



FIJI NATIONAL
UNIVERSITY

National Training & Productivity Centre

**Certificate of Registration
of Training Staff**

This is to certify that

Joji Bakoso

of

Fiji Electricity Authority

has been duly registered with this University as a recognised

Training Officer

Dated at Suva this *31st* day of *October 2015*



Director
National Training & Productivity Centre

Registrar



APTTC

AUSTRALIA-PACIFIC
TECHNICAL COLLEGE

CREATING SKILLS FOR LIFE

Certificate IV in Training and Assessment

COURSE CODE: TAA40104

AWARDED TO

RATU GEORGE
RICHARD SERUTAWAKE
BAKOSO

HAS SUCCESSFULLY COMPLETE THE REQUIREMENTS OF THE AWARD AT
THE AUSTRALIA-PACIFIC TECHNICAL COLLEGE UNDER THE AUSPICES OF
SUNSHINE COAST INSTITUTE OF TAFE

THE QUALIFICATION CERTIFIED HEREIN IS RECOGNISED
WITHIN THE AUSTRALIAN QUALIFICATIONS FRAMEWORK.

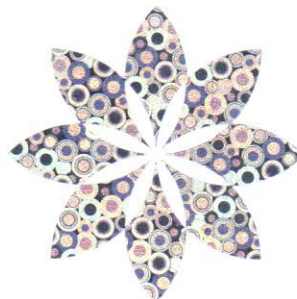
AWARD NUMBER: 51005524Q4

PROVIDER NUMBER: 0418

27 JULY 2010

GENERAL MANAGER, APTTC

INSTITUTE DIRECTOR, SUNSHINE COAST INSTITUTE OF TAFE



TAFE Queensland
Queensland Government

Department of
Education, Training and the Arts



An Australian Government Initiative

THIS DOCUMENT HAS THE FOLLOWING SECURITY FEATURES:
SILVER HOLOGRAPHIC FOILSTAMP

A summary of the employability skills developed through this qualification can be downloaded from <http://employabilityskills.training.com.au>



CERTIFICATE OF REGISTRATION OF TRAINING STAFF

This is to Certify that

JOJI S BAKOSO

of

TELECOM FIJI LIMITED

has been duly registered with this Council as a

TRAINING INSTRUCTOR
recognised

Dated at Suva this 25th day of NOVEMBER 19 ⁹⁸

Registration No. TI 27/98


Director General
Fiji National Training Council



CERTIFICATE OF REGISTRATION OF TRAINING STAFF

This is to Certify that

JOJI BAKOSO


of

TELECOM FIJI LIMITED

has been duly registered with this Council as a
recognised **TRAINING OFFICER**

Dated at Suva this 27TH day of JANUARY 2000

Registration No. TO 1/00


Director General
Fiji National Training Council

POWERSTATION OPERATOR'S TRAINING OVERVIEW



NAME:

ADDRESS:

Overview

This training is targeted to the Powerstation operators and Fitters/Electricians who operate Powerstations and Generators sets to understand the importance of electrical safety and also enhance and develop their skills and knowledge on electrical power generation and associated circuits and equipment.

They can possibly operate generating plant & switchgear inside Power Stations up to 415V & including 11 kV.

All person that **undergo this training (powerstation operator's) must go through the Stand Alone Generator training first.**

AIM

The aim of this training is to uplift the knowledge of the trainees that will man and operate the Powerstation around Fiji.

Capabilities Addressed

- ⊙ Communication Skills in the Powerstation
- ⊙ Electrical Safety in the Powerstation
- ⊙ Engine Room Housekeeping Duties
- ⊙ Operation Procedures
- ⊙ Synchronising of Machines
- ⊙ Transformer
- ⊙ Fuel Bunking Process & 24 hour power loading graph
- ⊙ Black Start Process
- ⊙ Blackout Process
- ⊙ Isolation Process
- ⊙ Single Line, Circuit & Schematic Diagram

Course Objectives:

At the end of this training participants will be able to know and understand:

- Communication Skills
- Know the importance of Electrical Safety
- Engine Room House Keeping Duties
- Synchronisation
- Operational Procedures
- Transformer
- Fuel Bunking
- Black Out procedures (site specific)

UNIT 1: Communication

- Communication Skills

UNIT 2: Electrical Safety

- Introduction
- Basic Concept
- Voltage Transients

UNIT 3: Engine Room House Keeping Duties

- Operator Duties
- Auxiliaries

UNIT 4: Synchronising of Machines

- Methods of Synchronizing
- Generator Synchronizing Requirements

Unit 5 Operational Procedures

- Pre – Start
- Start Circuit
- Stop Circuit
- Alarm Circuit
- Shut Down Circuit
- Common Fault

UNIT 6: Transformer

- Mutual Induction
- Coupling
- Single and Three Phase
- Calculations

UNIT 7: Fuel Bunking Process & 24 hour power loading graph

- Total number of Fuel tank
- Fuel capacity
- Fuel Loading
- Power loading

UNIT 8 Black Start & Isolation Procedures

- Black Out procedures
- Electrical & Mechanical Isolation procedures

Methodology: Lecture, Discussion, Powerpoint presentation, Movies, Practical

Venue: Training Room/Power Station

Dates: Tentative

Instructors: Joji Bakoso

Duration: 3 days

Participants: minimum 8, maximum 15

COURSE TIME TABLE:

TOPIC	TIME	TOPIC	TRAINING AID	PARTICIPANTS
DAY 1				
Attendance	8:00 – 8:15	House Rules	White Board	Watch & Listen
Course Opening	8:15 – 8:30		Give out the Manual	Receive Manual
Unit 1 – Communication Skills	8:30 – 10:00	1. Listen 2. Communicate	Lap top & Data Protector – powerpoint slides 1 Movie – Communication Skills	Watch & Listen
MORNING TEA BREAK				
Unit 2 – Electrical Safety	10:15 – 12:00	1. Safety	Lap top & Data Protector Movie – Look Up and Live	Watch & Listen
LUNCH BREAK				
Unit 3 – Engine Room House Keeping Duties	13:00 – 15:00	1. Operator Duties 2. Auxilleries	Lap top & Data Protector Movie – Safe Way	Watch & Listen
AFTERNOON TEA BREAK				
Unit 4 – Synchronising of Machines	15:15 – 16:30	1. Methods 2. Requirements	Lap Top & Data Projector	Watch & Listen
COMPLETE DAY 1 DAY 2				
Review of day 1	8:00 – 10:00	1. Review of Unit 1- 4	Butcher Paper	4 teams to present yesterday Units
MORNING TEA BREAK				
Unit 5 – Operation Procedures	10:15 – 12:00	1. Pre-Start 2. Start Circuit 3. Stop Circuit 4. Alarm Circuit 5. Shut Down Circuit 6. Common Fault	Lap Top & Data Projector, Butcher Paper	Team to explain their procedures & Discuss procedures
LUNCH BREAK				
Unit 6 Transformers	13:00 – 15:00	1. Mutual Induction 2. Coupling	Lap Top & Data Projector	Watch & Listen

		3. Single and Three Phase 4. Calculations		
AFTERNOON TEA BREAK				
Unit 6 Transformers	15:15 – 16:30	Transformers	Field Visit – To a Transformer site	Inspect Transformer
COMPLETE DAY 2 DAY 3				
Review of day 2	8:00 – 10:00	Review of Unit 4 – 6	Butcher Paper	2 teams to present yesterday Units
MORNING TEA BREAK				
Unit 7 Fuel Bunking Process & 24 hour loading graph	10:15 -12:00	1. Total number of Fuel Tank 2. Fuel Capacity 3. Fuel Loading 4. Power Loading	Butcher Paper	Team to present their Fuel Bunking Process
LUNCH BREAK				
Unit 8 Black Start & Isolation Procedures	13:00 – 15:00	1. Blackout Procedures 2. Electrical Isolation 3. Mechanical Isolation	Butcher Paper	Team to present their Black Start & Isolation Procedures
AFTERNOON TEA BREAK				
Test & Review	15:15 – 16:30		Hand out Test Papers Collect Test Papers	Give out evaluation forms Collect evaluation forms

TARGET GROUP

- ⊙ Diploma in Electrical Engineering
- ⊙ Diploma in Mechanic Engineering
- ⊙ Apprentice in Electrical
- ⊙ Apprentice in Mechanical
- ⊙ 3 years in Electrical Field
- ⊙ 4 years Mechanical Field
- ⊙ 2 year as a Power Station Operator
- ⊙ 3 years as an Assistant Generator Operator
- ⊙ Marine Electrician
- ⊙ Wiremen License's Holder

Note

All person that **undergo this training (Powerstation Training)** must go through the **Stand Alone Generator training first.**

TRAINERS: Joji Bakoso

DATES: Tentative

VENUE: Training Room/On Site

METHODOLOGY: Lecture, Group Discussions and Presentation, Overhead Slides, Video Clips, Diagram Reading

Acknowledgement : -

1. S.David Alley, PE.ANNA, Inc - Synchronising
2. Jim Jenneson – Principle of Power Generation & Transformer

COURSE PROGRAM

Day 1	Day 2
08:00 – 08:15 Attendance/House rules	08:00 – 10:00 Review of Day 1
08:15 – 08:30 Course opening	10:00 – 10:15 Morning Tea
08:30 – 10:00 Unit 1 Communication <ul style="list-style-type: none"> • Communication Skills 	10:15 – 12:00 Unit 5
10:00 – 10:15 Morning Tea	Operational Procedures <ul style="list-style-type: none"> • Pre – Start • Start Circuit • Stop Circuit • Alarm Circuit • Shut Down Circuit • Common Fault
10:15 – 12:00 Unit 2: Electrical Safety <ul style="list-style-type: none"> • Introduction • Basic Concept • Voltage Transients 	12:00 – 13:00 Lunch
12:00 – 13:00 Lunch	13:00 – 15:00 Unit 6 Transformer <ul style="list-style-type: none"> • Mutual Induction • Coupling • Single and Three Phase
13:00 – 15:00 Unit 3: Engine Room Housekeeping Duties <ul style="list-style-type: none"> • Operator Duties • Auxiliaries 	Calculations
15:00 – 15:15 Afternoon Tea	15:00 – 15:15 Afternoon Tea
15:15 – 16:30 Unit 4 Synchronising of Machines <ul style="list-style-type: none"> • Methods of Synchronizing • Generator Synchronizing Requirements 	15:15 – 16:30 Unit 7: Fuel Bunking Process & 24 hour power loading graph <ul style="list-style-type: none"> • Total number of Fuel tank • Fuel capacity • Fuel Loading
16:30 End of Day 1	16:30 End of Day 2

