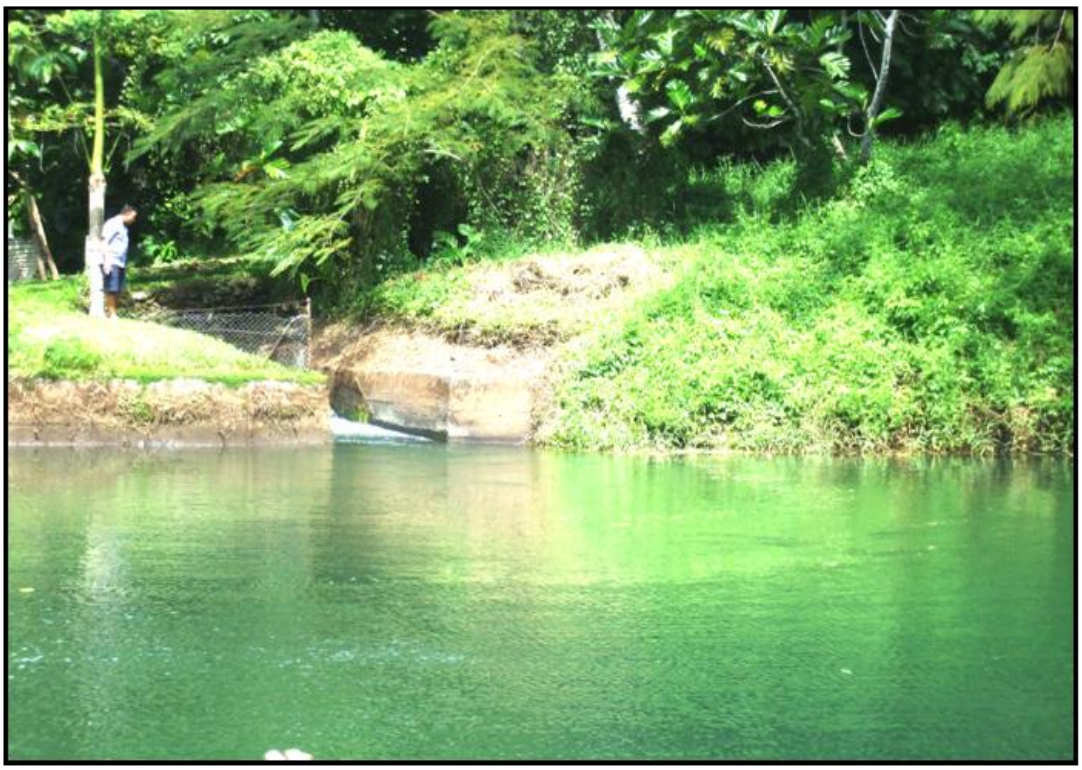
POWER SECTOR EXPANSION PROJECT

ADB LOAN №2368
ADB GRANT №0087
JBIC LOAN №8232
AusAID GRANT №0101



Quarterly Progress Report No. 17
2nd Quarter 2012
(April – June 2012)

PROJECT MANAGEMENT UNIT & EGIS BCEOM INTERNATIONAL

Table of Acronyms

ADB	Asian Development Bank
ADR	Arthur D Riley
APM	Acting Project Manager
ATS	Automatic Transfer Switch
AusAID	Australian Agency for International Development
CDC	Cabinet Development Committee
CEO	Chief Executive Officer
CSO	Community Service Obligation
DSR	Debt-service Ratio
EA	Executing Agency
EARF	Environmental Assessment and Review Framework
EI	Egis 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
MAN	MAN Diesel Australia Ltd
MCIL	Ministry of Commerce, Industry and Labour
MNRE	Ministry of Natural Resource and Environment
MOF	Ministry of Finance
MOU	Memorandum of Understanding
MV	Medium Voltage
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
PSEP	Power Sector Expansion Project
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
Anthony Maxwell	Team Leader Asian Development Bank
Wen Zhand	ADB South Pacific Infrastructure Specialist
Heather Dixon	2nd Secretary Development Cooperation Australian High Commission
Yoshifusa Shikama	Resident Representative JICA
Sachie Terasaki	Pacific Division JICA
Hon. Afoafouvale J. Moors	Associate Minister, EPC
Tologata G.L.T. Tuimalealiifano	General Manager Electric Power Corporation (EPC BOARD MEMBER ex Official)
Fa'aolesa Katopau T. Ainu'u	EPC Board Member and Chairman
Papalii Ryan	EPC Board Member
Fiu Peni Asi	EPC Board Member
Leiataua Daryl Clarke	EPC Board Member
Fanene Mark Betham	EPC Board Member
Ale Vena Ale	EPC Board Member
Fiu Taligi	EPC Board Member
Tupa'imatuna Iulai Lavea	Chief Executive Officer Ministry of Finance (EPC BOARD MEMBER & PSC CHAIRPERSON)
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 MWCSD (PSC MEMBER)
Vui Lance Lameko	Manager, Corporate Services, EPC (PMC MEMBER)
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Tagaloa Patricia Fruean	HR Manager, EPC (PMC MEMBER)
Amelia Fa'asau	Manager, Legal Department, EPC (PMC MEMBER)
Faumui Iese Toimoana	Manager, Utilization, EPC, (PMC MEMBER)
Sam Kava	Manager, ICT, EPC, (PMC MEMBER)
Masoe Tautua	Manager, Retail, EPC, (PMC MEMBER)
Amituanai Faimanu Tausisi	Internal Auditor, EPC, (PMC Member)

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1. EXECUTIVE SUMMARY

This is the Quarterly Progress Report No. 17 and it covers the project activities and progress for the 2nd Quarter 2012 from April 1 to June 30, 2012.

Here is a summary of the progress of each subproject at end of Quarter 2, 2012:

1.1 Core Subprojects

Hospital Feeder Upgrade Stage 1 – Contractor was Bluebird Ah LAL JV

- Project is complete.

Prepayment Meters – Contractor is A D Riley NZ Ltd

- Total number of Prepayment meters installed by ADR up to end of June 2012 is 19,616; 1,384 left to complete ADR's contract. Total number of PPM to be installed in ADR's contract is 21,000. Contract includes lowering of meters. Total of 3,845 meters have been lowered so far.
- There are 31,909 active meters at end of June; 22,932 Prepayment Meters and 8,977 still on induction meters.
- 71.87% of total active meters are on Prepayment; this leaves 3.13% to achieve project goal of having 75% of total number of active meters on Prepayment Meters.
- ADR repaired 1,064 defective meters with blank screen; 786 are contract meters and 278 EPC installed meters. They replaced a component in defective meters. It was thought this would solve the blank screen problem. But it didn't. EPC is very concern of the defect and have pressured ADR for a solution. Worse is that customers continued to receive power even if meters are blank screens. This is a loss to EPC of customers with this kind defective meters will continue to receive free power.
- Tests continued of an alternative prepayment meter from another supplier, Joy Electric Ltd Company. Test is if meter can work with tokens from existing vending system installed by A D Riley. If tests prove successful, this will give EPC another supplier of these meters.

Consultancy Services

- Implementation Consultant, Egis International, is continuing to complete Feasibility Studies of 5 hydro schemes and tender documents of 3 of the 5 schemes.
- PMU still has 2 individual consultants hired. Replacement of 3rd individual consultant who resigned was replaced with a local hired Distribution Engineer.
- PMU to submit to ADB proposal for additional consultants required to complete project.
- ADB approved to hire short term experts to assist with detailed commissioning of these subprojects; Fiaga power plant, SCADA, and Fuluasou Substation.
- ADB approved to fund as part of PSEP a short term individual consultant to conduct a Cost of Service and Tariff Study. Request for Proposal for solicitation will be issued soon.

1.2 Candidate Subprojects

Upolu Generation

1.2.1 Tanugamanono Plant Noise and Emission Controls

- No activity this Quarter.
- May not need to do this subproject because new Board of Directors approved to relocate all 4 base load generators from Tanugamanono power station to the new power station in Fiaga.
- New power station is built with only 3 generators to be relocated to Fiaga new power station. To also relocate 4th generator would require major redesign and construction work to accommodate the 4th generator.
- Main critical reason for keeping one generator in Tanugamanono is for backup to the main hospital and critical government facilities in middle of Apia, if transmission line from Fiaga power station to Fuluasou Substation and Tanugamanono is down on a fault. Main feeder which supplies power to main hospital and rest of critical facilities in Apia is connected to Tanugamanono power station.

Refurbishment of Alaoa Hydro Plant

- Project is complete.
- Plant is back in operation.
- One change order from civil contractor is approved. Change is for extra length of stairway they built alongside penstock to use by maintenance crew.

Fiaga Power Plant Lot A – Contractor is Blue Bird Ah LAL in association with Woods Pacific Ltd and Mitsubishi Heavy Industry (BBA/Woods/MHI)

- This project include; powerhouse, 4 new generators, drainage, ring road, single stack, water system, fire fighting system, wastewater system, workshops, electrical reticulation in power plant, fence, earth grid system, and water storage tanks.
- 70% of contract is completed.
- Commission of generator is scheduled at end of October this year.
- Installation of generators continued.
- 6 additional change orders were approved this quarter. This brings accumulated value of all change orders to 4.73% of original contract amount. There are still other change orders being considered.

Fiaga Power Plant Electrical Lot B – Contractor is North Power NZ Ltd

- This contract involves design, manufacture, supply, installation and commissioning of 415 volts, 11kV, 22kV, and 33kV electrical switchgear, 6 power generators, 2 local supply transformers, and backup generators.
- Installation is 90% complete. Remaining work is dependent on completion of work by others. Pre-commission tests are successfully completed with no problems.
- Tender Board also approved Change Order No 2 and submitted to Cabinet for approval.
- Change Order No 2 covers 110VDC and battery bank system and SCADA interface equipment.

Fuel Tanks – Contractor is Fuelquip NZ Ltd/GMA Construction Ltd JV

- Tank bunds are completed. All 6 tanks are completed, arrived and installed.

- Pipe work and pumps to connect tanks to power station is not part of contractor's contract. Variation for this is approved. Contractor preparing design and construction drawings
- Estimate completion is in October 2012.

Fiaga Access Road/Pipe/Fence – Contractor is Silva Transport Ltd

- Contract is complete and being closed out.
- Change Order No 2 is approved. This is for additional fill materials used for construction of road.
- Punch list of defects is prepared for contractor to fix.

Relocation of Generators 5A, 7A and 9A from Tanugamanono to Fiaga Power Plant

- Actual moving of the 3 generators has not started, but some of work associated with relocating the 3 generators to Fiaga has been done as part of Fiaga power plant.
- Bluebird Ah LAL JV, contractor for powerhouse, completed construction of foundation for the 3 generators.
- North Power NZ Ltd under Fiaga Power Plant Lot B contract supplied and installed 3 power transformers, cable racks and power cables. Also the 11kv switchgear circuit breakers for the 3 generators are included in 11kV switchgear for entire power plant. Work is done.
- PMU started preparation of tender for relocation of 3 existing generators.
- New Board of Director approved to relocate all 4 Mirrlees generators from Tanugamanono to Fiaga. Design and construction of Fiaga power station did not allow for the 4th generator to be relocated.
- Original decision to keep the 4th generator (Unit No. 12) was critical to provide backup for main hospital and Government critical office in Apia.

Hospital Feeder Stage 2 – by Bluebird Ah LAL JV

- 70% of construction is complete; worked stopped awaiting arrival of certain materials. Vaults are installed and connectors inside vaults installed and cables terminated and connected to connectors.
- North Power NZ Ltd will install terminations of underground cables of feeders to connect to new 22kv switchgear in Tanugamanono power station.
- Improvements included in this subproject are:
    a) Upgrade voltage Hospital Feeder from 6.6kV to 22kV;
    b) replace eighteen (18) 6.6kV transformers with 22kV transformers;
    c) replace the main 500 kVA transformer which supply the National Hospital
    d) Install two padmount Automatic Transfer Switches (ATS) at the National Hospital's two electricity supply points. ATSs enable two distribution feeders to be connected to the hospital substations so that if the primary feeder is off, the ATS will automatic switch to 2nd feeder;
    e) Replace the 22kV overhead lines of Hospital Feeder with 22kV underground cables from Tanugamanono power station to Savalalo;
    f) Construct a dedicated underground transmission line to connect the Samasoni hydro plant direct to Tanugamanono power station; and

g) Connect dedicated transmission line for Alaoa and Fale ole Fee hydro plants direct to 22kv switchgear in Tanugamanono power station instead of feeding through East Coast distribution feeder.

