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.100		
Refurbishment of Taalefaga Switchgears	3	Q2 2009	1.10							0.165	0.2338	0.2338	0.2338	0.2338																		1.1	
Refurbishment of Samasoni Switchgears	3	Q2 2009	0.50							0.075	0.125	0.125	0.125	0.125																			
Power System Planning Software	3	Q3 2008	0.06			0.06																										0.06	
APPROVED EPC, NOT APPROVED ADB, NEW SUBPROJECTS																																	
Vaipu Pumping Scheme	3	Q1 2010	0.50										0.125	0.125	0.125	0.125																0.5	
Refurbishment of 2 only Tanugamanono Diesel Generators	3	Q3 2009	0.75							0.1125	0.2125	0.2125	0.2125																			0.75	
NOT YET APPROVED EPC/ ADB, NEW SUBPROJECTS																																	
Upolu Hydro Generation	3	Q1 2010	3.51										0.8775	0.8775	0.8775	0.8775																3.51	
GRAND TOTAL			82.67	0.25	0.25	0.35	1.04	0.68	0.68	1.66	3.41	4.01	4.83	9.12	5.76	5.69	4.79	2.47	2.31	2.31	2.31	2.56	2.22	3.45	3.14	3.14	3.14	3.14	2.75	2.48	1.30	82.17	

*ADB category: 1. Land Acquisition and Restlement

2. Civil Works

3. Equipment Supply and Installation

4. Consultant Services

Appendix 6 - Electricity Receivables

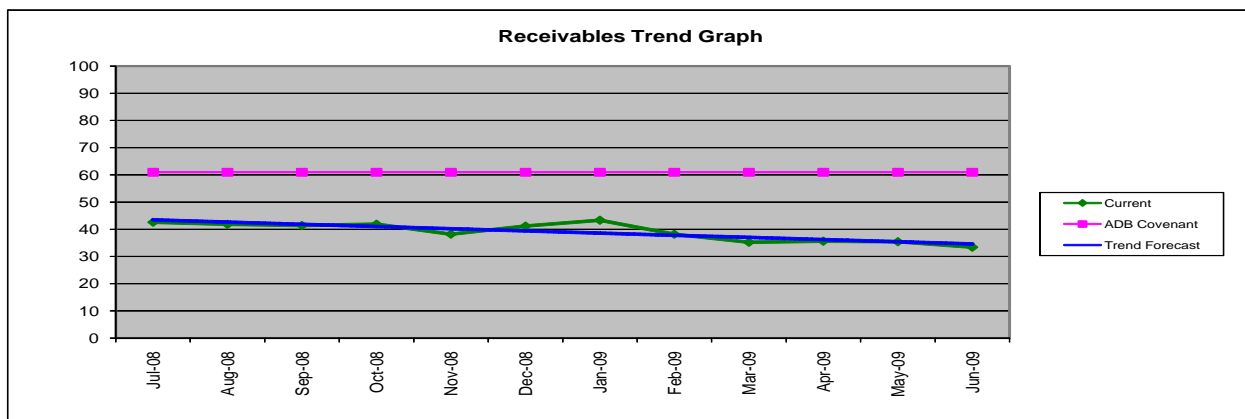
Schedule 3.1

Government and Private Sector Electricity Arrears

Month ended	Previous Quarters					Previous Month	Current Month		Variance
	30-Sep 2008	31-Dec 2008	31-Mar 2009						
By Consumer Category	\$000	\$000	\$000		\$000	\$000	\$000	\$000	%
Ministries	99	227	99		99	294	208	105	1.44%
State-Owned Entities	353	351	223		223	229	250	134	1.83%
CSO Street Lighting	155	-	-		-	-	-	-	0.00%
Total Government	607	578	322		322	523	458	239	3.27%
Private Sector	7,567	7,430	6,576		6,576	6,471	6,500	6,259	85.56%
Debit Note	906	899	824		824	799	791	817	11.17%
Grand Total	9,080	8,907	7,722		7,722	7,793	7,749	7,315	100.00%
By Aged Debtor Profile	\$000	\$000	\$000		\$000	\$000	\$000		%
Current	4,566	4,184	3,314		3,314	3,416	3,365	2,973	40.64%
1 - 30 days arrears	1,380	1,563	1,255		1,255	1,237	1,323	1,275	17.43%
31 - 60 days arrears	487	581	611		611	546	510	509	6.96%
61 - 90 days arrears	462	500	454		454	502	447	420	5.74%
over 90 days arrears	1,279	1,180	1,264		1,264	1,293	1,313	1,321	18.06%
Debit Note	906	899	824		824	799	791	817	11.17%
Total	9,080	8,907	7,722		7,722	7,793	7,749	7,315	100.00%
ARREARS (excl Current)	4,514	4,723	4,408		4,408	4,377	4,384	4,342	
12 month total sales	\$74,000	\$75,500	\$80,000		\$80,000	\$80,000	\$80,000	\$80,000	

KEY PERFORMANCE INDICATORS

1) Days of Sales							
	44.8	43.1	35.2	35.2	35.6	35.4	33.4
PSEP Performance Target	Below 61 days		Actual 33.4 days				
2) Government Debtors							
% Government Debt	3.27%						
% Government Sales	13.46%						
PSEP Performance Target	Less than 100%		Actual 24.28% =Debt/Sales				



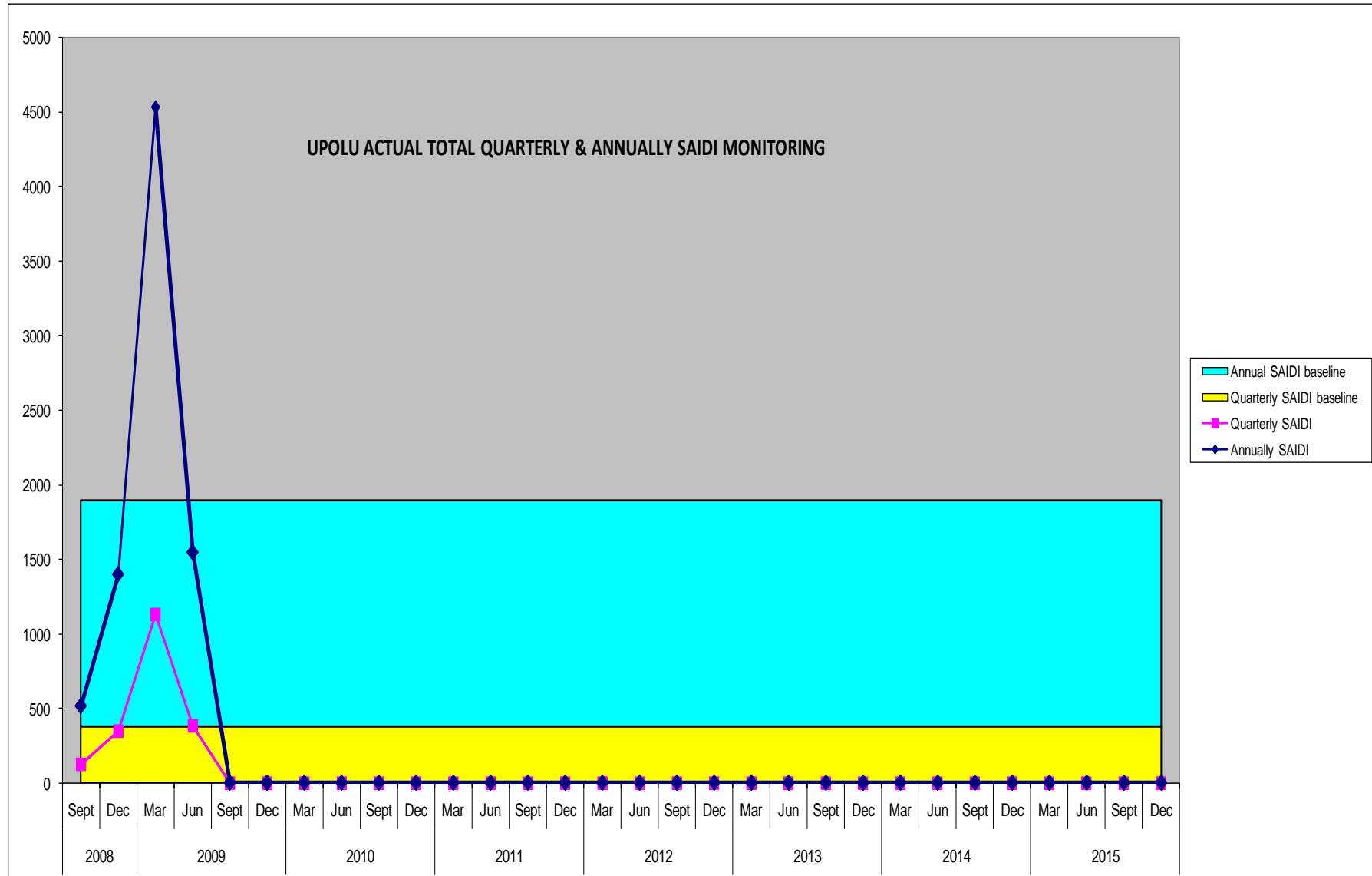
Current	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09
ADB Covenant	42.6	41.8	41.4	41.9	38.2	41.2	43.3	38.2	35.2	35.6	35.4	33.4
	61	61	61	61	61	61	61	61	61	61	61	61

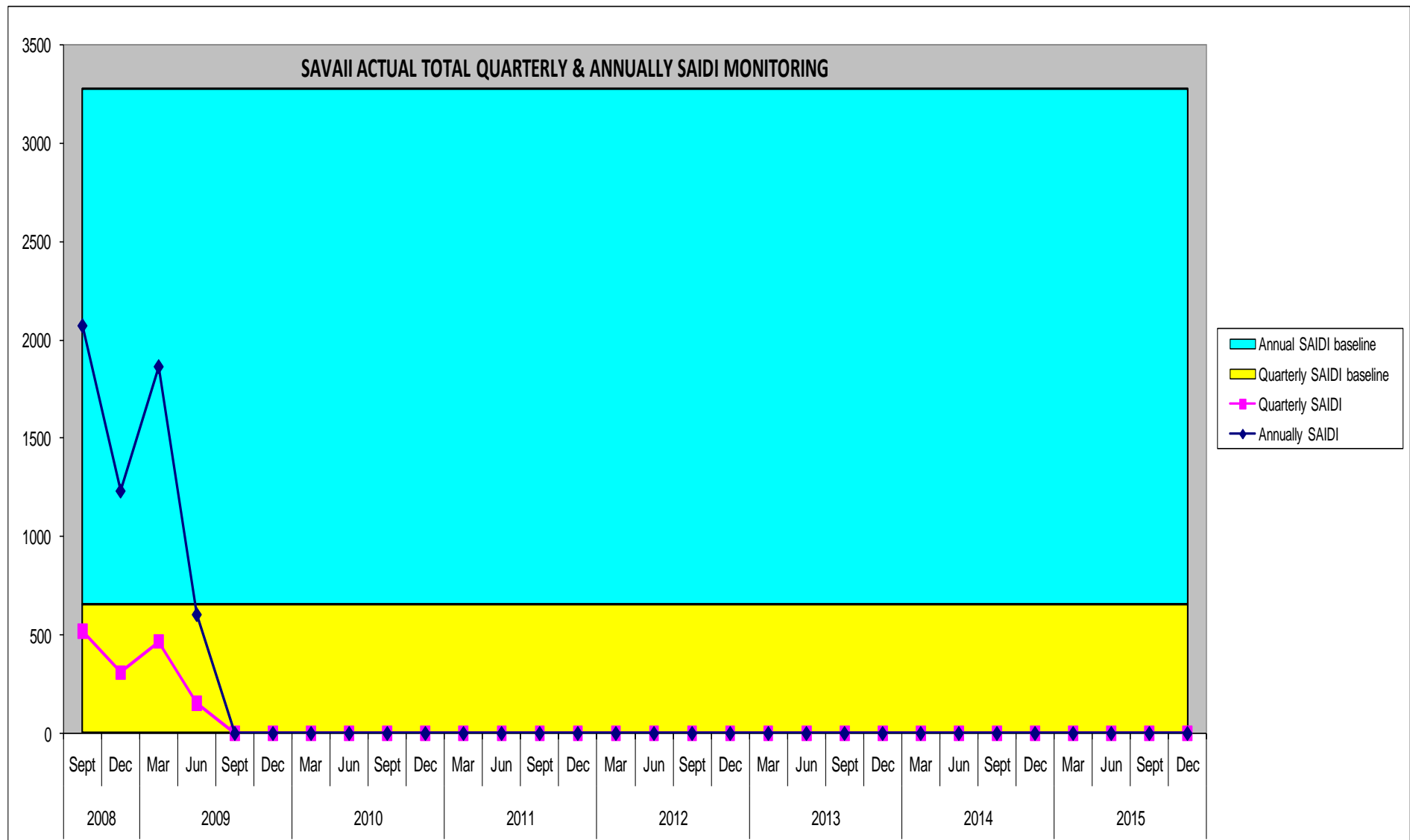
Appendix 7 – Prepayment Meter Installation Projection & Actuals

		Projected Customers with Payment Meters Installed	Project Total Customers	Projected % of Customers with Prepayment Meters Installed	Actual Customers with Prepayment Meters Installed	Actual Total Numbers of Customers	Actual % of Customers with Prepayment Meters Installed
2008	Sep	5,000	29,800	16.8%	4,760	31,000	15.35%
	Dec	6,940	30,000	23.1%	6,248	31,827	19.63%
2009	Mar	8,190	30,150	27.2%	8,276	32,158	25.74%
	Jun	9,440	30,300	31.2%	13,018	39,476	32.98%
	Sep	10,690	30,450	35.1%	15,792	39,566	39.91%
	Dec	12,065	30,600	39.4%	16,692	33,566	49.73%
2010	Mar	13,300	30,750	43.3%	23,415	36,584	64.00%
	Jun	14,560	30,900	47.1%	23,688	36,634	64.66%
	Sep	15,815	31,050	50.9%			
	Dec	17,080	31,200	54.7%			
2011	Mar	18,330	31,350	58.5%			
	Jun	19,580	31,500	62.2%			
	Sep	20,830	31,650	65.8%			
	Dec	22,080	31,800	69.4%			
2012	Mar	23,330	31,950	73.0%			
	Jun	24,580	32,100	76.6%			
	Sep	25,830	32,250	80.1%			
	Dec	26,230	32,400	81.0%			
Note: Loan buydown mechanism requires 75% of all EPC's electricity customers to be prepayment meters by							
Note: Loan buydown mechanism requires 75% of all EPC's electricity customers to be prepayment meters by December 2012							

Project Target is to get 75% of consumers on Cash Power Meters at end of project in 2016. At end of 2nd Quarter of 2011, 64.67% of consumers are already on Cash Power. There is 10.33% needed to meet target. About 2,000 additional meters are needed added to A D Riley's present contract to complete the 75%. Quotations were received from ADR and two other suppliers for supply of 2000 single phase meters and 100 three phase meters without current transformers. Decision to order has not been made by EPC.

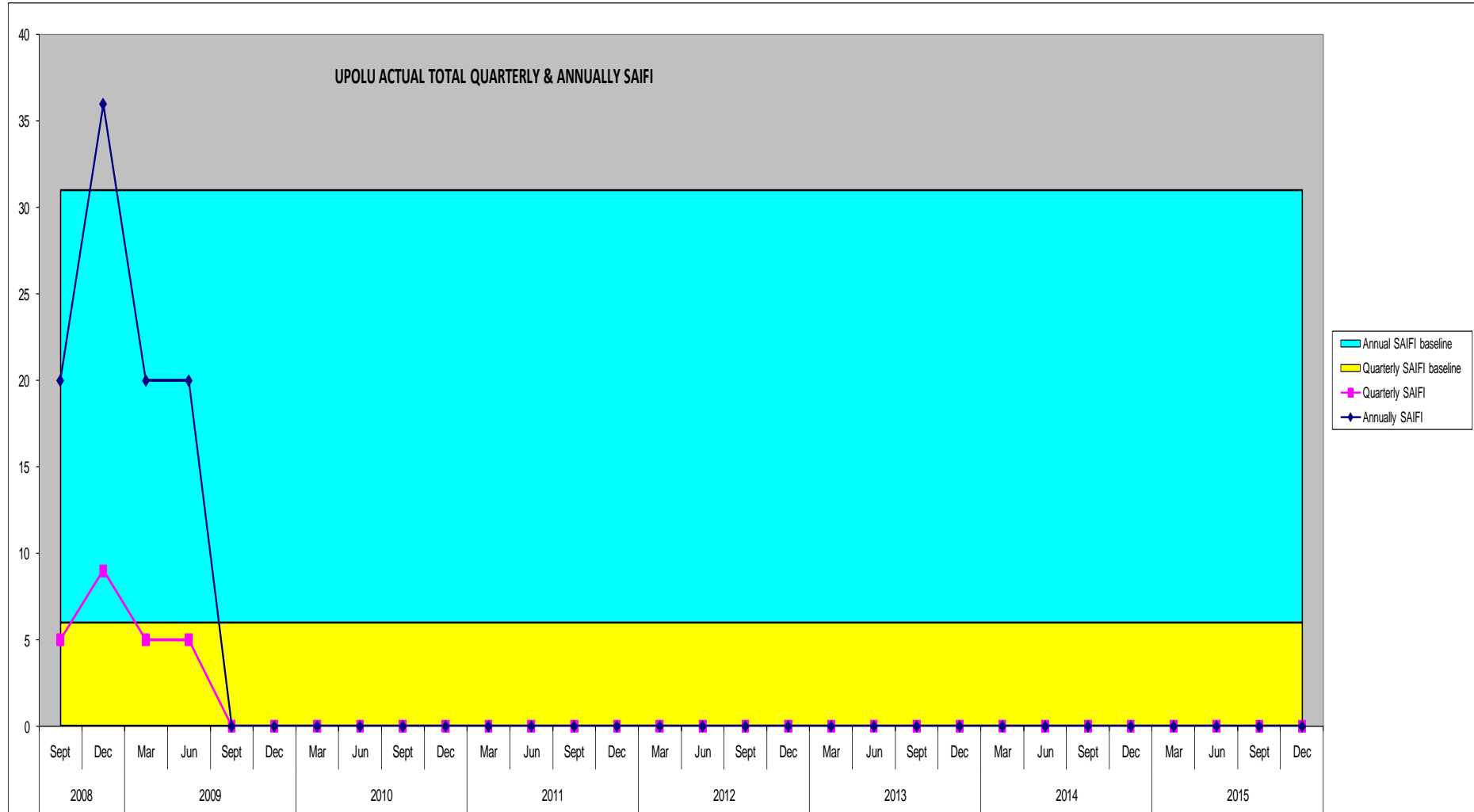
Appendix 8 - System Average Interruption Duration Index (SAIDI) Monitoring

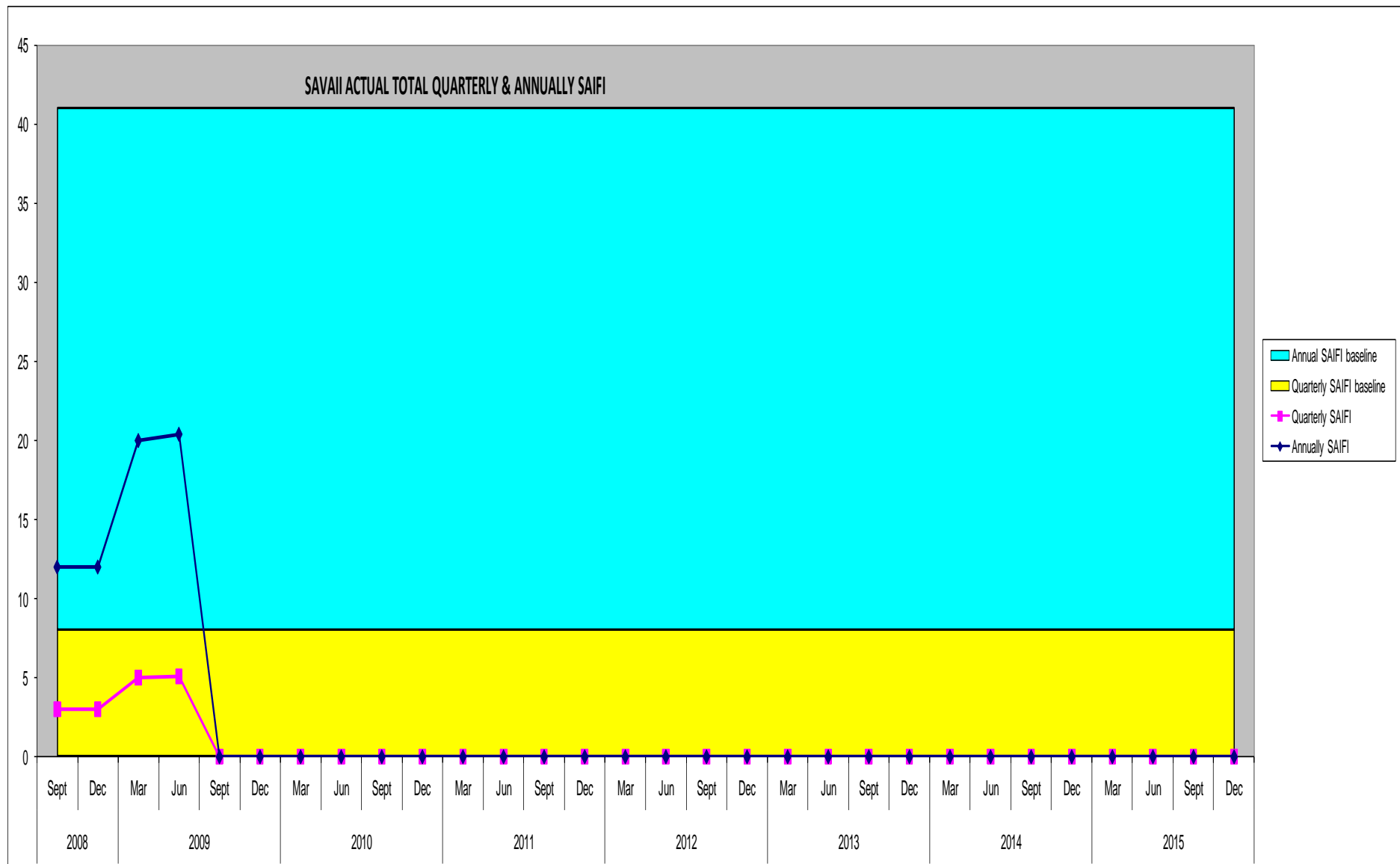




- SAIDI to be reduced by 20% by 2015
- Plan interruption is included since 1st Quarter 2009.