33kV Transmission Line – Construction by EPC

- This 33kV transmission line connects the new Fiaga power plant to the new Fuluasou Substation and continues to Tanugamanono power station. This line becomes the 33kV backbone transmission line that links power stations to substation. There are two 33kV circuits connecting Fiaga Power Plant to Fuluasou Substation; one underground and one overhead. Reason is to improve reliability of transmission line during major cyclone or earthquake. Line continued underground from Fuluasou Substation to Tanugamanono power station.
- Construction of 33kv overhead line started. Construction is done by EPC and supervised by Distribution Engineer. EPC introduced use of pre-stressed concrete poles for this important transmission line. EPC used to use wooden poles.
- Underground 33kv cables will be run inside Golf Course to Substation. Samoa Land Corporation approved to run underground cables inside the Golf Course fence.
- Materials started to arrive. Cables are expected to arrive in September. Factory testing of cable is scheduled on September.
- Consultations with affected people and survey of powerline route are finished.
- Total length of trenching for underground cable from Fiaga power station to Fuluasou substation 15 kilometers. EPC will contract out excavation and EPC crew only lay and install cables. .

22kV Underground Cables from Fuluasou Substation to Apia – by EPC

- Rest of materials supplied as part of 33kv TL contract. Contract has been awarded to 2 suppliers.
- Design of interconnection of customers along Vaitele Road is complete.
- Construction has not started.
- All conduits and vaults for this underground feeder have been built and installed under another earlier contract.

Fuluasou Substation – by North Power NZ Ltd

- Construction continued; about 50% of civil work and 50% of building and transformers bund are completed. Subcontractor is Fletcher Construction Ltd. All medium volt switchgear has arrived in Apia. Factory testing of all main transformers is done. There are tests that did not pass, manufacturer are resolving failed tests. Two PMU engineers attended FAT.
- EPC reduced scope and cost of this Contract. Replacing the Lalomauga hydro plant 22/33 kV substation for 33kV tie and interconnecting 33kV switchgear is taken out of contract. These changes are included in Change Order 1.
- CO1 is with ADB for their review and approval.
- NPL conducted computer modelling of EPC's electric network with addition of the Fiaga Power station 4 new generators. This will enable Mitsubishi to design protection system for the 4 new generators in Fiaga.

- Completed factory testing of transformers in Schneider's (supplier) factory Indonesia. EPC sent 3 engineers to witnessed tests. Transformers are now shipped due to arrive at end of August.

Low Voltage System Improvements (Upolu)

- Feasibility Study is approved by ADB.
- About 70% of materials have arrived; rest is ordered with 33kv line materials.
- Construction is carried by EPC.

22kV Overhead line Reconductoring – Contractor is GMA Construction Ltd

- Construction continued. Work is 55% complete.
- Work slowed down due to shortage of materials. Additional materials are ordered 33kv materials contracts. Contracts for supply of materials have awarded to INTRACOR and SOUTH AUSTRAL.
- Contractor filed a SAT$1,126,076.84 claim loss of revenue due to stoppage of work due to lack of materials. Acting Project Manager disapproved this claim twice. Contractor is now requesting dispute to taken to Adjudicator.

Refurbishment of Salelologa Power Station and construction of new power station in Vaiaata.

- Feasibility Study and Resettlement Plan have been submitted to ADB for review / approval.
- MOF approved Resettlement Plan.
- Evaluation report for consultant to conduct resistivity study is submitted to ADB for review/approval. ADB will not approve it until Feasibility Study is approved.
- EPC is considering to incorporate a bio-diesel plant (by others) in planning of power plant in Vaiaata. Bio diesel plant will be built and operated by somebody else, not EPC. EPC main involvement is buying bio fuel to use in power station.
- PMU decided to implement Salelologa Substation separately from Vaiaata Power Plant due to deteriorating conditions of electrical switchgear in Salelologa power plant and long implementation time of the Vaiaata power plant. PMU started to prepare bid for substation. Substation will be housed inside old power plant building.

Puapua to Asau 22kV (Savaii) overhead line upgrade – Contractor is Tenix NZ Ltd

- Project is 100% complete.
- There is still a section of HV powerline (102 spans) that conductors need replacing. Materials for reconductoring of these additional spans are ordered with 33kV line materials. Work will be done by EPC crew.

Stream Flow Gaging & Test Equipment

- Project is 100% complete.
- Stream gauging station in Tiavea is shutdown and equipment removed. Adequate data has been collected.

Refurbishment of Generators 7A and 9A in Tanugamanono Power Station – Contractor is MAN Diesel Australia Ltd

- Contract is complete with recent commissioning of generator 7A. A new crankshaft was installed in 7A as well as major overhaul. Unit 7A replaced Unit 5A in original contract to overhaul generators 9A and 7A.

SCADA – Schneider Electric Ltd

- Contract is awarded to Schneider Electric Ltd. Contract agreement is signed.
- Design work starts.
- Schneider engineers visited on April 10 - 13 to start data collection and finalize contract agreement.
- Signing of contract is delayed due to a few legal and technical issues. PMU / Office of Attorney General continued to work on contract.

Vending System for Prepayment Meters

- EPC and National Bank of Samoa launched a new system this year for customers to buy top up tokens by a texting system to NBS and payment of token is deducted direct from customer account in NBS. Cost of each transaction is 1 Tala, and is paid by customer. Money collected is automatically deposited in EPC account with NBS. Already 1000 new customers have signed up with NBS for this new service.
- A new prepayment meter from another supplier is being tested if can work in existing vending system. If it works, this will give EPC an option of another supplier.

Taelefaga, Lalomauga, and Samasoni Hydro Plants and Tanugamanono Power Station 22kv Switchgear Refurbishment

- Contract is 100% complete. Plants are back in operation.

Hydro Development

- Hydro development of schemes in Savaii and Upolu are combined under this subproject.
- Implementation Consultant (Egis International) continued with preparation of Feasibility Studies of 5 hydro schemes; which are: Faleseela, Fuluasou, Tiapapata, and Tafitoala on Upolu and Faleata-Palauli on Savaii. They are also preparing design built tenders of 3 schemes (Fuluasou, Faleseela, and Tiapapata).
- Summary of capital costs and annual electricity generated from each of the 3 selected schemes. There isn't enough funding in the present budget to build all 3 schemes. Additional funding is needed.

Hydro Schemes	Installed Capacity MW	Annual Generation kWh million	Capital Costs US$million.
Fuluasou	1.15	4.061	$13.057
Tiapapata	0.6	3.478	$6.177
Falese'ela	0.5	1.776	$4.910
Total	2.25	11.315	$24.144

Vaipu Pump Scheme

- Decision from ADB and EPC to start implementation of this project is still pending.
- ADB funded study under a Technical Assistance TA: 7121 SAM – ***Afulilo Environmental Enhancement Project*** Phase 1 Report by SMEC is complete. Report has been reviewed

and discussed by various Government agencies. EPC is presently planning to conduct consultation with 6 villages of Fagaloa District to present findings of the Study.

- Unpleasant smell of hydrogen sulphide odour generated at Afulilo Dam continues to be of major concern to the people of the village of Taelefaga where the discharge water from the hydro plant flow through. Kids affected by the smell ended up in hospital from vomiting and headache.
- EPC has decided to implement recommendations of Study Report to mitigate the smell. A new subproject outline to implement these recommendations will be submitted to EPC Board for approval. It is also brought to ADB for their review and approval.
- Plan is to: 1st install concrete pipes in the ocean to pipe the water from hydro plant to discharge in deep part of bay. 2nd is install pumps or air compressor to improve the circulating of deep water in dam up on surface to expose to oxygen.
- A USD$300,000 is left over from the TA used for SMEC study. ADB is requested to reprogram this money towards the budget for implementation of remedy to the odour problem.

Taelefaga Hydro Plant Governor System Replacement

- Revised Evaluation Report was submitted to ADB for final consideration.
- ADB and Government granted approval to award contract to North Power NZ Ltd for total price of US$914,967.75 or SAT$2,091,354.86.
- Contract replaces existing control system of two hydro generators in the Taelefaga hydro station.

Training

- This is subproject of its own, with a budget of US$0.235million.
- EPC Board approved outline of this subproject; budget is US$0.235 million.
- PMU is preparing Training Plan
- Plan will include setting up a computer based Asset Management Program (AMP) to plan, schedule and manage maintenance of all facilities. PMU reviewed an existing maintenance schedule that was used by EPC if suitable for AMP.
- PMU prepared bid for installation of Asset Management Program, bid has not been issued until evaluation of an existing program is done.
- It also include of EPC linemen, mechanics, SCADA technicians and engineers, and operators and power system controllers.

PMU Staffing

- Project Manager's position is still vacant. Generation Engineer Consultant continued as acting project manager. EPC advised position locally and internationally. Interview has been done.
- All positions are now filled except for PM.
- PMU to submit proposal for additional consultancy services needed to see PSEP to completion.
- EPC hired Distribution Engineer for PMU. 30 EPC linemen are also assigned work under PMU for construction of power distribution subprojects. This include: 33kv underground transmission line from Fiaga power station to Fuluasou substation, 33kv overhead transmission line from Fiaga power station to Fuluasou substation, 33kv underground

transmission line from Fuluasou substation to Tanugamanono power station, 22kv overhead distribution line from Fiaga power station to Fuluasou substation, 22kv underground feeder from Fuluasou substation to Apia, connecting Samasoni hydro 22kv transmission line to Tanugamanono power plant, connecting Alaoa/Fale ole Fee hydro transmission line to Tanugamanono power station and other powerline work.

- ADB concurred to conduct EPC cost of service and tariff study and funded under PSEP loan.
- ADB also concurred to hire short term experts for commissioning of Fiaga power plant, SCADA and Fuluasou Substation.

Investment Plan Revision

- Revised Investment Plan is submitted to ADB for approval. Same plan has been approved by Project Steering Committee, and Project Management Committee.
- Project original Plan had 19 subprojects. 11 new subprojects were added under the same budget. No subproject was dropped.

Financial Report at end Quarter 2, 2012

Financial Report to end of 2nd Quarter 2012		
No.	**Details**	**Amounts in USD**
1	Total Project Budget	USD$100 million
2	Total Amount Obligated/Committed	USD$79.156 million
3	Total Claimed (Withdrawal Application)	US$54 million
4	Total Amount Already Disbursed (Loan+Grant)	US$51.675 million
5	Total Amount Paid Out from: ADB Loan ADB Grant JICA Loan AusAid EPC (US$4.5m include interest payment during construction of SAT$2.8million, Principal repayment has not started until 2013 or 5 yrs from start of project in May 2008)	US$15.3 million US$ 6.4 million US$22.9 million US$ 6.6 million US$ 4.5 million
6	Original Funding Sources: ADB Loan ADB Grant JICA Loan AusAid Grant EPC	 US$26.61 million US$15.39 million US$38.00 million US$8.00 million US$12.00 million

Notes:

1. ADB informed Govt. and EPC during their Mission in May of an increase of US$18 million of JICA's contribution to Project. EPC will provide a list of subprojects to use this fund on.
2. ADB Mission preferred to keep hydro development subprojects in PSEP under a different development package to seek funding from other sources.

EPC Funded Projects

These subprojects which are also managed and implemented by PMU are funded under EPC's local budget:

Generator No. 5A major overhaul – TBA (pay to EPC)

- Overhaul was bided out. Evaluation report was approved by EPC Project Management Committee and Board.
- ADB and Government approved award of contract to MAN Diesel Ltd for price of AUD$274,114.23 or SAT$682,046.98.

Salelologa No. 8 and 9 Major Overhaul

- EPC did not go ahead with major overhaul. EPC is consideration other options to improve generation in Salelologa before completion of new power station in Vaiaata.

RENEWABLE ENERGY

Solar Samoa Ltd

- Power Purchase Agreement between SSL and EPC has been signed. Project will be launched in July with first 1MW installation in Faleolo Airport.
- PPA has been approved by the Regulator.

BIOGen3

- There has been a long delay due to approval of Environmental Impact Assessment (EIA).
- Company had plans to import power millet to raise here for feed stock for gas manufacturing. MNRE/PUMA did not approve. Company proposed giant grass instead. Approval is being processed as part of EIA.
- As a starter, Company plans to import glycerine grade liquid fuel to run the generators first awaiting production of gas. Company is seeking land on Apia Wharf to build storage tanks for the imported glycerine. This has not been approved.
- Company said they secured a 10 acre block in Nuu for the plant. We have not received confirmation.

JICA 400kw Solar Project

- This project is funded by a US$3.6M grant from Japanese Government to all Forum Countries.
- Main condition is that the (i) main contractor MUST be a Japanese incorporated company; (ii) all major components of the PV systems must be Japanese made and brand; and (iii) Major components are: solar panels, inverters, and power transformers and switchgear.
- Project involves installation of 400kw or more of total capacity solar systems to generate electricity and feed into EPC's grid.

- Bid for construction is advertised. Bid closes on 27 of August 2012.
- There are 3 EPC sites considered for installation. They are Vaitele Depot, Tanugamanono power plant, and Salelologa power plant sites.
- Prebid meeting is completed. There are a few bidders who took bid documents.

ProCom Solar PV System Proposal

- Received proposal from ProCom for installation of a 3.5MW Independent Power Producer (IPP).
- Cabinet approved for National Energy Coordinating Committee (NECC) to investigate ProCom proposal whether it is needed by EPC.
- EPC main concern of too much solar generation is the impact on system stability. Total solar generation should not exceed 20% of EPC's noon peak. The 20% limit in solar generation capacity is already maxed out with Samoa Solar Ltd's 3-4MW proposal. So EPC cannot approval anymore solar PV system connected to EPC grid.
- ProCom original offered a feed in tariff of 57 sene/kWh; later they raised to 65 sene/kWh.
- EPC notified National Energy Committee that EPC cannot approve to connect any more Solar System to grid. 20% limit of system noon peak has maxed out with Samoa Solar Ltd installations.

Renewable Energy Systems Interconnection to EPC system

- Draft Rules/ Regulations for interconnection agreement has been submitted to Power Regulator and Attorney General for their review and comments. Received Regulator comments.
- Same with interconnection agreement also submitted to Regulator and AG.

Biodiesel

- NECC approved to ask developer to provide a formal proposal on setting up bio diesel plants in Samoa.

Expressional of Interest (EOI)

- National Energy Coordinating Committee (NECC) of Government approved to issue EOI for investment for development of renewable energy. EOI is for (i) development of biodiesel, (ii) solar hybrid systems with storage batteries for generation of electricity,

Withdrawal Applications

Table 1 below provides a summary of Withdrawals Application and Disbursements at end of 2nd Quarter 2012:

WITHDRAWAL APPLICATIONS AND DISBURSEMENTS AS AT 30TH JUNE 2012

PROJECT/ CONTRACTS	CONTRACT NO'S	ADB LOAN - LOAN 2368		ADB GRANT - ADB 0087		AUSAID GRANT - AUS 0101		JICA LOAN - L8232 / SAM-P1			EPC				
		US$ Equivalent	Value Date	US$ Equivalent	Value Date	US$ Equivalent	Value Date	US$ Equivalent	Value Date	TOTAL DISBURSED FUNDS - LOANS+GRANT	COUNTERPART FINANCING	TOTAL PAYMENT PER PROJECT	TOTAL BUDGET PER PROJECT	VARIANCES ($)	VARIANCES (%)
TOTAL PROJECT FUNDS		**26,610,000**		**15,390,000**		**8,000,000**		**38,000,000**		**88,000,000**	**12,000,000**	**100,000,000**	100,000,000		
PROJECT MANAGER		0		52,937		0		0		52,937	323,441	**376,378**	**750,000**	***373,622***	***50%***
IMPLEMENTATION & INDIVIDUAL CONSULTANTS				2,367,934		0		0		2,367,934	272,312	**2,640,247**	**3,181,458**	***541,211***	***17%***
SINGLE AND THREE PHASE PREPAYMENT METERS		1,612,483		358,799		769,557		2,430,087		5,170,926	336,110	**5,507,036**	**6,142,688**	***635,653***	***10%***
HOPITAL FEEDER STAGE ONE, ALAOA AND PUAPUA FEEDER		409,111		91,736		196,500		620,752		1,318,100	85,676	**1,403,776**	**1,893,637**	***489,861***	***26%***
REFURBISHMENT OF ALAOA HYDRO POWER STATION - MECHANICAL ELECTRICAL		412,509		93,131		199,566		640,576		1,345,781	87,476	**1,433,257**	**1,697,378**	***264,121***	***16%***
REFURBISHMENT OF ALAOA HYDRO POWER STATION - CIVIL WORKS		125,995		14,180		30,293		133,775		304,244	95,837	**400,080**	**503,029**	***102,949***	***20%***
MEASUREMENT EQUIPMENTS & POWER SYSTEM PLANNING SOFTWARE		40,415		9,132		19,568		62,199		131,314	8,535	**139,850**	**170,497**	***30,647***	***18%***
REFURBISHMENT OF SWITCHGEARS - TAELEFAGA/LALOMAUGA/SAMASONI/T/NONO		820,401		185,172		396,631		1,289,128		2,691,331	174,937	**2,866,267**	**2,861,391**	***(4,877)***	***0%***
REFURBISHMENT OF T/NONO GENERATORS 9A AND 7A		393,872		192,413		87,059		603,895		1,277,238	83,020	**1,360,259**	**1,677,825**	***317,566***	***19%***
CASHPOWER - VENDING SYSTEM REIMBURSEMENT		28,466		6,428		13,774		43,158		91,825	5,969	**97,794**	**91,825**	***(5,969)***	***-7%***
HOSPITAL FEEDER STAGE 2 & 22Kv UPGRADING		1,556,140		344,766		739,050		2,343,089		4,797,608	311,845	**5,109,453**	**7,040,000**	***1,930,547***	***27%***
22Kv UNDERGROUND CABLE - FULUASOU SUBSTATION TO APIA WHARF AREA		687,279		368,868		112,656		1,030,988		2,199,791	142,986	**2,342,778**	**2,314,104**	***(28,674)***	***-1%***
FIAGA DIESEL POWER STATION		8,804,992		2,026,286		4,020,462		13,214,284		28,066,024	2,074,292	**30,140,316**	**35,305,078**	***5,164,762***	***15%***
33Kv - FIAGA PS TO FULUASOU SS TO TANUGAMANONO PS		334,418		242,177		0		498,086		1,069,381	569,510	**1,638,891**	**5,690,000**	***4,051,109***	***71%***
FULUASOU 22KV SUBSTATION		664,432		470,858		0		1,031,860		2,167,150	140,865	**2,167,150**	**3,680,000**	***1,512,850***	***41%***
UPOLU LOW VOLTAGE		77,300		17,454		37,402		118,062		250,218	16,264	**250,218**	**250,218**	-	***0%***
TOTAL DISBURSEMENTS AS AT 30TH JUNE 2012		**15,303,380**		**6,371,413**		**6,622,518**		**23,028,079**		**51,134,652**	**4,588,210**	**55,706,598**			
% OF FUNDS ALREADY DISBURSED		***58%***		***41%***		***83%***		***61%***		***58%***	***38%***	***56%***			
REMAINING PROJECT FUNDS AS AT 30TH JUNE 2012		**11,306,620**		**9,018,587**		**1,377,482**		**14,971,921**		**36,865,348**	**7,411,790**	**44,293,402**			
% OF REMAINING PROJECT FUNDS		***42%***		***59%***		***17%***		***39%***		***42%***	***62%***	***44%***			
TOTAL FUNDS ALREADY COMMITTED FOR AWARDED CONTRACTS		**19,747,000**		**9,240,000**		**7,969,000**		**34,200,000**		**71,156,000**	**8,000,000**	**79,156,000**			
% OF FUNDS ALREADY COMMITTED FOR AWARDED CONTRACTS		***74%***		***60%***		***100%***		***90%***		***81%***	***67%***	***79%***			
REMAINING PROJECT FUNDS AVAILABLE FOR NEW PROJECTS		**6,863,000**		**6,150,000**		**31,000**		**3,800,000**		**16,844,000**	**4,000,000**	**20,844,000**		-	-
% OF FUNDS AVAILABLE FOR NEW PROJECTS		***26%***		***40%***		***0%***		***10%***		***19%***	***33%***	***21%***			

2. INTRODUCTION

This is the Quarterly Progress Report No. 17 and it covers the project activities and progress for the period from beginning of April to end of June 2012 (2nd Quarter 2012 Progress Report).

This Report provides progress report of each subproject highlighting work completed to date, problems encountered and planned solutions. It also provides financial situation of Project, of total funds obligated, claims received, withdrawal application processed and submitted to ADB and amount of money paid to contractors. It also gives status of spending.

3. PROJECT IMPLEMENTATION

3.1 Project Management Unit Staff Movement

PMU has a total of 22 staff; 20 EPC local staff and 2 ADB recruited Individual Consultant engineers (Civil and Generation Engineers).
Total staff includes: 1 Project Manager (vacant since July 2011), 3 Engineers, 4 Graduate Engineers, 1 Mechanical Supervisor, 1 Project Accountant, 1 Attorney, 1 Social and Land Resettlement Staff, 1 Environmentalist, 1 Public Relation Staff, 1 Secretary, a driver, 1 linemen assistant, 1 Store-person and 3 store assisting staff, and 2 Renewable Energy staff. RE section is now incorporated as part of PMU. A JICA engineer was with PMU for 3 months assisting with SCADA project. .

EPC hired a local Distribution Electrical Engineer to replace the International TD engineer who resigned after 4 months of work here. 30 EPC linemen were also assigned to work with PMU for construction 33kv transmission line from Fiaga power station to Fuluasou Substation and to Tanugamanono power station. They also completed other power distribution subprojects under Power Sector Expansion Project.

The Project Manager position is still vacant. Newly hired Generation Engineer has been acting Project Engineer since beginning of this year. It is critically important the appointment should be made as soon as possible.

PMU staff:

Generation engineer/Acting Project Manager
Generation Electrical Engineer,
TD Electrical Engineer, locally hired and to join PMU in start of 3rd Quarter.
System Planner Graduate Engineer,
SCADA/Graduate Engineer,
Civil Engineer
Electrical Graduate Engineer,
Civil Graduate Engineer,
1 Environmentalist
1 Land Resettlement Specialist,
1 Legal Advisor,
1 Public Relation Coordinator,
1 Project Accountant,
1 Secretary,
1 Administrative Assistant / Store Keeper,
1 Lineman, and 3 Store assistants, and
1 driver.

3 Meter inspectors were transferred back to EPC's Utilization Section.

Fifteen (15) subprojects were under construction this quarter. The status of construction of each subproject at end of 2nd Quarter 2012:

1. Access road and water pipeline to Fiaga new power plant – 100% complete.
2. Construction of security fence around Fiaga property – 100% complete.
3. Upgrading of the Hospital Feeder to 22kv and undergrounding medium voltage cable from Tanugamanono power plant to Apia – 80% complete.
4. Reconductoring of all 22kv overhead line feeders in Upolu – 60% complete.
5. Civil work of refurbishment of Alaoa hydro plant – 90% complete; work that can be done.
6. Reconductoring of Puapua to Asau 22kv Overhead line – 100% complete.
7. Fiaga power plant fuel and oil storage tanks and off loading facility – 60% complete
8. Construction of Alaoa and Fale ole Fee hydro plants dedicated 22kv transmission line from the hydro plants to Tanugamanono power station is in progress – 80% complete
9. Construction of Samasoni hydro plant dedicated transmission line to Tanugamanono power station is in progress – 80% complete.
10. Refurbishment of the 9A and 7A generators in Tanugamanono – 100% complete.
11. Fiaga New Power Plant and Generators Lot A – construction of power house is 90% completed, installation of generators 60% complete, civil work (road, drainage, fence, etc) 60% complete, water tanks, collection, and water distribution system 60% complete.
12. Fiaga Power Plant MV Electrical Switchgear Lot B – switchgear installation and pre-commissioning testing is 95% complete.
13. Construction of 33kv overhead transmission line from Fiaga power plant to Fuluasou substation started with training on handling and setting up of pre-stressed concrete poles. Underground 33kv line has not started, waiting on arrival of cables and materials. Work is done by EPC. 30 EPC linemen are assigned to this project and other power distribution projects. 33kv line continues to from Fuluasou to Tanugamanono.
14. 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 were ordered and started to arrive. Cable installation has not started – 0% complete.
15. Prepayment meters – 91.29% of meters under A D Riley's contract have been installed. Defective meters with blank screens continued to rise. Defective meters with blank screens are the biggest concern on this project. Worse, is customers with blank screen meters continue to receive electricity without paying top up. Contractors have been asked many times to fix problem. Factory of these meters have not come up with a technical solution.

3.2 PMU Actual Personnel Movement during 2nd Quarter and Plan for 3rd Quarter

		2nd QUARTER 2012 ACTUAL		3rd QUARTER 2012 PLAN		
NAME	**DESIGNATION**	**START**	**FINISH**	**START**	**FINISH**	**COMMENTS**
Fonoti Perelini	Acting Project Manager & Individual Consultant Generation Engineer	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Taulealea Aumalaga Tiotio	Transmission& Distribution Engineer	1 April 2012	Jun 30, 2012			Appointed as Deputy General Manager Operation and left PMU.
Tupai Mau Simanu	Generation Electrical Engineer	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Nuulopa Pereira	Graduate Engineer - Power System Planner	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Faalepo Solofa	Project Accountant	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Mathew Lemisio	Legal Environment Advisor	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Seukeva Asi Tuuau	Land Acquisition DFC Specialist	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Moetuasivi Asiono	PRCS	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Iosefa Aiolupo	Environmental Specialist	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Raema S. Adam	Graduate Engineer – SCADA	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Was away on maternity leave for most of 2nd quarter, but will return to work in 3rd quarter.
Roberto Pamingtuan	Individual Consultant Civil Engineer	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Sila	Electrical Inspector	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Transferred to EPC Utilization Section in 2nd quarter.
Oikumene	Apprentice	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	To transfer to EPC Utilization Section in 3rd Quarter.
Posi Moe	Linesman	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter

Elisapeta Collins	Secretary	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Alfred Matatia	Graduate Civil Engineer	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
John Rimoni	Graduate Electrical Engineer	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Penelope Tupuola	Project Assistant/Store keeper	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Venisini Iese	Storeman	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Iosefa Leota	Storeman assistant	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter
Puleia Tuiloma	Storeman assistant	1 April 2012	Jun 30, 2012	1 July 2012	Sept 30, 2012	Will be available for whole 3rd quarter

3.3 Implementation Consultants Personnel Movement

The Implementing Consultant (Egis International) remaining task under their contract is completion of feasibility studies of 5 hydro schemes and tender documents of 3 schemes. Only 3 experts are involved in this remaining task. Completing this task is late.