Appendix 9 – System Average Interruption Frequency Index (SAIFI)





- SAIFI to be reduced by 20% by 2015
- Plan interruption is included since 1st Quarter 2009.

Appendix 10 – Memorandum of Understanding of ADB REVIEW Mission in October 2008

File
cc: GMM
cc: MGS, APM
cc: MR



Asian Development Bank

LOANS 2368/8232 AND GRANTS 0087/0101-SAM: POWER SECTOR EXPANSION PROJECT TA-4994 SAM: IMPLEMENTING THE SAMOA NATIONAL ENERGY POLICY

MEMORANDUM OF UNDERSTANDING REVIEW MISSION

I. INTRODUCTION

1. A review mission¹ (the Mission) from the Asian Development Bank (ADB) visited Samoa from 11-19 March 2009 to (i) review progress on Loans 2368/8232 and Grants 0087/0101-SAM: Power Sector Expansion Project (Project), and (ii) assess progress on TA-4994 SAM: Implementing the Samoa National Energy Policy. The Executing Agency (EA) for the Project is the Ministry of Finance (MOF), and the Implementing Agency (IA) is Electric Power Corporation (EPC). A list of persons met is included in Appendix 1. A Project Steering Committee meeting was held on 17 March 2009². A wrap-up meeting was held on 19 March 2009 at MOF. This Memorandum of Understanding (MOU) records the understandings reached between the MOF, EPC and ADB.

II. MISSION FINDINGS

Loans 2368/8232 and Grants 0087/0101-SAM: Power Sector Expansion Project

2. **Contract Awards and Disbursements.** The cumulative commitments and disbursements as of 8 March are detailed below (seven months into implementation)³:

Fund Source	Loan/Grant Amount (at time of approval)	US\$ Equivalent (8 March 2009)	Commitments	%	Disbursements	%
2368-SAM (Loan)	26,610,000	25,099,633	1,669,291	7%	664,212	3%
8332-SAM (JICA Loan)	38,000,000	46,840,101	2,520,497	5%	534,796	1%
0087-SAM (ADB Grant)	15,390,000	15,390,000	3,159,209	21%	633,051	4%
0101-SAM (AusAID Grant)	8,000,000	8,000,000	1,003,945	13%	173,311	2%
	88,000,000	95,329,734	8,352,942	9%	2,005,370	2%

¹ The Mission comprised Anthony Maxwell, Team Leader (11-19 March 2009), and Susan Francisco, Operations Officer (13-18 March 2009). Alan Coulthart, Principal Infrastructure Advisor, Australian Agency for International Development (AusAID), also accompanied the mission (13-18 March 2009).

² The PSC was attended by MOF, Ministry of Commerce, Industry and Labor (MCIL), Ministry of Natural Resources and Environment (MNRE), Samoa Water Authority (SWA), and EPC. ADB and AusAID attended as observers. MOF CEO chaired the meeting. It was agreed that the PSC would meet every 2 months for the interim period.

³ It is anticipated that commitments and disbursements will increase substantially during the year, as PMU has projected to process and award about 15 subprojects estimated at \$35.0 million during 2009. Accordingly, disbursements are estimated at about \$8.0 million.

3. **Conversion of Loan to Grant.** The Project Report and Recommendation to the President (RRP) para. 47 and para. 8 (c) of the Subsidiary Financing Agreement⁴ allows for up to 7% of Project costs or a ceiling of \$10 million to be converted from loan to grant by MOF to EPC. Section 6.01 (b) of the Financing Agreement⁵ requires a conversion mechanism to be established. EPC and MOF agreed that the established performance triggers under the loan buy down mechanism would be suitable for conversion of the loan to grant. MOF indicated that they would formally advise ADB of this decision by 3 April 2009.

4. **EPC Financial Projections and Project Counterpart Financing.** EPC submitted the 2009 financial projections to ADB on 5 March 2009. The projections indicate that, based on the current implementation schedule, EPC would require a tariff increase of 13% in January 2010. Given the recent tariff increase of 10% in January 2009, it was agreed that there may be difficulties in achieving this increase. The projections for financial year 2009 indicate that, due to financial difficulties experienced over the first 6 months, (i) EPC will have a self-financing ratio of 6% (below the loan covenant of 12%), and (ii) EPC are projected to meet the loan covenants related to debt service and accounts receivable. In financial year 2008, EPC did not meet the self-financing or debt service covenants. The Mission raised its concern regarding EPC's capacity to generate sufficient cashflow to service counterpart financing obligations. The PMU proposed to revisit the subproject implementation schedule and assess the impact on the required tariff increase. The PMU agreed to forward to ADB the results of this assessment by 24 April 2009.

5. **PMU Staffing.** The PMU manager is currently in an acting capacity. EPC agreed to undertake necessary actions to establish a permanent PMU Manager⁶. The PMU indicated that the allocated resources under the Implementation Consultant contracts are declining rapidly. The PMU indicated it was preparing a human resource plan covering allocation of remaining budget to separate subprojects, which would be forwarded to ADB by 24 April 2009.

6. **Salelologa Diesel Power Station.** The Mission visited the Salelologa power station on 14 March 2009, to assess the proposed subproject. The subproject is divided into 2 phases. The PMU proposed to reassess Phase 2 of the subproject, which includes 2 new 2MW diesel generators, given the relative high cost of these items, and advise ADB of the revised proposal by 24 April 2009.

7. **Foreign Exchange Rate Losses.** The PMU noted that there had been additional costs for some subprojects related to exchange rate losses during JICA disbursement. ADB agreed to discuss with JICA, and MOF agreed to write to JICA and Bank of Tokyo regarding the issue.

8. **Installation of Prepayment Meters.** Implementation of the prepayment meter subproject is ongoing. Installation rates are presented in Appendix 6. Refusal rates have increased to an estimated 30% in some areas, primarily due to an interpretation of the Prepayment Metering Policy which provides the customer with a right of refusal if they have a good payment record with EPC. To ensure prepayment meter implementation targets are achieved, MOF and EPC have proposed the following:

⁴ Subsidiary Financing Agreement (Power Sector Expansion Project) between Independent State of Samoa and Electric Power Corporation, 16 June 2008.

⁵ Financing Agreement between Independent State of Samoa and Asian Development Bank for the Power Sector Expansion Project, 11 December 2007.

⁶ EPC indicated to the PSC on 16 March 2009 that the proposal for establishing a permanent PMU manager would be submitted to the next EPC Board meeting.

- (i) Revise the Prepayment Metering Policy to require consumers to change to prepayment meters.
- (ii) Installation of card vending facilities to improve access for customers.
- (iii) Introduction of fiscal incentives for customers to install prepayment meters, such as altering the costs of standard billing to reflect full cost recovery and providing power discounts for customers who install prepayment meters.
- (iv) Improved public communication activities.

9. Customers are also complaining that some meters are installed too high to easily enter the prepayment code. The PMU also considers this to be a health and safety concern. The PMU has proposed to assess alternatives and advise ADB of the proposed option.

10. **Loan Buy Down Mechanism.** The Project includes a loan buy down mechanism⁷ of \$4 million for conversion of loan to grant, funded by AusAID. A summary of progress towards the performance targets is presented below.

Table 1: Progress on the Loan Buy Down Mechanism Triggers

Triggers	Progress
Appointment of an independent technical and price regulator for the power sector	The Cabinet has approved (i) the proposed structure of the recommended Office of the Power Regulator and (ii) the schedule for drafting the Electricity Act and Regulations and the appointment of the Power Regulator. ADB is providing assistance (grant financed by AusAID) for drafting legislation under TA 4994-SAM: Implementing the Samoa National Reform Energy Policy. The Electricity Act and Regulations have been drafted and 4 public consultation workshops held. A roundtable meeting was held on 18 March 2009. The documents will be finalized by mid-April 2009 and the Attorney General's office proposes to submit to Parliament for the June session for the first two readings. It is anticipated that the third reading will then occur in the September 2009 sitting of Parliament, after which the Electricity Act and Regulations will be passed.
Improvement of EPC's debt collection performance such that accounts receivable shall not have exceeded 2 months of electricity sales for a minimum of two years	Receivables are 38.2 days as of 31 February 2009. Receivables have remained below 2 months since 30 September 2007 (17 months). Current data for receivables is presented in Appendix 5.
Usage of prepaid meters by 75% of all EPC's electricity customers by 31 December 2012	Currently 24.9% of EPC's customers are using prepaid meters. The installation of prepaid meters is on-going. Installation projections for prepaid meters are included in Appendix 6.

TA-4994 SAM: Implementing the Samoa National Energy Policy

11. **Component 1 and 2: Establishment of the Clean Energy Fund (CEF) and the Designated National Authority (DNA).** The second interim report was submitted on 3 March 2009. A workshop was held on 13 March 2009 with key government departments to discuss the report. Consensus was reached on the following key issues:

- (i) The CEF and DNA would be managed together under a single management unit established under the Energy Unit, MOF.
- (ii) An inter-ministerial body would be established to guide the DNA, chaired by the CEO of MOF, who would also be the DNA focal point.

⁷ Loan Buydown Agreement between the Government of Australia and Asian Development Bank with respect to the Power Sector Expansion Project Loan in the Independent State of Samoa, 19 February 2008.

- (iii) MOF indicated that the letter nominating the MOF CEO as Designated National Authority is proposed to be signed by the Prime Minister and forwarded to the United Nations Framework Convention on Climate Change (UNFCCC) by 27 April 2009.

12. **Component 3: Regulatory and Policy Reform in the Power Sector.** Component 3 has conducted 4 public workshops, consulted key stakeholders and drafted the Electricity Act and Regulations providing the regulatory framework for the independent Office of the Power Regulator. A stakeholder roundtable was held on 18 March 2009. The following is proposed:

Mid-April 2009	Finalize Draft Electricity Act and Regulations incorporating stakeholder comments
June 2009	Draft Electricity Act and Regulations submitted to Parliament for first two readings
September 2009	Draft Electricity Act and Regulations submitted to Parliament for final reading

13. **Component 4: Resident Financial Management Advisors to EPC.** Component 4 is ongoing, with two financial advisors providing ongoing support to EPC. The financial advisors are proposing their next mission to Samoa in April 2009. EPC has indicated that they were satisfied with the support provided to date.

Other Projects

14. **TA-7121 SAM: Preparing the Afulilo Environmental Enhancement Project** The project preparation technical assistance *Preparing the Afulilo Environment Enhancement Project* is financed by the Japan Special Fund for \$1.2 million. were mobilized to Samoa on 9 March 2009. The EPC indicated that the current Generation Section head would manage TA 7121-SAM under the guidance of the EPC General Manager. The Consultants are undertaking initial activities under the TA, and the ADB inception mission is proposed to be conducted in May 2009.

15. **RETA: 6485-REG: Promoting Energy Efficiency in the Pacific** The regional technical assistance project RETA: 6485-REG: Promoting Energy Efficiency (\$1.2 million) will be implemented in Cook Islands, PNG, Samoa, Tonga and Vanuatu. Consultants have been selected and mobilization is anticipated in early April 2009. The IA in Samoa is MNRE. The Inception Mission is proposed to be conducted in May 2009.

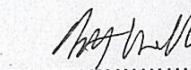
III. OTHER MATTERS

16. The Mission would like to express its appreciation for the cooperation and the hospitality extended by the GoS and EPC. It is understood that the points of agreement and recommendations as reflected in the MOU are subject to the approval of higher authorities in GoS and ADB.

Signed in Apia, Samoa 18 March 2009


Ms. Hinayri Petana


Mr. Mua'ausa Fiu Joseph Walter


Mr. Anthony Maxwell

List of Persons Met

Ministry of Finance

Hinauri Petana
Noumea Simi
Justina Sau
Benjamin Pereira

Silia Kilepoa Ualesi

Chief Executive Officer
Assistant CEO, Debt Management
Assistant CEO, State Enterprise Monitoring Division
Assistant Chief Executive Officer, Economic Policy and Planning Division
Energy Coordinator, Economic Policy and Planning Division

Electric Power Corporation

Mua'ausa Fiu Joseph Walter
Vui Lance Lameko
Galumalemana Tologata Tile
Le'i'a Tuimalealiifano
Faumui Iese Tomoimoana
Taulealeausumai Tiotio
Magele Tafu Salevao
Leilani Pereira-Moeano
Faalepo Solofa
Wairarapa Young
Bobby Ah To

Chief Executive Officer
Manager, Corporate Services

Acting Project Manager, PMU
Generation Engineer, PMU
Transmission & Distribution Engineer, PMU
Acting Manager, Savai'i Power Station
Legal & Environment Advisor, PMU
Project Accountant, PMU
Renewable Energy Officer
Renewable Energy Officer

EGIS-BCEOM (Project Implementation Consultants)

Fonoti Perelini Perelini
Brendan Hegerty

Team Leader
Transmission & Distribution Engineer

Office of the Attorney General

Rebecca Wendt
Sarona Rimoni

Assistant Attorney General
Principal Lawyer, Legislative Drafting Div.

Ministry of Natural Resources and Environment

Tu'u'u Laufatasaga Dr. Letitaia
Setu Taule'alo
Uaine Lolani Silailai
Steve Brown

Chief Executive Officer
Asst. CEO, Renewable Energy
Asst. CEO, GEF

TA No. 4994-SAM Consultants

Michaël Cheng
Hendrik Lund
Unasa Leilani Va'a Tamati
Satui Bentin

Team Leader, PA Consulting (Component 3)
Team Leader (Component 1 and 2)
Legislative Drafter (Component 3)
National Communication Expert (Component 1 and 2)

Australian High Commission

Heather Dixon
Alan Coulthart

2nd Secretary, Development Cooperation
Principal Infrastructure Advisor, Australian Agency for International Development (AusAID)

Secretariat of the Pacific Regional Programme (SPREP)

Solomone Fifita

Program Manager, Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP)

Revised Procurement Plan

Location	Contract Description	Estimated Cost (\$ million)	Procurement Method
1. Upolu	Hospital Feeder Upgrading Project – Stage 1	0.25	ICB Goods
		0.35	NCB Works
2. Upolu/Savaii	Single- and three-phase Prepayment Metering	6.07	ICB
3. Upolu	Project Manager	0.37	
	Unallocated	0.38	
4. Upolu	Project Implementation Consultants	2.67	QCBS
5. Upolu	Tanugamanono Power Station noise and emission control program	0.17	ICB Goods
6. Upolu	Refurbishment of Alaoa hydropower station	1.34	ICB
7. Upolu	Fiaga diesel power station	22.27	ICB
8. Upolu	Upgrade of the Alaoa 6.6kV distribution line	0.65	ICB Goods
		0.49	NCB Works
9. Upolu	Fiaga diesel power station to Tanugamanono 33kV underground project and Fuluasou Substation	8.83	ICB
10. Upolu	Hospital Feeder upgrading project – Stage 2	3.20	ICB
11. Upolu/Savaii	Low voltage network improvement program	1.29	ICB Goods
12. Upolu	22kV overhead conductor upgrading program	6.03	ICB Goods
			NCB Works
13. Savaii	Hydropower scheme	10.65	ICB
14. Savaii	Puapua-Asau transmission line 22kV reconductoring project	0.44	ICB Goods
		0.80	NCB Works
15. Upolu/Savaii	Measurement equipment electric high voltage/current	0.06	Shopping
16. Upolu/Savaii	Measurement equipment stream-flow gauging	0.05	Shopping
17. Upolu/Savaii	SCADA	3.48	ICB
18. Savaii	Refurbishment of Salelologa Diesel Power Station	5.90	ICB
19. Upolu	Vending System	0.25	Direct Contract
20. Upolu	Public Dissemination	0.10	Single Source
21. Upolu	Taelefa and Samasoni Switchgears	1.60	ICB
22. Upolu	Power System Planning Software	0.06	Shopping
23. Upolu	Refurbishment of Tanugamanono Diesel Generators	0.75	ICB
Total		82.67	

Revised Project Schedule

TITLE OF SUBPROJECTS	2008				2009				2010				2011				2012				2013				2014			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	
CORE SUBPROJECTS																												
Project Manager (0,37 + 0,38 unallocated)																												
Project implementation consultant: EBI (73 man-months)																												
Hospital Feeder Upgrading Project – Stage 1																												
Single- and Three-Phase Prepayment Metering Project																												
CANDIDATE SUBPROJECTS																												
UPOLU Generation																												
Tanugamanono Power Station Noise and Emission Control Program																												
Refurbishment of Alaoa Hydropower Station																												
Fiaga Diesel Power Station Project																												
UPOLU Transmission																												
Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project																												
Upolu Diesel Power Station to Fulusou Substation Underground Cable																												
Hospital Feeder Upgrading Project - Stage 2																												
22 kV Fulusou Substation Project																												
Low-Voltage Network Expansion Program																												
Fulusou Substation to Apia Wharf Area 22 kV Underground Cable																												
Fulusou Substation to Leulumoega via Vaigaga 22 kV Underground																												
22 kV Overhead Conductor Upgrading Program																												
SAVAII Generation																												
Hydropower Scheme																												
SAVAII Transmission																												
Puapua-Asau Transmission Line 22 kV Reconductoring Project																												
Low-Voltage Network Expansion Program																												
Measurement Equipment																												
Stream Flow Gauging Equipment																												
Electrical Test Equipment																												
SCADA																												
APPROVED NEW SUBPROJECTS																												
Refurbishment of Salelologa Diesel Power Station																												
Vending System																												
Public Dissemination																												
Taalefaga Switchgears																												
Samasoni Switchgears																												
Power System Planning Software																												
Refurbishment of Tanugamanono Power Station																												
Vaipu Pumping Scheme																												
Upolu Hydropowers																												

Revised Disbursement Projections

TITLE OF SUBPROJECTS	ADB category	Award Date	Revised Budget (\$M)	2008					2009					2010					2011					2012					2013					2014					Total
				1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total	1	2	3	4	Total						
CORE SUBPROJECTS																																							
Project Manager (0.37 + 0.36 unallocated)	4	Q4 2007	0.75	0.06	0.06	0.06	0.06	0.25	0.06	0.06	0.06	0.06	0.25	0.06	0.06	0.06	0.06	0.25																			0.75		
Project Implementation consultant: EBI (73 man-months)	4	Q1 2008	2.67			0.25	0.14	0.43	0.14	0.14	0.14	0.14	0.56	0.28	0.278	0.28	0.29	1.12	0.278	0.28			0.556														2.67		
Hospital Feeder Upgrading Project - Stage 1	3	Q1 2009	0.60					0.60			0.15	0.15	0.15	0.45	0.15			0.15																		0.60			
Single- and Three-Phase Prepayment Refueling Project	3	Q3 2008	5.67				0.57	0.57	0.32	0.318	0.318	0.32	1.26	0.32	0.318	0.32	0.32	1.27	0.319	0.32	0.319	0.319	1.276	0.319	0.319	0.32	0.319	1.276								5.67			
CANDIDATE SUBPROJECTS								0.00					0					0																		0.00			
HPOLB Generation								0.00					0					0																		0.00			
Compananawa Power Station Noise and Emission Control Program	3	Q4 2008	0.17					0.00					0	0.03	0.03	0.03	0.03	0.112	0.029	0.03		0.039														0.17			
Refurbishment of Akon Hydropower Station	3	Q5 2009	1.34					0.00				0.2	0.2	0.16	0.163	0.16	0.163	0.651	0.163	0.16	0.163	0.486														1.34			
Madhi Diesel Power Station Project including 6.6KV/3KV/22KV Substation	3	Q1 2010	22.27					0.00					0					3.34	1.18	1.183	1.183	4.732	1.183	1.183	1.18	1.183	4.732	1.183	1.18	1.183	1.183	4.732	1.183	1.183	1.183	3.449	22.27		
HPOLB Transmission								0.00					0					0																		0.00			
Upgrade of the Akon 6.6 kV Transmission Line to 22 kV Project	3	Q3 2009	1.14					0.00			0.285	0.29	0.57	0.29	0.285			0.57																		1.14			
Plan Power Station to Fubusou Substation 33 kV TL Underground	3	Q4 2009	3.12					0.00				0.3	0.31			0.36	0.357	0.357	0.36	0.357	0.357	1.426	0.357	0.357			0.713			0.312	0.312					3.12			
Hospital Feeder Upgrading Project - Stage 2	3	Q4 2009	3.20					0.00			0.48	0.48		0.54	0.544	0.54	0.54	2.176	0.544				0.544													3.20			
33KV/22 KV Fubusou Substation Project & 33KV DG TL from Compananawa to Fubusou SS	3	Q4 2009	5.71					0.00				0.57	0.57			0.66	0.653	0.653	0.65	0.653	0.653	2.61	0.653	0.653			1.307			0.571	0.571					5.71			
Low Voltage Network Expansion Program	3	Q2 2010	1.29					0.00					0	0.16	0.16	0.163	0.163	0.16	0.163	0.163	0.642	0.163	0.163			0.323										1.29			
Substation to Akon Diesel Area 22 kV Underground Cable Project	3	Q2 2012	0.60					0.00					0					0										0.42	0.394	0.812	0.394	0.394	0.394	1.578	0.394		0.60		
Fubusou Substation to Lalmawana Transmission	3	Q2 2012	2.78					0.00					0					0																			2.78		
22 kV Overhead Conductor Upgrading Program	3	Q5 2009	6.03	0.15	0.19			0.38				0.08	0.62	0.27	0.267	0.27	0.27	1.068	0.267	0.27	0.267	1.068	0.267	0.267	0.27	0.267	1.068	0.267	0.27	0.267	1.068	0.267	0.267			0.534	6.03		
SAVAB Generation								0.00					0					0																			0.00		
Hydropower Scheme	3	Q3 2012	10.65					0.00					0					0																			10.65		
SAVAB Transmission								0.00					0					0																			0.00		
Puapua-Akoni Transmission Line 22 kV Reconductoring Project	3	Q3 2009	1.24					0.00			0.183	0.35	0.54	0.35	0.351			0.703																			1.24		
Low Voltage Network Expansion Program	3	Q2 2010	0.56					0.00					0	0.06	0.06	0.112	0.058	0.06	0.058	0.056	0.224	0.056	0.056	0.06	0.056	0.224										0.56			
Measurement Equipment								0.00					0					0																			0.00		
Stream Flow Gauging Equipment	3	Q3 2008	0.05					0.00					0					0																			0.05		
Electrical Test Equipment	3	Q3 2008	0.06					0.06	0.06				0					0																			0.06		
SCADA	3	Q4 2009	3.48					0.00					0	0.32	0.316	0.32	0.32	1.268	0.316	0.32	0.316	0.316	1.268	0.316	0.316	0.32	0.948									3.48			
CORE AND CANDIDATE SUBTOTAL			72.78	0.25	0.29	0.34	0.58	1.75	0.53	0.60	1.14	0.72	0.67	2.76	2.61	5.54	4.39	15.3	4.35	3.76	3.47	3.31	14.83	3.31	3.31	2.58	2.22	11.8	3.44	3.14	4.02	3.14	13.7	3.14	2.75	2.41	1.34	9.64	72.78
APPROVED NEW SUBPROJECTS																																							
Refurbishment of Savan Diesel Power Station	3	Q2 2009	5.90										0.736	0.74	1.48	0.74	0.738	0.74	0.74	2.95	0.738	0.74			1.475												5.90		
Welding System	3	Q2 2009	0.25										0.095	0.18	0.25			0																			0.25		
Public Disconnection	3	Q1 2009	0.100								0.060	0.06		0.02	0.004	0.004	0.004	0.011	0.004	0.004	0.004	0.004	0.014	0.004	0.004	0.004	0.004	0.014	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.100		
Transformers and Sanitary Switchgear	3	Q2 2009	1.60								0.24	0.34	0.58	0.34	0.34	0.34	1.02																					1.60	
Power System Planning Software	3	Q3 2009	0.05					0.05	0.05				0					0																			0.05		
APPROVED EPC, NOT APPROVED ADD, NEW SUBPROJECTS																																							
Yagou Pumping Scheme	3	Q1 2010	0.50															0.125	0.13	0.13	0.375	0.125															0.50		
Technical Study Transmission Diesel Generators	3	Q3 2009	0.75											0.11	0.11	0.21	0.213	0.21	0.535																		0.75		
NOT YET APPROVED EPC/ADD, NEW SUBPROJECTS																																							
Udon Hydro Generation	3	Q1 2010	3.51															0.878	0.89	0.89	2.653	0.878															3.51		
GRAND TOTAL			85.45	0.25	0.29	0.34	0.64	1.78	0.53	0.60	1.14	0.67	0.67	4.06	4.03	6.95	5.29	22.93	5.19	4.52	3.48	3.32	17.31	3.32	3.32	2.58	2.22	11.47	3.45	3.14	4.02	3.14	13.71	3.14	2.75	2.41	1.34	9.64	85.45