There was little progress during this quarter in completing FS and tenders. Project Manager is putting pressure on IC to complete the FS and tenders.

Table below provides number of days worked in each month and combined for 2nd Quarter 2012 for each of IC personnel and remaining man months.

	Team Members	Contract person-mnths Q4 2011	Person-mnth worked in Q2 2012	Remaining man- months
	Hydro Expert	0.526	0	0.481
	Civil Engineer	0.89	0	0.604
	Environmentalist	(0.37)	0	0
	Social and Land Resettlement	(0.1)	0.37	0

3.4 Egis International Personnel Movement during this Quarter and Plan for next Quarter

		2nd QUARTER 2012 ACTUAL		PLAN for 3rd QUARTER 2012		
NAME	**DESIGNATION**	**START**	**FINISH**	**START**	**FINISH**	**COMMENTS**
Dominique Giraud	Hydro Expert & Coordinator	1 Apr 2012	31 Jun 2012	1 Jul 2012	30 Sept 2012	Continued working to complete feasibility studies of 5 hydro schemes.
Peri Perelini	National Civil Engineer	1 Apr 2012	31 Jun 2012	1 Jul 2012	30 Sept 2012	Continued working to complete tenders of 3 schemes.
Sam Sesega	National Environmentalist	1 Apr 2012	31 Jun 2012	1 Jul 2012	30 Sept 2012	Continued working to complete feasibility studies of 5 hydro schemes.
Sam Sesega	National Resettlement Specialist	1 Apr 2012	31 Jun 2012	1 Jul 2012	30 Sept 2012	Continued working to complete feasibility studies of 5 hydro schemes.

3.5 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. Refer to Appendix 2 for Project Monitoring.

A. Core Subprojects:

1. Hospital Feeder Upgrading Project Stage 1

Project is complete.

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

A total of 218 prepayment meters were installed during 2nd Quarter; 29 are new installations and 189 conversions from induction to prepayment meters. This brought the total number of meters installed under this contract at end of the 2nd Quarter is 19,722 or 93,91% of 21,000 meters to be converted under this Contract in AD Riley Contract.

Total number of active meters at end of 2nd Quarter is 31,909; made up of 22,932 prepayment meters and 8,977 induction meters. This brings total percentage of customers with prepayment meters to 71.87% or 3.13% short of target is 75%. Remaining meters to be installed by A D Riley will bring total percentage to 75%. All new installations are installed with prepayment meters.

Besides converting to PPMs, contractor also lowered the meters; 36 meters were lowered to 1.6 meters this 2nd Quarter bringing the total number of meters lowered to 3,715.

Most CRITICAL issue with this Contract of installing Prepayment meters is:

- Blank screen defective meters is still unresolved. A D Riley has been replacing defective meters under warranty. But main concern is that customers with blank screen meters continue to receive power with topping up their meter with more credit resulting in loss of revenue. ADR have not found a solution on this defect. EPC has written strong letters to ADR related to issue. EPC will eventually claim from ADR its loss of revenue due to blank screen meters.

A D Riley had two technicians here in May to carry out repairs to 786 contract meters and 278 meters installed by EPC. These meters had blank screens. An electronic component was replaced in all these defective meters. However, the repair didn't eliminate defect which caused blank screens.

At end of this 2nd Quarter 2012, a total of 19,616 meters have installed by ADR under their contract, leaving 1,384 meters remained to be installed to complete their contract.

Table below shows meters installed during the 1st and 2nd Quarter 2012:

No.	Subcontractors	Total installed since start	Meters installed in Jan 2012	Meters installed in Feb. 2012	Meters installed in Mar. 2012	Meters installed in Apr. 2012	Meters installed in May. 2012	Meters installed in Jun. 2012
1	All Electrical	5,201	0	0	0	0	0	0
2	McLean Electrical	9,278	113	152	60	51	106	69
3	Telecom. Tronics Ltd.	5,243	0	0	0	0	0	0
Total meters installed each month		19,722	113	152	60	51	106	69

Breakdown below are meter lowered during 1st Quarter of 2012 and 2nd Quarter of 2012:

Categories	Cable length	Q1 – 2012 Quantity	Q2 – 2012 Quantity
1	0-5 meters	57	68
2	5-10 meters	6	14
3	➢ 10 meters	4	6
4	no cable needed	0	0
	Lowered during maintenance	0	0
	Total meters lowered	70	95

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

Only 3,715 meters have been lowered so far by ADR. This is 19.38% of total number of meters converted plus new ones (or 19,171 at end of 4th Quarter) installed by A D Riley under its present contract. So there are still about 81% of the 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.

B. Candidate Subprojects:

1. Upolu

a. Generation

(i). Tanugamanono Power Station Noise & Emission Control

No activity.

(ii). Refurbishment of Alaoa Hydro Power Station

Completed.

(iii). Fiaga Diesel Power Station

Powerhouse and Generators (Lot A)

Bluebird Ah LAL JV/Woods/MHI continued with construction of powerhouse. About 90% of building is complete. Installation of generators and all associated equipment continued. 5 change orders were approved. This includes; water tanks, external water system, extra excavation, and strengthening of floor of switch room. There are additional change orders under review.

Fiaga power station electrical switchgear (Lot B)

North Power NZ Ltd completed 95% of construction and installation of all electrical switchgear, and transformers and testing. Final installation will be done when Bluebird Ah LAL JV completed electrical installation of generators. This includes power cables from generators to11kv switchgear. One change order was approved for upgrade of DC system and supply and installation of SCADA interface equipment. They filed two claims for cost for not accessing site during Easter weekend and extra storage cost due to delay in accessing the switchgear room to install generators. Project Manager disapproved both claims.

Fiaga Access Road, Water Pipeline and Fence

Project is complete. The only outstanding item is approval by ADB and Government of Change Order No 2 for supply of base course materials for construction of road. It is now approved and official closure of project is now being processed.

Fiaga Pumped Water Source

Tender is prepared to pump water from Samoa Water Authority's water system to Fiaga power plant. Bid is with ADB for approval. SWA system is 4 km away from the power plant and an elevation climb of about 250 meters. Because of the high elevation of the power plant at 520 meters, it requires 4 booster pumps to pump water to the power plant. Sites of 4 pumps are selected and a consultation with Samoa Land Corporation who owns the land and lessees is underway.

(iv) Refurbishment of 9A and 7A Generators at Tanugamanono Power Plant
Project is complete and both generators are back in operation. .

(v) Taelefaga, Samasoni, and Lalomauga hydro plant and Tanugamanono power station new 22kv switchgear
Project is complete.

b. Transmission

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

(ii). 33 kV Underground Cable from Fiaga Power Station to Fuluasou Substation
Materials for this project started to arrive. There are two suppliers; INTRACOR and South Austral. The 33kv transmission line has 2 circuits; underground and overhead. This will improve reliability of this critical line against cyclones and earthquakes. Construction of overhead line by EPC crew started.

(iii). Hospital Feeder Upgrading Stage 2
This project is under construction; 80% of work is completed. Remaining work is energizing of cable and replacement of 18 x 6.6kv transformers with 22kv ones. Same subproject included; Samasoni hydro underground transmission line and connection to Tanugamanono power station of Alaoa/Fale O le Fee transmission line. Conduits and underground feed to main hospital 2nd substation.

(iv) 22kV Fuluasou Substation
This project is under construction. Construction by subcontractor, Fletcher Construction continued and is progressing well. Building and civil work (road, drainage, transformer bunds, etc) is 60% complete. Switchgear arrived and is being stored until moved into building. Shipping delayed some of materials for construction.

One change order which reduces scope and adding some other items of contract has been approved by ADB and Government. We took off replacing of 33kv tie substation in Lalomauga hydro plant. PMU is preparing tender for construction of river bank protection rock rep rap; this is not part of North Power's contract. Construction will be scheduled during dry season next year.

(v). Upolu Low Voltage Network Improvements
Construction has not commenced. 50% of materials have been received. Remaining 50% is included with rebid materials. Construction will be done by EPC.

(vi). Fuluasou Substation to Apia Wharf Area 22kV Underground Cable
Installation of cable and equipment has not started. Cables and materials are arriving. Conduits and vaults for this project from Lepea bridge to Apia is already laid as part of the main Vaitele road. There is a 1.7km section from Fuluasou substation to Lepea bridge that has not been done. Excavation of this 1.7km is included as part of another contract which included the 33kv underground cable.

(vii). 22kV Overhead Conductor Upgrading Program
This project is under construction. Contractor, GMA Construction Ltd, continued with construction. About 60% of work is completed and invoiced. This contractor submit a claim of about SAT$1.1M for loss of revenue from September 2011 to February 2012 due to shortage of materials according to them. Acting Project Manager disapproved this claim twice. Dispute is now transferred to Adjudication Process. This is contractor who hired 17 linemen from EPC. Linemen returned to EPC in July 2011. This greatly affected its work production because they did not have qualified linemen and engineer to perform.

2. Savaii

a. Generation

(i) Hydropower Scheme
Savaii hydropower scheme is included under 'Hydro Developments'. One Savaii hydro scheme is included. This is scheme in Faleata, Vailoa, Palauli. Sili Scheme is on hold.
Only activity this quarter is completion of Feasibility Study by Egis International, Implementation Consultant.

b. Distribution

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

Project is complete. No work on this subproject this Quarter.

There are still some sections of distribution system (102 spans of 22kv lines) with conductors that needs replacing with larger ones. Poles and other items will be replaced at same time. Materials are included in rebid materials. EPC will do the work.

(ii). Power Factor (PF)
Completed.

(iii). Low Voltage Network Improvement Program in Savaii
Materials are ordered and received. Work has not started.

3. Measurement Equipment:

(i). Steam Flow Gauging Equipment
Completed.

(ii). HV Testing Equipment
Completed.

SCADA
Contract started; contractor is Schneider Electric (Australia) Ltd. Completed field survey and study of option of network. Continued with design.

NEW SUBPROJECTS
Listed as follows are approved new subprojects:

(i). Public Dissemination
On going.

(ii). Vending System Expansion
System is in operation.

Only activity is testing of a prepayment meters from Joy Electric Ltd supplier if they work on current vending system. Also getting ITRON manufactured meters to undergo same tests. If successful, this will give EPC other suppliers to buy meters from.

(iii). Power System Planning Software
On-going updating of system as changes are completed.

(iv). Refurbishment of Salelologa Power Station
New power plant is built in Vaiaata, not Salelologa. Only substation and mini control centre is located in Salelologa depot. ADB approved FS and Resettlement Plan. Due to deteriorating conditions of existing electrical switchgear in Salelologa and long delay in completing Vaiaata Power Plant, it was decided to separate bid for Salelologa new substation from Vaiaata Power Plant bid. Tender for Salelologa Substation was prepared and submitted to ADB for final review before issuing bid.

Resistivity study is carried out in Vaiaata site. Similar geotechnical study will be carried out.

(v). Refurbishment of Taelefaga and other power plants 22kV Switchgears
Project is complete.

(vi). Refurbishment of Tanugamanono Diesel Generators
Involves Unit 9A and 7A. Refurbishments are completed. Contract is closed out.

(vii). Vaipu Pumping Scheme
No decision on this yet if to go ahead.

$300,000 is left over from ADB Technical Assistant used for SMEC study on Afulilo. Request is with ADB to reallocate this fund for implementing of solution to odour problem from water from Afulilo Dam that discharges from Taelefaga hydro plant. There is a separate mitigation subproject to solve smell problem. Tender is prepared.

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4. RISKS AND ISSUES

A. PMU Organization Structure
No further action is needed. PMU continued with present organization structure.

B. Staff Recruitment
Project Manager's position is vacant since middle of 2011; position and is being advertised locally and internationally. A local TD engineer is hired. .

C. Prepayment Meters
Major issue is blank screen defective meters that is continuing to increase. Contractor is yet to find a solution even though they are replacing defective meters as part of guarantee. But

worse problem is customers with blank screen meters continuing to receive power without topping up their meter.

D. Vending and Card System

There are no issues. Tests of prepayment meters from other suppliers if working on vending system is on-going. Two new suppliers provide test samples.

E. Fiaga Power Plant Access Road, Pipeline and Fence

Only outstanding item was approval of final Change Order No 2, which was finally approved by ADB and Government. Contract Agreement addendum is in process. Project is complete and is being closed out.