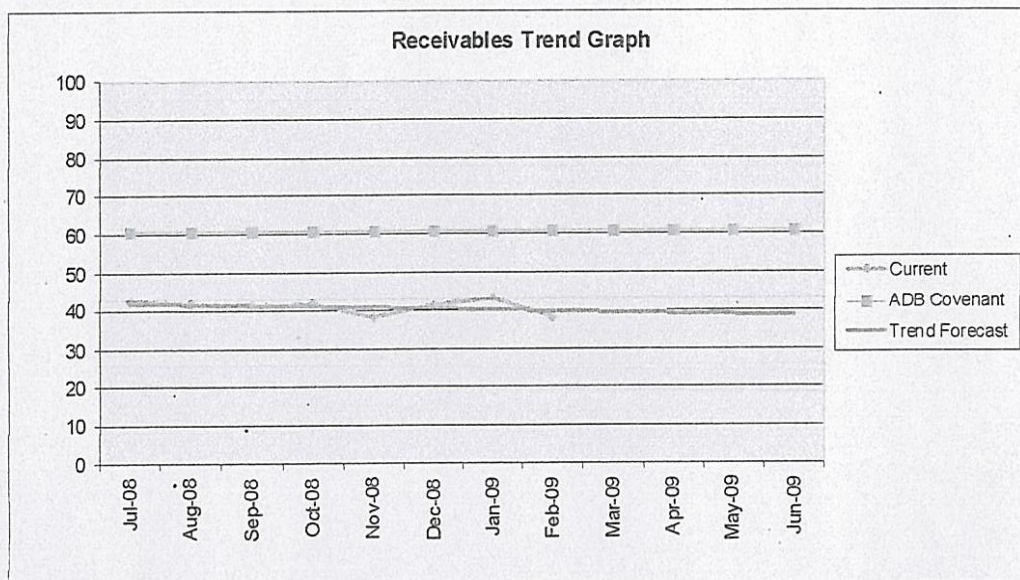
Electricity Receivables

Government and Private Sector Electricity Arrears

Month ended	Previous Quarters			Previous Month	Current Month		Variance
	30-Jun 2008	30-Sep 2008	31-Dec 2008				
By Consumer Category	\$000	\$000	\$000	\$000	\$000	%	\$000
Ministries	176	99	227	228	146	1.74%	(82)
State-Owned Entities	849	353	351	291	276	3.30%	(15)
CSO Street Lighting	269	155	-	112	-	0.00%	(112)
Total Government	1,294	607	578	631	422	5.04%	(209)
Private Sector	8,154	7,567	7,430	7,966	7,118	85.07%	(848)
Debit Note	802	906	899	893	827	9.88%	(66)
Grand Total	10,250	9,080	8,907	9,490	8,367	100.00%	(1,123)
By Aged Debtor Profile	\$000	\$000	\$000	\$000	\$000	%	
Current	4,785	4,566	4,184	4,870	3,754	44.87%	(1,116)
1 - 30 days arrears	1,826	1,380	1,563	1,403	1,522	18.19%	119
31 - 60 days arrears	855	487	581	567	531	6.35%	(36)
61 - 90 days arrears	506	462	500	487	465	5.56%	(22)
over 90 days arrears	1,476	1,279	1,180	1,270	1,268	15.15%	(2)
Debit Note	802	906	899	893	827	9.88%	(66)
Total	10,250	9,080	8,907	9,490	8,367	100.00%	(1,123)
ARREARS (excl Current)	5,465	4,514	4,723	4,620	4,613		
12 month total sales	\$74,000	\$75,500	\$80,000	\$80,000	\$80,000		

KEY PERFORMANCE INDICATORS

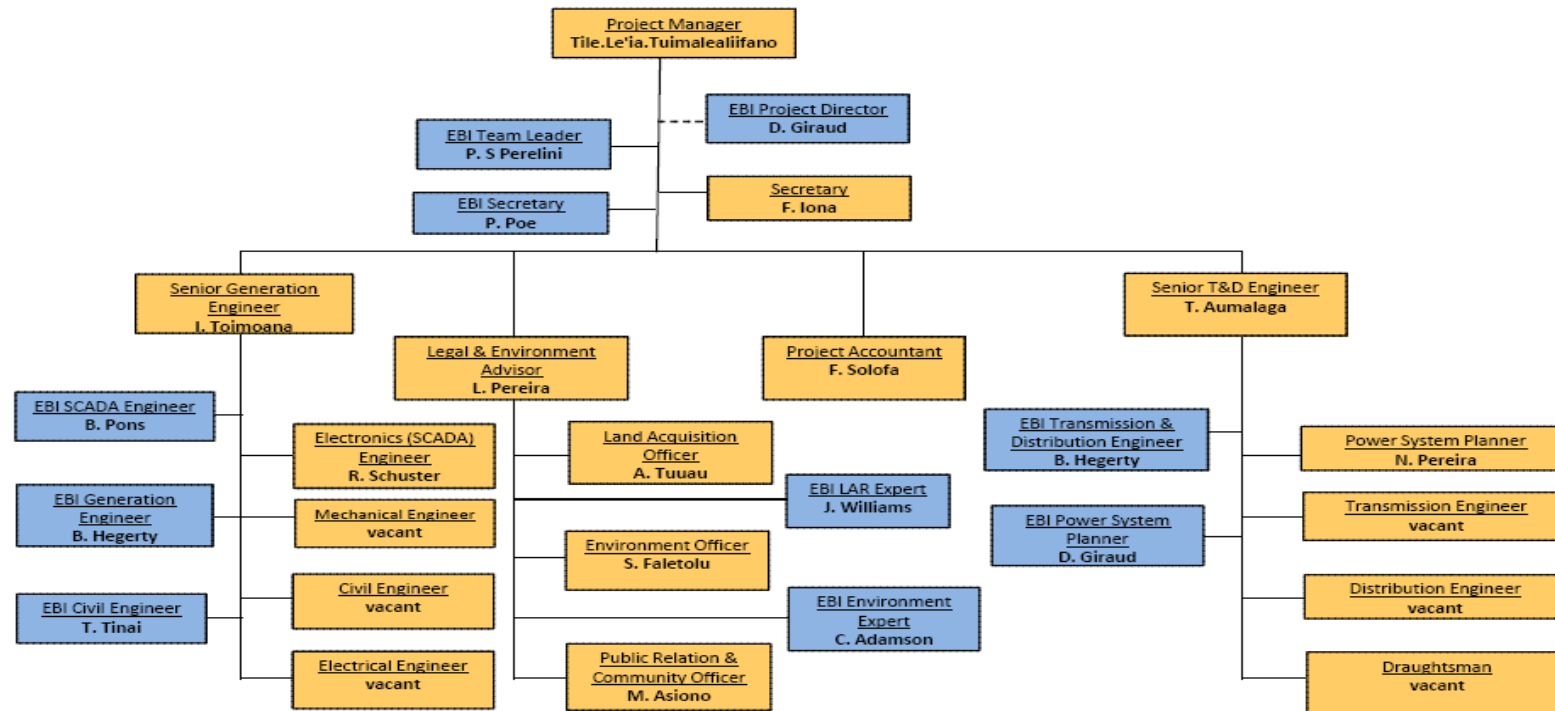
1) Days of Sales	50.6	43.9	40.6	43.3	38.2
PSEP Performance Target	Below 61 days		Actual	38.2 days	
2) Government Debtors					
% Government Debt				5.04%	
% Government Sales				13.46%	
PSEP Performance Target	Less than 100%		Actual	37.47% =Debt/Sales	



		Projected Customers with Payment Meters Installed	Project Total Customers	Projected % of Customers with Prepayment Meters Installed	Actual Customers with Prepayment Meters Installed	Actual Total Numbers of Customers	Actual % of Customers with Prepayment Meters Installed
2008	Sep	5,000	29,800	16.8%	4,760	31,000	15.35%
	Dec	6,940	30,000	23.1%	6,248	31,827	19.63%
2009	Mar	8,190	30,150	27.2%	8,276	32,158	25.74%
	Jun	9,440	30,300	31.2%	13,018	39,476	32.98%
	Sep	10,690	30,450	35.1%	15,792	39,566	39.91%
	Dec	12,065	30,600	39.4%	16,692	33,566	49.73%
	Mar	13,300	30,750	43.3%	23,415	36,584	64.00%
2010	Jun	14,560	30,900	47.1%	23,688	36,634	64.66%
	Sep	15,815	31,050	50.9%			
	Dec	17,080	31,200	54.7%			
	Mar	18,330	31,350	58.5%			
2011	Jun	19,580	31,500	62.2%			
	Sep	20,830	31,650	65.8%			
	Dec	22,080	31,800	69.4%			
	Mar	23,330	31,950	73.0%			
2012	Jun	24,580	32,100	76.6%			
	Sep	25,830	32,250	80.1%			
	Dec	26,230	32,400	81.0%			
Note: Loan buydown mechanism requires 75% of all EPC's electricity customers to be prepayment meters by							
Note: Loan buydown mechanism requires 75% of all EPC's electricity customers to be prepayment meters by December 2012							