F. Land transfer to EPC

Official transfer of 97 acres in Fiaga and 100 acres in Vaiaata for new power plants is still outstanding. A third piece of land (5,059 square meters) in Tuanaimato for the Fuluasou substation was approved by Minister of Environment to be used by EPC. Samoa Land Corporation also approved lease of four 20m x 20m lots of access road to Fiaga Power Plant to install booster water pumps.

G. Claims against EPC

There are two contractual claims against EPC. One is from GMA Construction Ltd with 22kV overhead line reconductoring. Claim is for lost of revenue when work slowed down due to shortage of materials. Total claims is SAT$1,126,076. Acting Project Manager disapproved claim twice. Case is now refereed to Adjudication. Our counter arguments are: GMA did not have qualified linemen since 17 EPC linemen returned to EPC; contract is for work completed; some qualified is excessive; contractor delayed work from beginning as they were finding some qualified linemen and engineer.

Second claim is from North Power NZ Ltd for extra cost associated with their contract of Fiaga Power Plant Lot B. Extra cost is for additional storage charges due to delay in completion of switchgear room in Lot A contract for construction of powerhouse. Second part of this claim is extra cost for non accessing power plant during public holiday during Easter weekend.

Again, Acting Project Manager disapproved claims on ground they supposed to coordinate work with power house contractor.

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 reactivated service order tracking system in Daffron System to track all customers requests..
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	Baseline SAIDI established on 3rd Quarter 2008: Annual SAIDI for Upolu: 1515 min Annual SAIDI for Savaii: 2622 min Quarterly SAIDI for Upolu: 379 min Quarterly SAIDI for Savaii: 656 min 2nd Quarter 2012 SAIDI: Total Annual SAIDI for Upolu: 380 Annual Unplanned SAIDI Upolu:104 Annual Planned SAIDI Upolu: 276 Total Annual SAIDI for Savaii: 340 Annual Unplanned SAIDI Savaii: 312 Annual Planned SAIDI Savaii: 28 Total Quarterly SAIDI for Upolu: 95 Quarterly Unplanned SAIDI Upolu: 26 Quarterly Planned SAIDI Upolu: 69 Total Quarterly SAIDI for Savaii: 85 Quarterly Unplanned SAIDI Savaii: 78 Quarterly Planned SAIDI Savaii: 7 Baseline SAIFI established on 3rd Quarter 2008 Annual SAIFI for Upolu: 26 Annual SAIFI for Savaii: 44 Quarterly SAIFI for Upolu: 6.5 Quarterly SAIFI for Savaii: 11 SAIFI on 2nd Quarter 2011 Annual SAIFI for Upolu: 5.2 Annual SAIFI for Savaii: 24 Quarterly SAIFI for Upolu: 1.3

Design Summary	Performance Targets/Indicators	Current Status
		Quarterly SAIFI for Savaii: 6 Refer to Appendix 8 for SAIDI monitoring Refer to Appendix 9 for SAIFI monitoring
	Cost of generation 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	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	Baselines figures of Total System losses established on a 12 month moving average at September 2008 are: Upolu: 15.7% Savaii: 18.2% EPC : 15.9% Updated 12 month moving average of total system losses now reported monthly to the Board. End of December 2008 are: Upolu: 17.1% Savaii: 18.2% EPC : 17.2% Not possible to calculate Technical losses due to lack of metering and dedicated resources.
	Baseline for non-technical system losses established and verified by 4th quarter 2008 and reduced by 10% by 2010.	Not possible to calculate non-technical losses - this can only be calculated as *"total system loss – technical loss"* Technical loss is established to be 13.5% from studies by the Japanese Volunteer and PMU in 4th Quarter 2008. Change in non technical loss can be monitored as technical loss level generally remains static Finance Department have begun diagnostic review of causes of non-technical loss as basis for implementation of reduction measures
3. The financial performance of	Consistent application	Procedures reviewed in August 2008 and revised procedures implemented. Refer to Customer aging

Design Summary	Performance Targets/Indicators	Current Status
EPC improves	of disconnection policy	report below.
	Fuel audits conducted on all EPC's diesel power stations	Fuel Audit's at both Upolu and Savaii Generation Stations introduced 1 May 2008 and now routinely conducted monthly. Results reported monthly to Board. Refer to Fuel Report below for Period of June 2011 to June 2012
	Timeliness of tariff adjustments in response to cost	Base Tariff decrease of 3.6% effective from 1 August 2012, and 2% discount for all prepayment meter customers top up purchases. This changes were incorporated in FY 2012/13 approved Budget which is already implemented. EPC planning to hire a consultant to conduct a cost of service and tariff review before end of 2012.
	EPC's collection performance improves such that accounts receivables are below 2 months of sales	Customers' arrears on 2nd Quarter of 2012 were: Debtor days as = 45.4 days % Government Debt (of total debt) = 19.45% % Government Sales (of total sales) = 10.63%
	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	Debt/Sales Ratio:1.83 Reference Appendix 5

4. Effective regulation of the power sector is established	Electricity Act Reform to govern the power sector was established by 31 December 2009 Amendments of the EPC Act consistent with the Electricity Act by 31 December 2009 Regulatory agency established by 31 December 2010.	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	Number of projects by energy subsector financed by the clean energy fund Number of projects by energy subsector eligible for clean development mechanism Electricity produced by clean energy resources (baseline of 45	Not within Scope of this Project

ELECTRIC POWER CORPORATION
FUEL REPORT
FROM JUNE 2011 TO JUNE 2012

FUEL REPORT PER MONTH

Upolu Fuel Report	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Electricity Generated in KWH JUNE 12	Electricity Generated in (%) JUNE 12
Fuel Purchased ($)	4,070,579	5,317,277	5,167,879	4,677,565	4,973,144	4,070,579	3,870,339	3,247,441	2,984,944	3,066,839	3,393,267	4,150,113	3,980,477		
Fuel Purchased (litres)	1,390,700	1,873,600	1,821,600	1,640,100	1,779,300	1,390,700	1,329,100	1,105,700	1,019,100	1,052,450	1,145,600	1,373,300	1,325,500		
Diesel Production (kWh)	6,407,773	7,069,026	6,755,892	6,412,786	6,673,109	5,352,206	5,091,390	4,402,021	3,697,072	4,170,007	4,361,041	5,143,442	4,950,923		
Hydro Production (kWh)	1,666,777	1,382,055	1,652,242	1,719,469	1,492,046	3,159,359	3,257,575	3,956,554	4,165,793	4,489,469	4,108,972	3,832,836	3,558,404	8,509,921	89.91%
Solar Production (kWh)	823	883	566	927	600	1,233	1,951	607	505	703	866	621	594		
Engine Fuel Consumption (Ltrs)	1,388,895	1,869,478	1,817,860	1,693,545	1,860,315	1,388,895	1,338,970	1,178,942	966,670	1,102,680	1,147,215	1,354,406	1,300,692		
Fuel Price per litre	2.93	2.84	2.84	2.85	2.80	2.93	2.91	2.94	2.93	2.91	2.96	3.02	3.00		
Savaii Fuel Report	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12		
Fuel Purchased ($)	701,075	736,035	831,950	725,035	723,206	838,673	724,127	811,493	710,956	757,844	766,418	939,238	719,098		
Fuel Purchased (litres)	241,500	259,350	293,250	254,220	258,750	286,530	248,670	276,300	242,730	260,070	258,750	310,800	239,460		
Diesel Production (kWh)	942,970	976,976	971,149	903,986	975,180	905,692	932,889	970,801	879,000	933,721	984,078	974,601	955,141	955,141	10.09%
Engines Fuel Consumption (Ltrs)	255,107	273,368	269,306	239,684	274,192	255,107	258,404	272,657	246,458	266,790	270,641	274,095	274,531		
Fuel Price per litre	2.90	2.84	2.84	2.85	2.80	2.93	2.91	2.94	2.93	2.91	2.96	3.02	3.00		
SUMMARY															
Total Fuel Purchased ($)	4,771,653	6,053,312	5,999,829	5,402,601	5,696,350	4,909,252	4,594,466	4,058,934	3,695,900	3,824,683	4,159,685	5,089,350	4,699,575		
Total Fuel Purchased (litres)	1,632,200	2,132,950	2,114,850	1,894,320	2,038,050	1,677,230	1,577,770	1,382,000	1,261,830	1,312,520	1,404,350	1,684,100	1,564,960		
Total Diesel Production (kWh)	7,350,743	8,046,002	7,727,041	7,316,772	7,648,289	6,257,898	6,024,279	5,372,822	4,576,072	5,103,728	5,345,119	6,118,043	5,906,064		62.399%
Total Hydro Production (kWh)	1,666,777	1,382,055	1,652,242	1,719,469	1,492,046	3,159,359	3,257,575	3,956,554	4,165,793	4,489,469	4,108,972	3,832,836	3,558,404	9,465,062	37.595%
Total Solar Production (kWh)	823	883	566	927	600	1,233	1,951	607	505	703	866	621	594		0.006%
Total Engine Fuel Consumption (Ltrs)	1,644,002	2,142,846	2,087,166	1,933,229	2,134,507	1,644,002	1,597,374	1,451,599	1,213,128	1,369,470	1,417,856	1,628,501	1,575,223		

FUEL STOCK RECONCILIATION AS AT 30 JUNE 2012

	UPOLU		SAVAII			TOTAL	
	Litres	$	Litres	$		Litres	$
Stock on Hand	259,206	783,321	108,900	332,677		368,106	1,115,997
Fuel Purchased	1,325,500	3,980,477	239,460	719,098		1,564,960	4,699,575
Total Stock Available in the month	1,584,706	4,763,797	348,360	1,051,775		1,933,066	5,815,572
Engines Fuel Consumption (Ltrs)	1,300,692	3,905,978	274,531	824,417		1,575,223	4,730,395
Expected Fuel Stock end of month	284,014	852,894	73,829	221,708		357,843	1,074,603
Less Actual Fuel Stock on Hand	280,795	843,227	73,750	221,471		354,545	1,064,699
Total Fuel Loss/(Surplus)	3,219	9,667	79	237		3,298	9,904

Government and Private Sector Electricity Arrears

Jun-12

Month Ending	March. 2011	JUNE 2011	SEP 2011	DEC 2011	JAN 2012	FEB 2012	MAR 2012	APR 2012	MAY 2012	JUNE 2012	Change	Variance JUN VS MAY
By Consumer Category	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	%	$ change
Ministries	192	103	169	80	127	66	97	209	255	135	1.30%	120
State-Owned Entities	253	317	262	496	552	371	160	324	225	263	2.55%	(38)
CSO Street Lighting	1,075	1,585	1,648	2,224	2,417	2,601	1,023	1,214	1,422	1,611	15.59%	(189)
Total Government	1,520	2,005	2,079	2,800	3,096	3,038	1,280	1,746	1,902	2,009	19.45%	(107)
Private Sector	7,095	6,733	6,967	7,557	6,867	6,911	7,151	7,181	7,024	7,348	71.14%	(324)
Debit Note	851	841	833	826	824	1,133	1,063	1,031	1,014	972	9.41%	42
Grand Total	9,466	9,579	9,879	11,183	10,787	11,082	9,494	9,958	9,940	10,329	100.00%	(389)
By Aged Debtor Profile											%	
Current	4,055	3,937	4,103	4,676	4,432	4,048	4,294	4,474	4,122	4,503	43.60%	(381)
1 - 30 days arrears	1,176	1,274	1,190	1,280	1,221	1,381	1,171	1,341	1,453	1,283	12.42%	170
31 - 60 days arrears	672	561	553	680	536	563	585	549	611	634	6.14%	(23)
61 - 90 days arrears	501	480	483	523	516	465	478	476	466	491	4.75%	(25)
over 90 days arrears	2,211	2,486	2,717	3,198	3,258	3,492	1,903	2,087	2,274	2,445	23.68%	(171)
Debit Note	851	841	833	826	824	1,133	1,063	1,031	1,014	972	9.41%	42
Total	9,466	9,579	9,879	11,183	10,787	11,082	9,494	9,958	9,940	10,329	100.00%	(389)
ARREARS (excl Current)	5,411	5,642	5,776	6,507	6,355	7,034	5,200	5,484	5,818	5,826		
12 month total sales	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000		

KEY PERFORMANCE INDICATORS	31/03/2011	30/06/2011	30/09/2011	31/12/2011	31/01/2012	29/02/2012	31/03/2012	30/04/2012	31/05/2012	30/06/2012	
1) Days of Sales	43.2	43.7	45.1	51.0	49.2	50.6	43.3	45.4	45.4	47.1	
PSEP Performance Target	60.0 DAYS									47.1	Days
2) Government Debtors											
% Government Debt										19.45%	
% Government Sales										10.63%	
PSEP Performance Target	100.00%									182.91%	Debt/Sales

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 new office at TTTE Bldg 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**	**Yes, Beneficiary committed personnel, funds, and other resources to 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**	**Yes, ADB Mission here on Sept 5 to 7.**
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**	**Yes, EPC provided resources to support Project.**
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**	**Yes, regard claims against project and managing of contracts.**
No rights or obligations under the Subsidiary Financing Agreement shall be assigned, amended, or waived without the prior concurrence of ADB.	**Complied**	**ALL changes to contracts are pre approved by ADB including less than 15% of contract amount changes.**

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	**IC contract expired except completion of 5 hydros feasibility study**
Project Manager	**To be appointed**
Restructure of PMU	**Maintained old flat org. chart. It works.**
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, Aussie Aid grant is used up**
Legal Opinion from the Attorney General's Office	**Complied; all contracts need AGO clearances.**

8. RESETTLEMENT (updated quarterly)

Official transfer or lease of Fiaga 97 acres, Vaiaata 100 acres and additional land in Tuanaimato for Fuluasou Substation is still pending; but not affecting progress of project. These will be addressed towards end of the Project. However, Cabinet had approved all 3 properties for EPC to use for power sector facilities. Samoa Land Corporation also approved lease of four 20m x 20m lots to install booster water pumps for Fiaga power plant water supply.