Appendix 11- Revised PMU Organisational Structure (Note: This Org Chart is out of date)

REVISED PROJECT MANAGEMENT UNIT ORGANISATIONAL STRUCTURE JUNE 2009



*Acronyms:

LAR: Land Acquisition and Resettlement

EBI: Egis Bceom International

SCADA: System Control And Data Acquisition

*Implicit link: All experts from Egis Bceom International are under the responsibility of its Team Leader
EBI's TL and PD have no authority on EPC/PMU staff

Appendix 12 - Withdrawal Applications Register to date

WITHDRAWAL APPLICATIONS REGISTER-POWER SECTOR EXPANSION PROJECT AS OF 30/09/2010										USD EQUIVALENT	AUSAID	EPC
APPLICATION FC	SUMMARY SHEET FORM	COMPANY NAME	Category	USDS Equip	ADBL L2368	ADBG G0087	JICA SAM-P1	A0101	COUNTERPART			
TOTAL PROJECT FUNDS				100,000,000.00	26,610,000.00	15,390,000.00	38,000,000.00	8,000,000.00	12,000,000.00			
WITHDRAWAL APPLICATIONS ALREADY SUBMITTED												
WA0001	Project Manager	Project Manager PC-55 601762-PM 55HT1	EPC	42,272.37		42,272.37				2,271.75		
WA0002	Implementation	PIA Mob. Pmt Summary Sheet	EGIS	266,402.33		266,402.33				14,316.65		
WA0003	Power System P	Power Sys Planner Summ Sht 1	Digital Pac	38,694.01	11,995.14	2,708.58	18,186.18	5,804.10				
WA0004	Implementation	PIA First Claim 30 Sep 08	EGIS	232,833.35		232,833.35				12,512.65		
WA0005	Project Manager	PM 55HT1_VA0005	EPC	12,646.20		12,646.20				679.62		
WA0006	HV Test Equipm	HV Equipment\WA0006 Summ Sheet1 HV	Electrotest	8,275.28	2,565.34	579.27	3,889.38	1,241.29				
WA0007	Prepayment Me	PROJECTS\WITHDRAWAL APPLICATION	ARDILEY	258,710.00	80,200.10	18,109.70	121,593.70	38,806.50				
WA0008	Prepayment Me	PPM1207\WA0008 55HT1 PPM Adv pmt	ARDILEY	280,645.87	87,000.22	19,645.21	131,903.56	42,096.88				
WA0009	Prepayment Me	PPM1207\WA0009 55HT1 Claim 2	ARDILEY	110,838.88	34,360.05	7,758.72	52,094.27	16,625.83				
WA0010	Prepayment Me	PPM1207\WA0010 55HT1 Claim 3	ARDILEY	18,010.00	5,583.10	1,260.70	8,464.70	2,701.50				
WA0011	Stream Flow Ga	Gauging Equip SS 3	NIWA	42,742.13	13,250.06	2,991.95	20,088.80	6,411.32				
WA0012	PPM1207\WA00	PPM1207\WA0012 55HT1 PPM1207.xls	ARDILEY	46,573.04	14,905.64	3,386.11	22,735.33	7,255.96				
WA0013	PPM1207\WA00	PPM1207\WA0013 55HT1 PPM1207.xls	ARDILEY	148,143.05	45,924.35	10,370.01	69,627.23	22,221.46				
WA0014	PPM1207\WA00	PPM1207\WA0014 55HT1 PPM1207.xls	ARDILEY	99,046.06	30,704.28	6,933.22	46,551.65	14,856.91				
WA0015	HV Equipment	HV Equipment\WA0015 55HT1 HV Test Eq	South Pac Exp	99,141.15	12,130.66	2,739.18	18,391.64	5,869.67				
WA0016	PPM1207\WA00	PPM1207\WA0016 55HT1 PPM1207.xls	ARDILEY	43,704.67	13,548.45	3,059.33	20,541.19	6,555.70				
WA0017	PPM1207\WA00	PPM1207\WA0017 55HT1 PPM1207.xls	ARDILEY	75,733.24	23,477.30	5,301.33	35,594.62	11,359.99				
WA0018	Implementation	Implementation Consultants\WA0018 Rev	EGIS	154,938.01		154,938.01				8,330.09		
WA0019	PPM1207\WA00	PPM1207\WA0019 55HT1 PPM1207.xls	ARDILEY	12,464.36	3,863.93	872.50	5,858.22	1,869.65				
WA0020	PPM1207\WA00	PPM1207\WA0020 55HT1 PPM1207.xls	ARDILEY	84,954.56	26,335.91	5,946.82	39,928.64	12,743.18				
WA0021	PPM1207\WA00	PPM1207\WA0021 55HT1 PPM1207.xls	ARDILEY	124,959.64	38,749.89	8,749.97	58,749.83	18,749.95				
WA0022	Implementation	Implementation Consultants\WA0022 Rev	EGIS	146,553.37		146,553.37				5,274.47		
WA0023	PPM1207\WA00	PPM1207\WA0023 55HT1 PPM1207.xls	ARDILEY	26,801.90	8,308.59	1,876.13	12,596.89	4,020.28				
WA0024	PPM1207\WA00	PPM1207\WA0024 55HT1 PPM1207.xls	ARDILEY	131,985.73	40,915.58	9,239.00	62,033.29	19,797.86				
WA0025	PPM1207\WA00	PPM1207\WA0025 55HT1 PPM1207.xls	ARDILEY	48,193.24	15,239.99	3,439.86	24,439.86	7,771.00				
WA0026	PPM1207\WA00	PPM1207\WA0026 55HT1 PPM1207.xls	ARDILEY	29,084.10	9,916.07	3,335.89	8,969.53	3,862.62				
WA0027	PPM1207\WA00	PPM1207\WA0027 55HT1 PPM1207.xls	ARDILEY	132,007.47	42,902.32	9,240.52	62,043.51	19,801.12				
WA0028	PPM1207\WA00	PPM1207\WA0028 55HT1 PPM1207.xls	ARDILEY	175,696.36	54,465.87	12,998.75	82,577.29	26,354.45				
WA0029	PPM1207\WA00	PPM1207\WA0029 55HT1 PPM1207.xls	ARDILEY	140,345.20	45,924.35	10,370.01	69,627.23	22,221.46				
WA0029	22kv OH Upgrade	22kv OH Upgrade\WA0029 55HT1 22kvoh	ARDILEY	414,145.27	128,385.03	28,990.17	194,648.28	62,121.79				
WA0030	PROJECTS\WI	PROJECTS\WITHDRAWAL APPLICATION	EPC	91,825.00	28,465.75	6,427.75	43,157.75	13,773.75				
WA0031	PPM1207\WA00	PPM1207\WA0031 55HT1 PPM1207(2).xls	ARDILEY	125,680.40	42,066.40	9,457.19	53,773.26	16,625.83				
WA0033	PPM1207\WA00	PPM1207\WA0033 55HT1 PPM1207.xls	ARDILEY	165,752.10	51,383.15	11,602.65	77,903.49	24,862.81				
WA0034	PPM1207\WA00	PPM1207\WA0034 55HT1 PPM1207.xls	ARDILEY	188,806.52	58,530.02	13,216.46	88,739.06	28,320.98				
WA0035	PPM1207\WA00	PPM1207\WA0035 55HT1 PPM1207.xls	ARDILEY	197,322.17	61,169.87	13,812.55	92,741.42	29,598.33				
WA0036	PPM1207\WA00	PPM1207\WA0036 55HT1 PPM1207.xls	ARDILEY	18,618.19	5,771.64	1,303.27	3,750.55	1,179.72				
WA0037	PPM1207\WA00	PPM1207\WA0037 55HT1 PPM1207.xls	ARDILEY	103,749.82	32,162.44	7,262.49	48,762.41	15,562.47				
WA0038	PPM1207\WA00	PPM1207\WA0038 Withdrawal form PIA 4TH	ARDILEY	89,299.00	28,465.75	6,427.75	43,157.75	13,773.75				
WA0039	PPM1207\WA00	PPM1207\WA0039 55HT1 PPM1207.xls	ARDILEY	4,305.93	63,352.93	14,305.93	96,051.22	30,654.65				
WA0040	PPM1207\WA00	PPM1207\WA0040 55HT1 PPM1207.xls	ARDILEY	56,197.09	17,421.10	3,933.80	26,412.63	8,429.56				
WA0041	PPM1207\WA00	PPM1207\WA0041 55HT1 PPM1207.xls	ARDILEY	10,054.64	3,116.94	703.82	4,725.68	1,508.20				
WA0042	PPM1207\WA00	PPM1207\WA0042 55HT1 PPM1207.xls	ARDILEY	32,131.52	2,249.32	511.78	1,431.78	471.78				
WA0043	PPM1207\WA00	PPM1207\WA0043 55HT1 PPM1207.xls	ARDILEY	5,848.90	1,813.16	409.42	2,748.98	877.34				
WA0044	PPM1207\WA00	PPM1207\WA0044 55HT1 PPM1207.xls	ARDILEY	211,669.36	65,617.50	14,816.86	99,484.60	31,750.40				
WA0045	PPM1207\WA00	PPM1207\WA0045 55HT1 PPM1207.xls	ARDILEY	33,389.93	10,350.88	2,337.30	15,693.27	5,008.49				
WA0046	PPM1207\WA00	PPM1207\WA0046 Revised Summ Sheet 1.xl	EGIS	93,460.00		93,460.00				5,008.49		
WA0047	PPM1207\WA00	PPM1207\WA0047 55HT1 PPM1207.xls	ARDILEY	243,253.06	75,408.45	17,027.71	114,328.94	36,487.96				
WA0048	PPM1207\WA00	PPM1207\WA0048 55HT1 PPM1207.xls	ARDILEY	32,865.06	10,188.17	2,300.55	15,446.58	4,929.76				
WA0049	PPM1207\WA00	PPM1207\WA0049 55HT1 PPM1207.xls	ARDILEY	20,119.19	6,235.10	1,407.92	9,453.21	3,023.55				
WA0050	PPM1207\WA00	PPM1207\WA0050 55HT1 PPM1207.xls	ARDILEY	86,819.09	26,913.92	6,077.34	40,804.97	13,022.86				
WA0051	PPM1207\WA00	PPM1207\WA0051 55HT1 PPM1207.xls	ARDILEY	129,619.76	40,182.13	9,073.38	60,921.29	19,442.96				
WA0052	PPM1207\WA00	PPM1207\WA0052 55HT1 PPM1207.xls	ARDILEY	44,651.26	13,841.69	3,125.59	20,966.09	6,847.69				
WA0053	PPM1207\WA00	PPM1207\WA0053 55HT1 PPM1207.xls	ARDILEY	45,429.76	14,098.71	3,183.58	21,771.46	6,822.96				
WA0054	PPM1207\WA00	PPM1207\WA0054 55HT1 PPM1207.xls	ARDILEY	58,062.54	17,999.39	4,064.38	27,289.39	8,709.38				
WA0055	PPM1207\WA00	PPM1207\WA0055 55HT1 PPM1207.xls	ARDILEY	126,761.75	39,916.14	9,013.32	60,518.02	19,314.26				
WA0056	PPM1207\WA00	PPM1207\WA0056 55HT1 PPM1207.xls	ARDILEY	140,865.29	43,668.38	10,860.60	66,206.90	21,129.86				
WA0057	PPM1207\WA00	PPM1207\WA0057 55HT1 PPM1207.xls	EGIS	156,051.66		156,051.66				8,386.34		
WA0058	PPM1207\WA00	PPM1207\WA0058 55HT1 PPM1207.xls	EGIS	95,128.62	29,489.87	6,659.00	44,710.45	14,269.29				
WA0059	PPM1207\WA00	PPM1207\WA0059 55HT1 PPM1207.xls	EGIS	152,246.48	47,196.41	10,657.25	71,555.85	22,836.97				
WA0060	PPM1207\WA00	PPM1207\WA0060 55HT1 PPM1207.xls	EGIS	53,921.67	16,715.72	3,774.52	25,343.18	8,088.25				
WA0061	PPM1207\WA00	PPM1207\WA0061 55HT1 PPM1207.xls	EGIS	275,830.00	85,507.30	19,308.10	129,640.10	41,374.50				
WA0062	PPM1207\WA00	PPM1207\WA0062 55HT1 PPM1207.xls	EGIS	126,204.51	39,123.40	8,834.32	59,316.12	18,930.68				
WA0063	PPM1207\WA00	PPM1207\WA0063 55HT1 PPM1207.xls	EGIS	24,391.10	7,506.24	5,207.38	34,963.82	11,158.67				
WA0064	PPM1207\WA00	PPM1207\WA0064 55HT1 PPM1207.xls	EGIS	2,086.85	646.92	146.08	980.82	313.03				
WA0065	PPM1207\WA00	PPM1207\WA0065 55HT1 PPM1207.xls	EGIS	214,740.54	66,569.57	15,031.84	100,928.05	32,211.08				
WA0066	PPM1207\WA00	PPM1207\WA0066 55HT1 PPM1207.xls	EGIS	190,743.67	59,743.67	13,352.06	89,649.53	28,611.55				
WA0067	PPM1207\WA00	PPM1207\WA0067 55HT1 PPM1207.xls	EGIS	288,832.00	89,537.92	20,218.24	135,751.04	43,324.80				
WA0068	PPM1207\WA00	PPM1207\WA0068 55HT1 PPM1207.xls	EGIS	50,277.33	15,585.97	3,519.41	23,630.34	7,541.60				
WA0069	PPM1207\WA00	PPM1207\WA0069 55HT1 PPM1207.xls	EGIS	76,285.60	23,648.54	5,339.99	35,854.23	11,442.84				
WA0071	PPM1207\WA00	PPM1207\WA0071 55HT1 PPM1207.xls	EGIS	146,194.10	45,320.17	10,233.59	68,711.23	21,929.11				
WA0072	PPM1207\WA00	PPM1207\WA0072 55HT1 PPM1207.xls	EGIS	33,292.57	10,320.70	2,330.48	15,647.51	4,993.89				
WA0073	PPM1207\WA00	PPM1207\WA0073 55HT1 PPM1207.xls	EGIS	119,181.48	36,352.93	8,077.34	53,773.26	16,625.83				
WA0074	PPM1207\WA00	PPM1207\WA0074 55HT1 PPM1207.xls	EGIS	188,402.16	58,404.67	13,188.15	88,549.01	28,260.32				
WA0075	PPM1207\WA00	PPM1207\WA0075 55HT1 PPM1207.xls	EGIS	214,740.54	66,569.57	15,031.84	100,928.05	32,211.08				
WA0076	PPM1207\WA00	PPM1207\WA0076 55HT1 PPM1207.xls	EGIS	165,718.29	51,383.15	11,602.65	77,903.49	24,862.81				
WA0077	PPM1207\WA00	PPM1207\WA0077 55HT1 PPM1207.xls	EGIS	327,305.83	101,464.81	22,911.41	153,833.74	49,095.87				
WA0078	PPM1207\WA00	PPM1207\WA0078 55HT1 PPM1207.xls	EGIS	136,455.60	42,301.24	9,551.89	64,134.13	20,468.34				
WA0079	PPM1207\WA00	PPM1207\WA0079 55HT1 PPM1207.xls	EGIS	32,760.14	28,755.64	6,493.21	43,597.26	13,914.02				
WA0080	PPM1207\WA00	PPM1207\WA0080 55HT1 PPM1207.xls	EGIS	47,185.24	14,627.41	3,302.96	22,177.04	7,077.78				
WA0081	PPM1207\WA00	PPM1207\WA0081 55HT1 PPM1207.xls	EGIS	110,610.81	34,289.35	7,742.76	51,987.08	16,591.62				

Appendix 13 - Withdrawal Applications by Contract as of June 30, 2011

				TOTAL	LOANS				GOVT CAPITAL	COUNTERPART	TOTAL LOANS +	TOTAL	Remainder	
	PROJECT	PAYEE	CONTRACT NO.	DISBURSEMENT	ADB Loan	ADB Grant	JICA	TOTAL	AUSAID	EPC	GOVT CAPITAL+	AWARDS	(Variance)	
	Exchange Rate (29/12/2010)		2.4044	SAT\$				LOANS			EPC C/PART	SAT	\$	%
	COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E	COLUMN F	COLUMN G	COLUMN H	COLUMN I	COLUMN J	COLUMN K	COLUMN L	COLUMN M	COLUMN N
	TOTAL PROJECT APPROVED FUNDS		USD	\$88,000,000	\$26,610,000	\$15,390,000	\$38,000,000	\$80,000,000	\$8,000,000	\$12,000,000	\$100,000,000	2,180,000.00		
	TOTAL ESTIMATED PROJECT FUNDS		SAT\$	\$211,587,200	\$63,981,084	\$37,003,716	\$91,367,200	\$192,352,000	\$19,235,200	\$28,852,800	\$240,440,000	\$5,241,592		
1	SINGLE AND THREE PHASE PREPAYMENT METERS:	Arthur D. Riley & Co. Ltd.	PPM1207	\$11,792,007	\$3,655,522	\$825,441	\$5,542,243	\$10,023,206	\$1,768,801	\$ -	\$11,792,007	\$15,139,803	\$3,347,795	22%
2	POWER SYSTEM PLANNING SOFTWARE:	Digilent Pacific Pty Ltd	SAM-PSEP-06	\$134,810	\$41,791	\$9,437	\$63,361	\$114,589	\$20,222	\$ -	\$134,810	\$136,126	\$1,316	1%
3	STREAM FLOW GAUGING EQUIPMENT:	NIWA	SAM-PSEP-04	\$145,397	\$45,073	\$10,178	\$68,337	\$123,588	\$21,810	\$ -	\$145,397	\$163,988	\$18,591	11%
4	HV TEST EQUIPMENT :	Electrotest Ltd.	SAM-PSEP-05	\$163,443	\$50,667	\$11,441	\$76,818	\$138,927	\$24,516	\$ -	\$163,443	\$153,341	(\$10,102)	-7%
5	EGIS BCEOM IMPLEMENTATION CONSULTANTS:	EGIS BCEOM International	CON0508	\$4,004,841		\$4,004,841		\$4,004,841		\$184,659	\$4,189,500	\$7,105,010	\$2,915,510	41%
6	EPC REIMBURSEMENTS:												\$ -	
6.1	A. PROJECT MANAGER	EPC	CON0108	\$140,851		\$140,851		\$140,851		\$249,338	\$390,189	\$612,000	\$221,811	36%
6.2	B. 22 KV OVERHEAD UPGRADING	EPC	SAM-PSEP-09	\$991,727	\$307,435	\$69,421	\$466,112	\$842,968	\$148,759	\$ -	\$991,727	\$991,727	\$0	0%
	C. UPGRADING OF SUPRIMA VENDING MACHINES:	EPC		\$244,218	\$75,708	\$17,095	\$114,782	\$207,585	\$36,633	\$ -	\$244,218	\$ -	(\$244,218)	#DIV/0!
7	UPGRADING HOSPITAL FEEDER STAGE 1, ALAOA DIST. LINE & ASAU 22KV RECONDUCTORING:												\$ -	
7.1	TRANSFORMERS	Etel Limited	SAM-PSEP-02/01-D	\$543,527	\$168,493	\$38,047	\$255,458	\$461,998	\$81,529	\$ -	\$543,527	\$571,118	\$27,591	5%
7.2	CABLES & CONDUCTORS	Ltd.	SAM-PSEP-02/01-C	\$683,914	\$212,013	\$47,874	\$321,439	\$581,327	\$102,587	\$ -	\$683,914	\$684,687	\$773	0%
7.3	POLES & CROSSARMS	Bluebird/Ahlal JV	SAM-PSEP-02/01-B	\$88,804	\$27,529	\$6,216	\$41,738	\$75,483	\$13,321	\$ -	\$88,804	\$102,124	\$13,321	13%
7.4	SUPPLY OF GALVANISED LINE HARDWARE AND INSULATORS	Ltd.	SAM-PSEP-02/01-A	\$2,743,428	\$850,463	\$192,040	\$1,289,411	\$2,331,914	\$411,514	\$ -	\$2,743,428	\$154,689	(\$2,588,740)	-1674%
7.5	PROCUREMENT OF WORKS & RELATED SERVICES	Bluebird/Ahlal JV	SAM-PSEP-02/02-A	\$491,223	\$152,279	\$34,386	\$230,875	\$417,540	\$73,683	\$101,680	\$592,903	\$154,690	(\$438,214)	-283%
8	REFURBISHMENT OF ALAOA HYDRO POWER STATION	Tenix New Zealand	SAM-PSEP-03	\$657,916	\$203,954	\$46,054	\$309,221	\$559,229	\$98,687	\$ -	\$657,916	\$3,432,945	\$2,775,029	81%