Status of land acquisition and resettlement for subprojects at end of 2nd Quarter 2012:

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	100%	Official transfer or lease of land to EPC is 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	Cable route is inside road reserve but 30% of existing road is outside of legal road reserve. People planted crops inside legal road reserve. Held consultations with affected people and their crops will be compensated.
8) Hospital Feeder Upgrading Stage 2	N/R	N/R	N/R	Cable is laid inside road legal reserve. Have sorted out all land issues. 100% cable is laid.
9) 22kV Fuluasou Substation	NO	YES	50%	Use old EPC hydropower station land. Cabinet approved 500sq meters of extra land for substation. Land is registered.

10) Low Voltage Network Improvement Program	N/R	N/R	N/R	N/R
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 Schemes	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) Fiaga water booster pumps	N/R	YES	90%	SLC approved 4 lots for pump sites

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. Mini NCC in Salelologa Depot.
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 power station 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	YES	YES	0%	Yes, would need approval of land for pump and pipeline
30) Refurbishment of Taelefaga hydro governor system	N/R	N/R	N/R	N/F

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.

ADB approved feasibility study of Vaiaata power plant. Included in FS is Resettlement Plan and Initial Environmental Examination.

Subproject	Constraints	Activities	Action Taken	Comments
1) Hospital Feeder Upgrading Stage 1	NIL	NIL	NIL	Completed
2) Single & Three Phase PPM	NIL	NIL	NIL	93.4% of meters have installed. This brings total number of consumers with PP to 71.87%. Target is 75%.
3) Tanugamanono Power Station Noise & Emission Control	NIL	NIL	NIL	Started Feasibility Study; not finished.
4) Refurbishment of Alaoa Hydropower Station	NIL	NIL	NIL	Project is complete.
5) Fiaga Diesel Power Station	NIL	YES	YES	
6) Upgrade of Alaoa 6.6kV Transmission Line to 22kV	NIL	NIL	NIL	Completed. Followed existing line a long side of road.
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. 33kv Transmission Line is changed to have one circuit overhead and other underground.
8)Hospital Feeder Upgrading Stage 2	NIL	NIL	NIL	Construction continued; 100% of trenching and

				installation of ducts is complete. Cables being pulled and installed terminations.
9) 22kV Fuluasou Substation	YES	NIL	NIL	Cabinet approved 500 sq meters of land for Substation. Land survey has been registered with MNRE.
10) Low Voltage Improvement Program	NIL	NIL	NIL	Received all 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, tools, equipment and other material 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. 40% is complete. New powerline along East Coast Road require easements and social resettlement of affected trees.
14) Hydro Scheme				5 Feasibility Study reports are finalized.
15) Puapua-Asau Transmission Line 22kV Reconductoring	NIL	NIL	NIL	Project 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	Report of Tender submitted to ADB for approval.
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	ADB approved Feasibility study & Resettlement Plan of Vaiaata power plant
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	Need to complete IEE and prepare tender for construction.
29) Upolu hydro schemes				Implementation Consultant revising Faleseela Feasibility study and continued with rest of FS for other 4 schemes and tender of 3 schemes.

10. LOAN DRAW DOWN TO DATE (1 Jan - 31 March 2012)

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
				USD$M					
	ADB Loan			***26.61***					
	ADB Grant			***15.39***					
	JICA Loan			***38.00***					
	Ausaid Grant			***8.00***					
	EPC			***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**
	SAVAI'I 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 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 Switchgea	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	Q! 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**

LIST OF WITHDRAWAL APPLICATIONS OUTSTANDING AT END OF Q2, 2012

No	WA No	Contractor	Contract No	Lot	Claim No	Currency	Amount
1	WA 0269	A D Riley	PPM 1207			SAT	$ 46,303.95
2	WA 0270	A D Riley	PPM1207			USD	$ 4,040.43
3	WA 0271	BBA JV /Woods / MHI	12/03A			USD	$ 351,163.87
4	WA 0272	A D Riley	PPM1207			SAT	$ 18,661.02
5	WA 0273	A D Riley	PPM1207			USD	$ 1,579.02
6	WA 0274	A D Riley	PPM1207			SAT	$ 16,341.92
7	WA 0275	A D Riley	PPM1207			USD	$ 1,342.16
8	WA 0276	Northpower NZ Ltd	14/01		Claim 5	NZD	$ 435,889.66
9	WA 0277	Northpower NZ Ltd	14/01		Claim 9	NZD	$ 62,676.23
10	WA 0278	INTRACOR	13/02A	LOT 5	Claim 1	USD	$ 54,218.64
11	WA 0279	INTRACOR	13/02A	LOT 3	Claim 1	USD	$ 99,120.00
12	WA 0280	INTRACOR	13/02A	LOT 5	Claim 2	USD	$ 42,075.25
13	WA 0281	INTRACOR	13/02A	LOT 1	Claim 2	USD	$ 5,559.68
14	WA 0282	INTRACOR	13/02A	LOT 1	Claim 1	USD	$ 45,778.07

11. LAST ADB REVIEW MISSION

No ADB Mission during this Quarter. Next Mission is schedule towards middle of year.

12 APPENDICES

13. ATTACHMENTS

Appendix 1 – INVESTMENT PLAN Revised June 2012

REVISED INVESTMENT PLAN (Revised) : JUNE 2012, WITH ADDITIONAL SUBPROJECTS

No	Location	Contract Description		Contractors / Consultants	Estimate Cost mi(USD)	Subproject Number	% Completed
	CORE PROJECTS						
1	Upolu	Hospital Feeder Upgrade Stage 1		Bluebird Ah LAL JV	**0.700**	**SAM PSEP 02/01A**	100%
2	Upolu/Savaii	Single & three phase Prepayment Metering		A D Riley	**6.143**	**SAM PSEP 1207**	Installation is 91% complete; 73% of All active customers (31,730) have Prepayment Meters
3	Upolu	Project Manager		TBA	**0.750**		Vacant
4	Upolu	Consultant Services (Note 1)		Implementation consultant	**2.67**	**CON 0508**	Egis International & Individual Consultants, short term consultants, COS and Tariff Study
				Individual consultants	**1.50**		Individual consultants, short term experts for commissioning, cost of servce & tariff review
	CANDIDATE SUBPROJECTS						
	Upolu Generation						
5	Upolu	T'manono Power Station noise and emission control program		TBA	**0.170**		0%
6	Upolu	Refurbishment of Alaoa Hydro Power Station:				**535,847.309**	
		a	Electrical - Mechanical	Tenix NZ Ltd	**1.291**	**SAM PSEP 03**	100%
		b	Civil Works	Silva Transport Ltd	**0.536**	**SAM PSEP 03/01**	90%, reduced scope
7	Upolu	Fiaga Power Plant					
		a	LOT A (Generators & Powerhouse)	Bluebird/Woods/MHI	**28.015**	**SAM PSEP 12/3A**	Bldg-70%; Equip. Supply-80%; Equip. install-70%
		b	LOT B (Electrical Switchgear)	Northpower NZ Ltd	**3.437**	**SAM PSEP 12/3B**	Construction-100%; Equip Supply 90%; Equip. Install 95%
		c	Survey work	Sepulona Surveyor	**0.041**		100%
		d	Level power plant site	PPG Construction	**0.071**	**SAM PSEP 12/2B**	100%
		e	Access Road/fence/water pipeline	Silva Transport Ltd	**1.420**	**SAM PSEP 12/2A**	100%
		f	Fuel & Oil Tanks	Fuelquip/GMA JV	**1.200**	**SAM PSEP 12/04**	Tank manuf-100%; Design-100%; Construction-60%
		g	Water booster pumping system & tanks	EPC	**0.400**	**SAM PSEP 12/06**	Bid doc-100%; with ADB to review
		h	Water well drilling	EPC	**0.032**		0%
		i	Relocate Units 5A, 7A, & 9A to Fiaga	TBA	**3.00**	**SAM PSEP 12/05**	construction 30%, bid preparing
		j	Lube oil supply	TBA	**0.560**		

	Upolu Transmission						
8	Upolu	Alaoa Feeder Upgrade 6.6 to 22kV		Bluebird AhLAL JV	**0.440**	**SAM PSEP 02/02A**	100%
9	Upolu	33kV Transmission Line from Fiaga to Fuluassou Substation		EPC	**5.690**	**SAM PSEP 13/03**	10%
		a	Survey services	Sepulona SS Ltd	**0.007**		100%
		b	Trench excavation contract	TBA	**1.500**	**SAM PSEP 13/02**	biding
		c	Equipment rental	EPC	**0.043**		continuing
10	Upolu	Hospital Feeder Upgrade - Stage 2		Bluebird AhLAL JV	**3.753**	**SAM PSEP 09/01A**	construction 100%, installation 70%
11	Upolu	Fuluasou Substation		Northpower NZ Ltd	**3.103**	**SAM PSEP 12/01**	construction 70%, installation 5%
		a	River bank riprap protection	TBA	**0.652**		preparing bid
12	Upolu	Low Voltage System Improvements		EPC	**0.162**		materials supply 100%, construction 0%
13	Upolu	22kV UG Fuluasou Substation to Apia Wharf		EPC	**1.430**	**SAM PSEP 10/01**	construction 30%, installation 0%
14	Upolu	22kV Overhead conductor upgrading program		GMA Construction Ltd	**3.360**	**SAM PSEP 09/2B**	construction 60%
	Savaii Transmission						
15	Savaii	Puapua - Asau 22 kV line reconductoring		Tenix NZ Ltd	**0.754**	**SAM PSEP 02/02B**	100%
16	Savaii	Low Voltage Network Improvements		EPC	**0.534**		materials supply 100% construciton 9%
17	Savaii	Reconductor remaining spans (102)		EPC	**0.096**		0%
	Measurement Equipment						
18	Upolu/Savaii	Measurement equipment: stream flow gauging		EPC	**0.062**		100%
19	Upolu/Savaii	Measurement equipment: electric HV/current		EPC	**0.058**		100%
19	Upolu/Savaii	SCADA System		Schneider Electric Ltd	**3.548**	**SAM PSEP 12/05**	0%
			Contingency, 5%		**0.177**		
	APPROVED NEW SUBPROJECTS						
20	Savaii	Vaiaata Power Station and Salelologa Substation		TBA	**7.683**		Separate bids
		a	Resistivity study	Northpower NZ Ltd	**0.010**		start on 15/9/12
		b	Geotechnical study	TBA	**0.020**		
		c	Surveying	Sepulona	**0.003**		start on11/9/12
		d	Prepare access rd and clear site	TBA	**0.050**		0%
21	Upolu/Savaii	Vending System		A D Riley	**0.162**		100%
22	Upolu/Savaii	Public dissemination		EPC	**0.100**		Continuing
23	Upolu	Taelefaga/Lalomauga/Samasoni/Tanugamanono Power Stations Switchgear Refurbishment		Northpower NZ Ltd	**2.731**	**SAM PSEP - 07**	100%
24	Upolu	Power System Planning Software		Northpower NZ Ltd	**0.051**		100%
25	Upolu	Refurbishment of Generators 9A and 7A in Tanugamanono Power Station		MAN Diesel	**1.678**	**SAM PSEP - 08**	100%
26	Upolu	Vaipu Pumping Scheme		await EPC/ADB approval	**0.477**		FS-100%; EIA-80%; Bid-0%

27	ALL	Training		TBA	**0.238**		Linemen & other trainings & computerized maintenance program
28	Upolu	Taelefaga Power Station Hydro Governor System Upgrade		Northpower NZ Ltd	**0.90**	**SAM PSEP 17/01**	Contract awared
	Hydro Development						
29	Upolu/Savaii	Hydro Developments - Feasibility Study & tender doc.			refer below		Packaged separately & refer NEW PROJECTS below
	SUBTOTAL				**91.37**		investment costs
	CONTINGENCY (Physical)				**3.42**		contingencies
	LOAN INTEREST PAYMENT DURING CONSTRUCTION				**5.21**		loan interest during construction
	TOTAL				**100.00**		

	NEW SUBPROJECTS PENDING APPROVAL						
30	Afulilo Dam Environmental hazard Mitigation				0.75		Design and tender
31	Refurbish hydro m/c control system of 3 hydro plants (Samasoni, FOF, Lalomauga)				1.80		EPC Board to approve
32	Refurb. Penstock, valves, etc. of 4 hydros - Taelefaga, Lalomauga, Samasoni & FOF.				2.40		EPC Board to approve
33	Refurbish Tanugamaono diesel generator Unit 12				0.40		EPC Board to approve
34	Refurbish 3 Cummins generator in Salelologa				0.50		getting EPC Board approval
35	Hydro developments				13.15		
	TOTAL				**19.00**		

Notes

1 Include IC completion of hydro study, independent consultants, short term commission consultants, cost of service and tariff study
2 Total funds needed for 5 hydros is $48m, and $25m for 3 hydros (Fuluasou, Tiapapata, and Faleseela) tender being prepared now.
3 No decision yet on Vaipu Pump Scheme; assign USD300K from TA in SMEC contract to prepare design/tender.
4 TBA - To be announced
5 Proposed new subprojects for additional funds of US$19 million.

Appendix 2 – DISBURSEMENT PLAN

POWER SECTOR EXPANSION PROJECT

DISBURSEMENT PLAN - AS OF 2ND QUARTER 2012

	TITLE OF SUBPROJECTS	ADB	Award	Revised	2008				2009				2010				2011				2012				2013				2014				Total
		categ*	Date	Budget	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			($M)																													
1	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
2	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
3	Hospital Feeder Upgrading Project – Stage 1	3	Q1 2009	0.60						0.15	0.15	0.15	0.15																				0.60
4	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									5.67
	CANDIDATE SUBPROJECTS																																
	UPOLU Generation																																
5	Tanugamanono Power Station Noise and Emission Control	3	Q4 2009	0.17									0.0255	0.0289	0.0289	0.0289	0.0289	0.0289															0.17
6	Refurbishment of Alaoa Hydropower Station - Civil work	3	Q3 2009	1.34								0.201	0.1627	0.1627	0.1627	0.1627	0.1627	0.1627	0.1627														1.34
7	Refurbishment of Alaoa Hydropower Station - Electro/Mech.																																
8	Upolu Diesel Power Plant - Generator and Powerhouse	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	1.1831	1.183	1.183	1.183		22.27
9	Fiaga Power Plant - Electrical Switchgear		Q1 2010																														
10	Fiaga PP Fuel & oil tanks		Q1 2012																														
11	Fiaga PP access road, pipeline & fence		Q2 2011																														
12	Fiaga Water System Booster Pumps																																
13	Fiaga lube oil supply		Q3 2012																														
	UPOLU Transmission																																
14	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
15	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
16	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
17	33kV/22 kV Fuluasou Substation Project	3	Q2 2010	2.93											0.7325	0.7325	0.7325	0.7325															2.93
18	Low-Voltage Network Expansion Program	3	Q2 2010	1.29											0.16125	0.16125	0.16125	0.16125	0.16125	0.16125	0.16125	0.16125											1.29
19	Fuluasou Substation to Apia Wharf Area 22 kV Underground Cable Project	3	Q2 2012	0.00																													0
20	Fuluasou Substation to Lalomauga via Tanugamanono	3	Q2 2012	2.78																			0.4176	0.3944	0.3944	0.3944	0.3944	0.3944	0.394				2.78
21	22 kV Overhead Conductor Upgrading Program	3	Q3 2009	6.03	0.188	0.188						0.8481	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.2670	0.267	0.267			6.03
	SAVAII Generation																																
22	Hydropower Scheme	3	Q3 2012	10.65																					1.5974	1.2932	1.2932	1.2932	1.293	1.293	1.293	1.293	10.65
	SAVAI'I Transmission																																
23	Puapua–Asau Transmission Line 22 kV Reconductoring Project	3	Q3 2009	1.24								0.186	0.3513	0.3513	0.3513																		1.24
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																																
25	Stream Flow Gauging Equipment	3	Q3 2008	0.05				0.05																									0.05
26	Electrical Test Equipment Equipment	3	Q3 2008	0.06				0.057655																									0.06
27	SCADA	3	Q4 2009	3.48									0.31636364	0.31636364	0.31636364	0.31636364	0.31636364	0.31636364	0.31636364	0.31636364	0.31636364	0.31636364	0.31636364										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																																
28	Refurbishment of Savaii Diesel Power Station	3	Q2 2009	7.80							0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975															7.8
29	Vending System	3	Q1 2009	0.25				0.095	0.16																								0.25
30	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
31	Taalefaga, Samasoni, etc Switchgears	3	Q2 2009	1.60							0.24	0.34	0.34	0.34	0.34																		1.6
32	Power System Planning Software	3	Q3 2008	0.06				0.06																									0.06
	APPROVED BY EPC & ADB, NEW SUBPROJECTS																																
33	Vaipu Pumping Scheme	3	Q1 2010	0.50										0.125	0.125	0.125	0.125																0.5
34	Refurbish 2 Tanugamanono Diesel Generators	3	Q3 2009	0.75								0.1125	0.2125	0.2125	0.2125																		0.75
35	Training			0.24																													
36	Refurbishiment of Taelefaga hydro governor control		Q2 2012	0.90																													
37	Afulilo dam environmental hazard mitigation			0.75																													
38	Refurbishiment of other 3 hydros governor control			1.80																													
	NOT YET APPROVED EPC/ ADB, NEW SUBPROJECTS																																
39	Refurbishment of Tanugamanono No 12 unit			0.40																													
40	Refurbishment of 3 Salelologa generators			0.50																													
41	Refurbishment of hydro pentock pipes			2.40																													
42	Upolu Hydro Generation	3	Q1 2010	3.51										0.8775	0.8775	0.8775	0.8775																3.51
	GRAND TOTAL			**91.56**	**0.25**	**0.25**	**0.35**	**1.04**	**0.68**	**0.68**	**1.89**	**3.63**	**4.23**	**5.05**	**9.34**	**5.99**	**5.93**	**5.03**	**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**	**84.57**

Appendix 3 - Revised Project Schedule to end June 2012

NO	TITLE OF SUBPROJECTS	Status	2008				2009				2010				2011				2012				2013				2014				2015				2016			
			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	1	2	3	4	1	2	3	4
	CORE SUBPROJECTS																																					
1	Hospital Feeder Upgrading Project – Stage 1	COM																																				
2	Single- and Three-Phase Prepayment Metering Project	IIP																																				
3	Project Manager (0,37 + 0,38 unallocated)	CONT																																				
4	Project implementation consultant: EBI (73 man-months)	CONT																																				
	CANDIDATE SUBPROJECTS																																					
	UPOLU Generation																																					
5	Tanugamanono Power Station Noise and Emission Control Program	FSIP																																				
6	Refurbishment of Alaoa Hydropower Station	COM																																				
7	Upolu Diesel Power Station Project (Lot A and Lot B)	CIP																																				
8	Fiaga Access Road, Pipeline, and Fence	CIP																																				
9	Fiaga Fuel and oil tanks	CIP																																				
10	Fiaga pumped water system	CIP																																				
11	Relocate Gen Sets 5A, 7A & 9A to Fiaga Power Plant	PL																																				
	UPOLU Transmission																																					
12	Upgrade of the Alaoa 6.6 kV Transmission Line to 22 kV Project	COMP																																				
13	33kv transmission line from Fiaga to Fuluasou Substation	CIP																																				
14	33kv underground line from Fuluasou SS to Tanugamaono	CIP																																				
15	Hospital Feeder Upgrading Project - Stage 2	CIP																																				
16	Samasoni hydro underground trans line to Tanugamanono	CIP																																				
17	22 kV Fuluasou Substation	CIP																																				
18	Low-Voltage Network improvement Program	PL																																				
19	Fuluasou Substation to Apia Wharf Area 22 kV Underground Cable	CIP																																				
20	22 kV Overhead Conductor Upgrading Program	CIP																																				
21	Alaoa & FOF hydros dedicated transmission line to Tanugamanono	CIP																																				
	SAVAII Generation																																					
22	Hydropower development	OH																																				
	SAVAI'I Transmission																																					
23	Puapua–Asau Transmission Line 22 kV Reconductoring Project	CIP																																				
24	Low-Voltage Network Improvement Program	PL																																				
	Measurement Equipment																																					
25	Stream Flow Gauging Equipment	COMP																																				
26	Electrical Test Equipment	COMP																																				
27	SCADA	CIP																																				
	APPROVED NEW SUBPROJECTS																																					
28	Vaiaata Power Station	PL																																				
29	Salelologa Substation	TP																																				
31	Public Dissemination	ONG																																				
32	Refurbish Taalefaga, & others 22kv switchgears	COMP																																				
33	Power System Planning Software	COMP																																				
34	Refurbishment of Tanugamanono Generators 9A and 7A	CIP																																				
35	Vaipu Pumping Scheme	PL																																				
36	Upolu hydro development - Fuluasou, Tipapata, Faleseela, & Tafitoala	FSIP																																				
37	Refurbish Taelefaga hydro plant governor control system	CA																																				
38	Afulilo Dam Environmental Hazard Mitigation	TP																																				
39	Training	PL																																				
40	Refurbish No 12 gen in T'manono & 3 gens in Salelologa	NEW																																				
41	Refurbish governor & generator controls of FOF, Lalomauga & Samasoni hydro stations	TP																																				
42	Refurbish pentocks, valves, etc for Taelefaga, Samasoni, Lalomauga, & FOF hydros	NEW																																				

NOTES & KEY

1	Completion date - actual & planned	
2	Original subprojects & implementation schedules from RRP Report	
3	New subprojects NOT in original RRP Report	
4	Completed	COMP
5	Construction in Progress	CIP
6	Planning	PL
7	Installation in Progress	INP
8	Feasibiilty Study in Progress	FSIP
9	On-Going	ONG
10	Contract Award	AG
11	On Hold	OH
12	Tender Preparation	TP
13	New, pending approval	NEW

Appendix 4 - Electricity Receivables

Refer to Receivable Rport in Page 36.

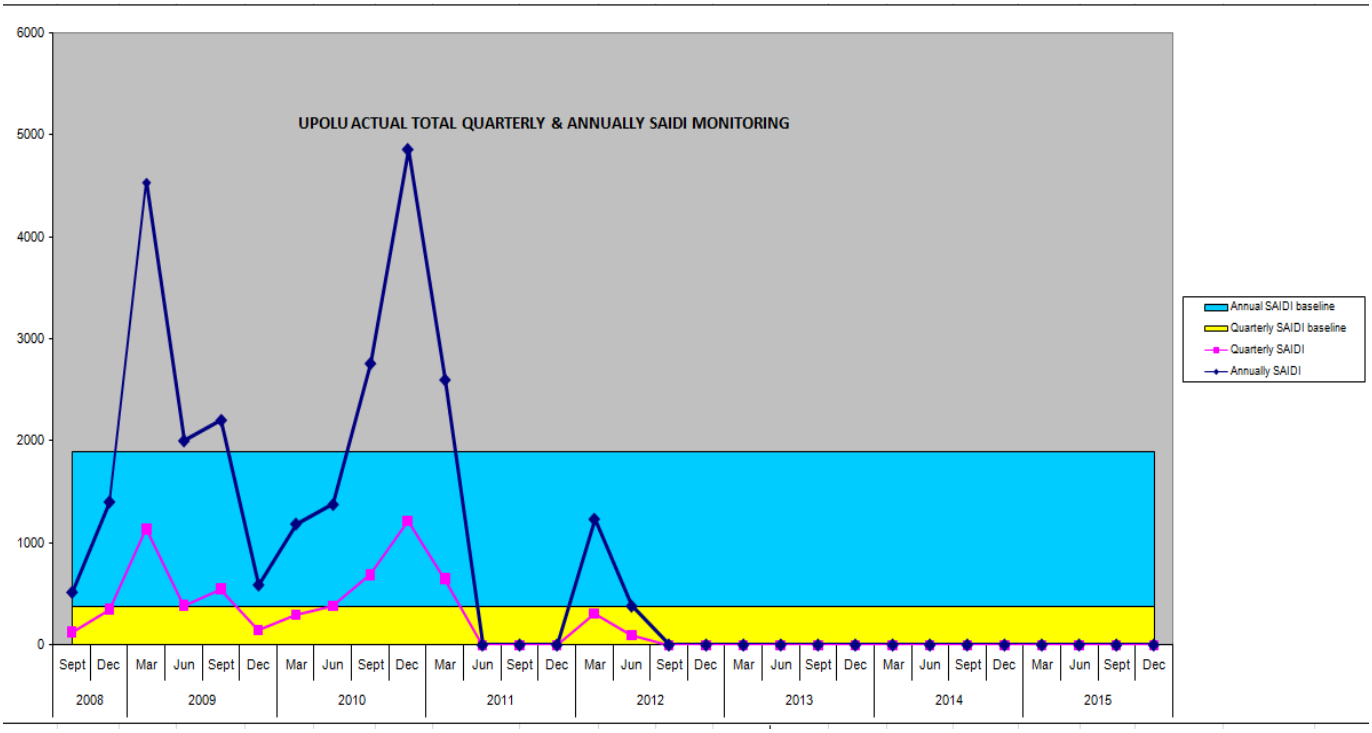
Appendix 5 – Prepayment Meter Installation Projection & Actuals