9	HOSPITAL FEEDER STAGE 2 & 22KV UPGRADING:													
9.1	SUPPLY OF MATERIALS	Etel Limited	SAM-PSEP-09/01-A	\$768,178	\$238,135	\$53,772	\$361,043	\$652,951	\$115,227	\$ -	\$768,178	\$768,178	\$0	0%
9.2	SUPPLY OF MATERIALS	Ltd.	SAM-PSEP-09/01-B	\$1,251,531	\$387,975	\$87,607	\$588,220	\$1,063,801	\$187,730	\$ -	\$1,251,531	\$4,625,858	\$3,374,327	73%
10	REFURBISHMENT OF TAELEFAGA, LALOMAUGA, SAMASONI & TANUGAMANONO SWITCHGEARS:	Northpower Ltd.	SAM-PSEP-07	\$4,730,718	\$1,466,523	\$331,150	\$2,223,438	\$4,021,110	\$709,608	\$ -	\$4,730,718	\$5,390,576	\$659,858	12%
11	REFURBISHMENT OF TANUGAMANONO GENERATORS SA AND 9A:	Man Diesel & Turbo Australia	SAM-PSEP-08	\$1,138,081	\$352,805	\$79,666	\$534,898	\$967,369	\$170,712	\$ -	\$1,138,081	\$2,855,377	\$1,717,296	60%
12	CONSTRUCTION OF PUAPUA FEEDER	Tenix New Zealand	SAM-PSEP-02/02-B	\$125,163	\$38,801	\$8,761	\$58,827	\$106,389	\$18,774	\$ -	\$125,163		(\$125,163)	#DIV/0!
13	REFURBISHMENT OF ALAQA HYDRO POWER STATION	Company	SAM-PSEP-03/01	\$272,636	\$84,517	\$19,085	\$128,139	\$231,741	\$40,895	\$41,018	\$313,654			
14	FIAGA ACCESS ROAD AND FENCING	Company	SAM-PSEP-12/02-A&C	\$300,521	\$93,162	\$21,036	\$141,245	\$255,443	\$45,078	\$45,164	\$345,685			
15	FIAGA DIESEL POWER STATION	Bluebird /Mitsubishi /Woods	SAM-PSEP-12/03	\$14,079,945	\$4,364,783	\$985,596	\$6,617,574	\$11,967,953	\$2,111,992	\$ -	\$14,079,945			
16	FIAGA SITE LEVELING	PPG Engineering	SAM-PSEP-12/02-B	\$70,324										
17	ELECTRICAL DUCTING-VAITELE ROAD WIDENING	Ott Transport	SAM-PSEP-10/01	\$325,682										
								\$ -	\$ -					
	TOTAL DISBURSEMENTS AS AT 30TH NOVEMBER 2010	SAT\$		\$45,888,887	\$12,817,629	\$7,039,995	\$19,433,179	\$39,290,803	\$6,202,078	\$621,859	\$46,114,740	\$24,210,886	(\$21,903,854)	

	INTEREST DURING CONSTRUCTION (IDC):	interest rate											
	Interest Due	6.50%		\$833,145.86	\$457,599.68	\$1,263,156.63	\$2,553,902.18						
	less Interest paid			(\$114,942.65)	(\$63,131.46)	(\$174,267.89)	(\$352,342.00)		\$352,342.00	\$352,342.00	\$352,342.00	\$ -	0%
	Total Interest Outstanding as at 30th November 2010			\$718,203.22	\$394,468.21	\$1,088,888.75	\$2,201,560.18			\$ -	\$2,201,560.18	(\$2,201,560.18)	-100%
	TOTAL DISBURSEMENTS + IDC	SATS	\$45,888,887	\$13,535,832	\$7,434,463	\$20,522,068	\$41,492,363	\$6,202,078	\$974,201	\$46,467,082	\$26,764,788	\$19,702,294	
	% of funds disbursed as at 30th November 2010		22%	21%	20%	22%	22%	32%	3%	19%			
	TAXES AND DUTIES												
	(GOVERNMENT CONTRIBUTION - MOF)								\$3,845,254.17	\$3,845,254.17	\$5,241,592	(\$1,396,337.83)	-27%
	TOTAL DISBURSEMENTS + IDC + TAXES & DUTIES	SATS	\$ -	\$13,535,832	\$7,434,463	\$20,522,068	\$41,492,363	\$6,202,078	\$4,819,455	\$50,312,336	\$32,006,380	\$18,305,956	
	% of funds disbursed as at 30th November 2010		0%	21%	20%	22%	22%	32%	17%	21%			
	Remaining Balance as at 30th November 2010	SATS	\$165,698,313	\$50,445,252	\$29,569,253	\$70,845,132	\$150,859,637	\$13,033,122	\$24,033,345	\$190,127,664			
	Remaining Balance as at 30th November 2010	USD\$	\$68,914,620	\$20,980,391	\$12,297,976	\$29,464,786	\$62,743,153	\$5,420,530	\$9,995,569	\$79,074,889			
	% of funds remaining as at 30th November 2010	%	78%	79%	80%	78%	78%	68%	83%	79%			

Appendix 14 - Withdrawal Applications Disbursement Advice to date

WITHDRAWAL APPLICATIONS DISBURSEMENT ADVICE																			
WA	PAYEE	Curr	Loan 2368-ADB		G-0087-ADB		G-0101-AusAid		JICA 8232/SAM-P1				Curr	Total	Exchange Rate	SAT Equivalent		USD Equivalent	
			Amount	Value date	Amount	Value Date	Amount	Value Date	Amount	Date of Disb	USD Equiv	JPY Equiv							
A0001	Electric Power Corpora	WST			103,634.15	6/08/2008							WST	103,634.15	1	WST 103,634.15	2.5887	USD 40,033.87	
A0002	Electric Power Corpora	USD			266,402.33	21/08/2008							USD	266,402.33	2.5887	WST 689,635.71	2.5887	USD 266,406.28	
A0003	Digsilent Pacific Pty Ltd	AUD	18,619.38	27/01/2009	4,204.38	27/01/2009	9,009.38	27/01/2009	28,229.36	20/02/2009 ^{1/}	18,420.05	1,718,038.00	AUD	60,062.50	2.0352	WST 122,239.20	2.5887	USD 47,221.00	
A0006	Electrotest Ltd.	NZD	4,796.94	11/02/2009	1,083.18	11/02/2009	2,321.10	11/02/2009	7,272.78	27/02/2009 ^{3/}	3,841.06	375,348.00	NZD	15,474.00	1.6527	WST 25,573.73	2.5887	USD 9,879.13	
A0007	Arthur D. Riley & Co. L	USD	80,200.12	15/01/2009	18,109.71	15/01/2009	38,806.51	15/01/2009	121,593.74	27/02/2009	121,593.74	11,882,140.00	USD	258,710.08	2.5887	WST 669,722.78	2.5887	USD 258,713.91	
A0008	Arthur D. Riley & Co. L	SAT	256,033.60	2/02/2009	57,814.04	2/02/2009	123,887.23	2/02/2009	388,179.98	24/02/2009 ^{2/}	127,377.52	11,998,643.00	SAT	825,914.85	1	WST 825,914.85	2.5887	USD 319,050.91	
A0009	Arthur D. Riley & Co. L	USD	34,360.05	15/01/2009	7,758.72	2/02/2009	16,625.83	2/02/2009	52,094.27	27/02/2009	52,094.27	5,090,652.00	USD	110,838.87	2.5887	WST 286,928.58	2.5887	USD 110,840.51	
A0010	Arthur D. Riley & Co. L	USD	5,583.10	15/01/2009	1,260.70	15/01/2009	2,701.50	15/01/2009	8,464.70	20/02/2009 ^{1/}	8,464.70	789,502.00	USD	18,010.00	2.5887	WST 46,622.49	2.5887	USD 18,010.27	
A0011	National Inst. Of	NZD	24,776.37	27/01/2009	5,594.66	27/01/2009	11,988.57	27/01/2009	37,564.18	20/02/2009 ^{1/}	19,698.34	1,837,264.00	NZD	79,923.78	1.6527	WST 132,089.23	2.5887	USD 51,026.07	
A0012	Arthur D. Riley & Co. L	SAT	43,010.59	2/02/2009	9,712.07	2/02/2009	20,811.58	2/02/2009	65,209.61	24/02/2009 ^{2/}	21,397.90	2,015,629.00	SAT	138,743.85	1	WST 138,743.85	2.5887	USD 53,596.75	
A0013	Arthur D. Riley & Co. L claim payment	USD	45,924.57		10,370.06		22,221.57		69,627.58				USD	148,143.78					
		USD	45,924.35	25/02/2009	10,370.01	25/02/2009	22,221.46	25/02/2009	69,627.23	3/03/2009	69,627.23	6,879,866.00	USD	148,143.05	2.5887	WST 383,497.91	2.5887	USD 148,145.24	
A0014	Arthur D. Riley & Co. L	SAT	87,801.77	26/02/2009	19,826.21	26/02/2009	42,484.73	26/02/2009	133,118.81	27/02/2009 ^{3/}	40,635.84	3,970,934.00	SAT	283,231.52	1	WST 283,231.52	2.5887	USD 109,412.34	
A0015	South Pacific Exports	AUD	18,686.04	23/03/2009	4,219.43	23/03/2009	9,041.63	23/03/2009	28,330.44	25/03/2009 ^{5/}	20,239.98	1,942,051.00	AUD	60,277.54	2.0352	WST 122,673.95	2.5887	USD 47,388.95	
A0016	Arthur D. Riley & Co. L	USD	13,548.45	4/03/2009	3,059.33	4/03/2009	6,555.70	4/03/2009	20,541.19	13/03/2009	20,541.19	2,048,367.00	USD	43,704.67	2.5887	WST 113,138.28	2.5887	USD 43,705.32	
A0017	Arthur D. Riley & Co. L	SAT	69,914.54	9/03/2009	15,787.16	9/03/2009	33,829.62	9/03/2009	105,999.47	13/03/2009 ^{4/}	31,952.91	3,186,344.00	SAT	225,530.79	1	WST 225,530.79	2.5887	USD 87,122.54	
A0018	EGIS BCEOM Internat	USD			154,938.01	22/04/2009							USD	154,938.01	2.5887	WST 401,088.03	2.5887	USD 154,940.30	
A0019	Arthur D. Riley & Co. L	USD	3,863.93	21/04/2009	872.50	21/04/2009	1,869.65	21/04/2009	5,858.22	1/05/2009	5,858.22	571,527.00	USD	12,464.30	2.5887	WST 32,266.33	2.5887	USD 12,464.48	
A0020	Arthur D. Riley & Co. L	SAT	74,542.63	23/04/2009	16,832.21	23/04/2009	36,069.02	23/04/2009	113,016.25	1/05/2009 ^{6/}	39,838.35	3,886,629.00	SAT	240,460.11	1	WST 240,460.11	2.5887	USD 92,889.74	
A0021	Arthur D. Riley & Co. L	USD	38,749.89	22/04/2009	8,749.97	22/04/2009	18,749.95	22/04/2009	58,749.83	15/05/2009	58,749.83	5,692,271.00	USD	124,999.64	2.5887	WST 323,586.57	2.5887	USD 125,001.49	
A0022	EGIS BCEOM Internat	USD			98,145.58	8/05/2009							USD	98,145.58	2.5887	WST 254,069.46	2.5887	USD 98,147.03	
A0023														-					
A0024														-					
A0025														-					

WST 5,420,647.52 USD 2,093,996.14

ANZ FX RATES 30/06/2009

1 USD	2.5887	2.7503
1 AUD	2.0352	2.2170
1 NZD	1.6527	1.7734
1 FJD	1.2369	1.3699

- ^{1/} Forex rate based on JICA'S rate for USD pay-A0010- on 20/02/09
^{2/} Forex rate based on ADB book rate on 24/02/09
^{3/} Forex rate based on JICA'S rate for USD pay-A0007- on 27/02/09
^{4/} Forex rate based on JICA'S rate for USD pay-A0016- on 13/03/09
^{5/} Forex rate based on ADB book rate on 25/03/09
^{6/} Forex rate based on JICA'S rate for USD pay-A0019- on 1/05/09

USD1=JPY93.27
USD1=JPY94.197495
USD1=JPY97.72
USD1=JPY99.72
USD1=JPY95.951248
USD1=JPY97.56