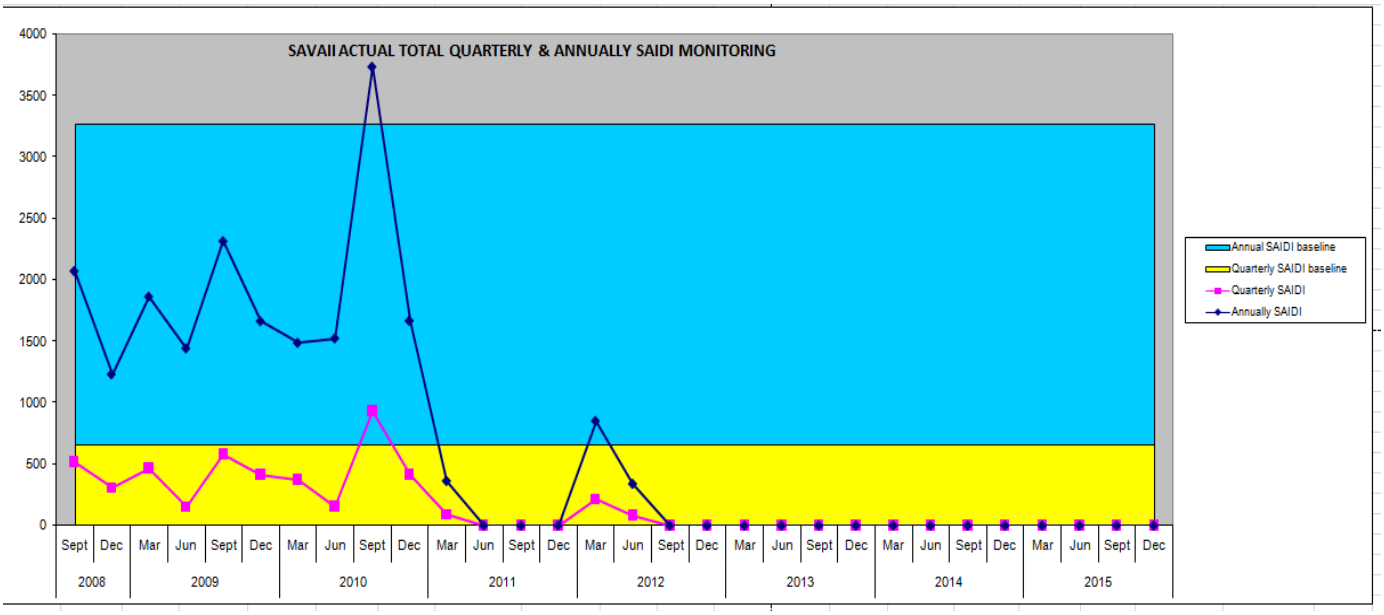
Project Target is to get 75% of consumers on Cash Power Meters at end of project in 2016. 19,616 meters have converted by A D Riley under their contract. At end of 2nd Quarter of 2012, 71.87% of active consumers have been converted or installed with prepayment meters. There is 3.13% needed to meet target. About 1,384 meters are left to be installed under A D Riley's contract. 75% will be reached with these meters. EPC is still testing a new meter from another supplier, Joy Electric Ltd. Another supplier is sending test meters to be tested on A D Riley vending system. If successful, this will give EPC new suppliers beside A D Riley. There has not been any technical solution on blank screen defective meters. ADR is asked for a solution. They have gone back to factory of CP meters. No word from them.

POWER SECTOR EXPANSION PROJECT
Customers Converted to Prepayment Meters

Month	All Electrical	McLean Electrical	Tel Tronic	ADR Total Installed this Month	No of customers on Cash Power
Oct-08	136	198	130	464	
Nov-08	249	212	335	796	
Dec-08	5	162	5	172	
Jan-09	203	348	200	751	
Feb-09	207	366	215	788	
Mar-09	-	233	-	233	
Apr-09	254	286	322	862	
May-09	595	459	495	1,549	
Jun-09	542	583	473	1,598	
Jul-09	510	509	370	1,389	
Aug-09	194	419	223	836	
Sep-09	109	190	149	448	
Oct-09	30	106	125	261	
Nov-09	55	11	218	284	
Dec-09	70	129	156	355	
Jan-10	68	134	197	399	
Feb-10	79	99	209	387	
Mar-10	439	304	351	1,094	
Apr-10	436	498	328	1,262	
May-10	390	447	486	1,323	
Jun-10	127	433	186	746	
Jul-10	131	345	60	536	
Aug-10	185	246	-	431	
Sep-10	163	289	3	455	
Oct-10	24	236	7	267	
Nov-10	-	278	-	278	**20,990**
Dec-10	-	235		235	**21,268**
Jan-11		192		192	**21,503**
Feb-11		131		131	**21,695**
Mar-11		127		127	**21,826**
Apr-11		131		131	**21,953**
May-11		59		59	**22,084**
Jun-11		83		83	**22,143**
Jul-11		71		71	**22,226**
Aug-11		47		47	**22,297**
Sep-11		48		48	**22,344**
Oct-11		31		31	**22,392**
Nov-11		38		38	**22,423**
Dec-11		14		14	**22,461**
Jan-12		113		113	**22,475**
Feb-12		152		152	**22,588**
Mar-12		60		60	**22,740**
Apr-12		51		51	**22,800**
May-12		106		106	**22,906**
Jun-12		69		69	**22,932**
Total to date	**5,201**	**9,278**	**5,243**	**19,722**	

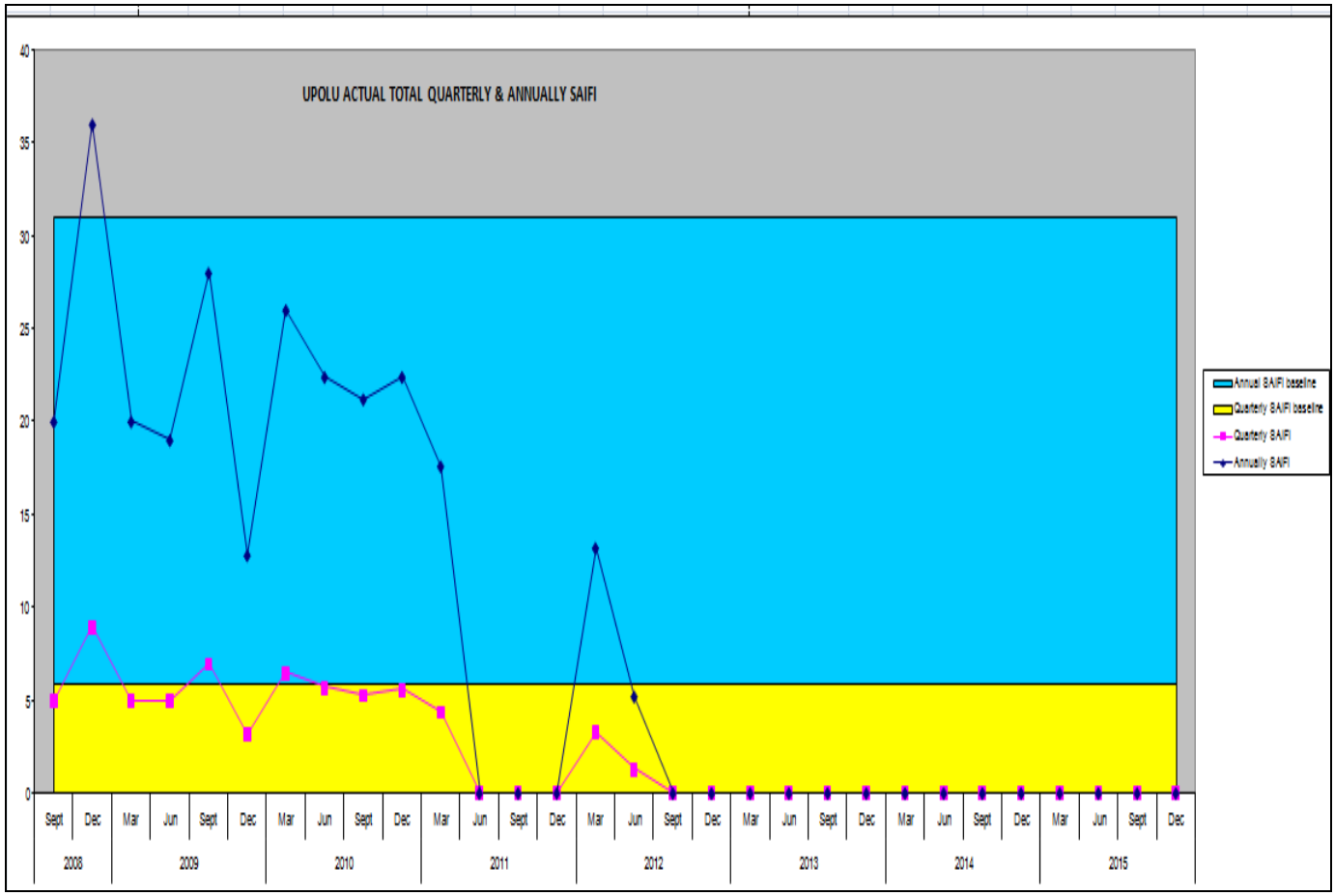
Appendix 6 - System Average Interruption Duration Index (SAIDI) Monitoring

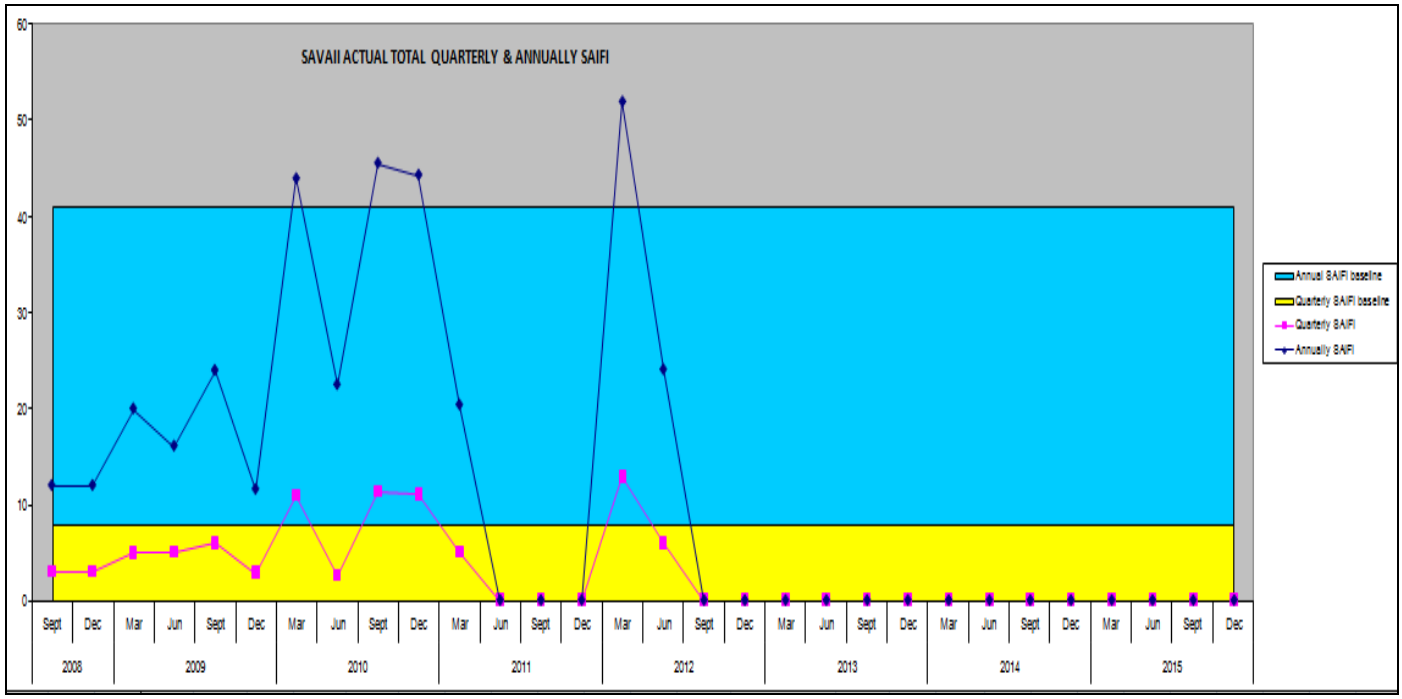




- SAIDI to be reduced by 20% by 2015
- Plan interruption is included since 1st Quarter 2009.

Appendix 7 – System Average Interruption Frequency Index (SAIFI)





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

Appendix 8: PMU Current Organisational Structure