Day 3

08:00 – 10: 00 **Review Day 2**

10:00 – 10:15 Morning Tea

10.15 -12.00 **Unit 8: Black Start & Isolation Procedures**

- Black Out procedures
- Electrical & Mechanical Isolation procedures

12:00 – 13:00 Lunch

13:00 – 15:00 Field Trip

15:30 – 15:45 Afternoon Tea

15:45 – 16:30 Test & Review

16:30 **End of Training**

Manual compile by George RS Bakoso aka Joji Bakoso

Trainer Profile



Name: Joji Bakoso

Contact Details:

Phone - Mobile- +679 904 1942

Email -

- jbakoso@gmail.com
- georgerichard276@gmail.com

Designation:

Training Officer - Electrical

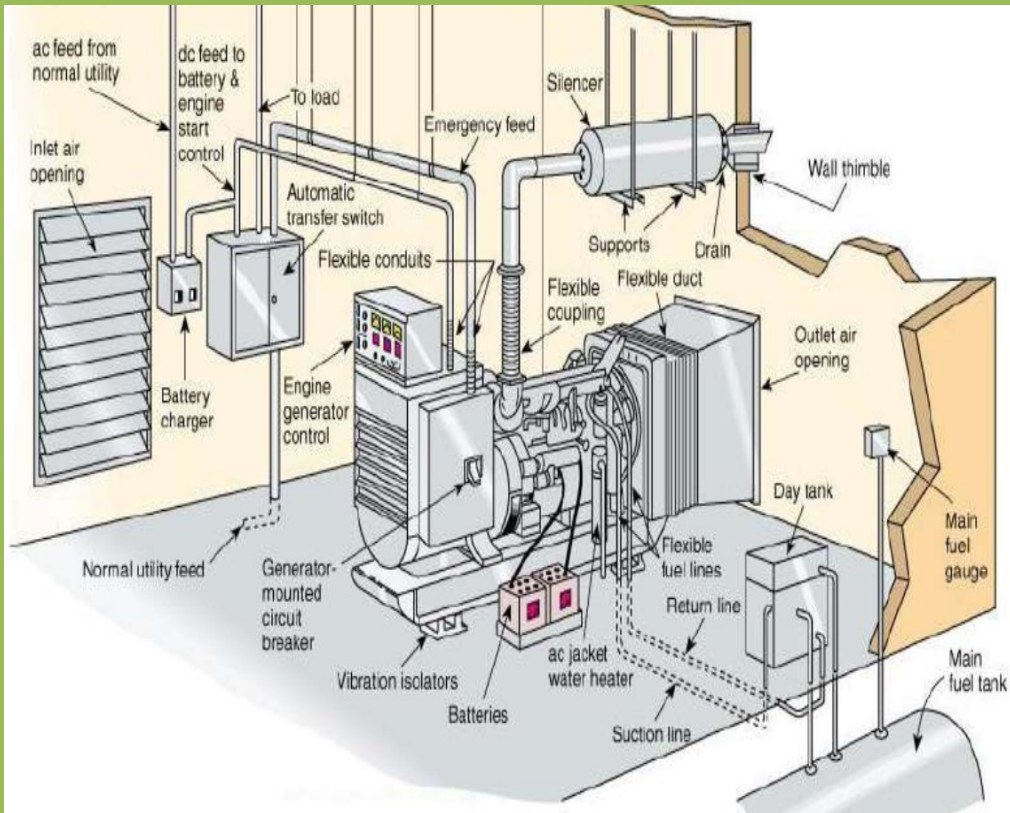
Qualifications:

- Cert IV in Training & Assessment TAA 40104 (APTC) • TOT I-IV (NTPC) • Registered Training Instructor • Registered Training Officer • Higher Technician Certificate (P&T) • Craft Apprenticeship Certificate – Electrical Fitter Mechanic (FNTC)

Work Experience:

43 years of relevant electrical work experience.

TRANSFER SWITCH TRAINING (Normal)



NAME:

ADDRESS:

Overview

This training is designed for License Electricians, Electrical Technicians and Generation Technicians to understand the importance of electrical safety and also enhance and develop their skills and knowledge on electrical power generation and associated circuits and equipment.

All persons that **undergo this training (transfer switch) must go through the Stand Alone AC Generator training first.**

AIM

The aim of this training is to uplift the knowledge of the trainees that will maintain, repair and operate the various Transfer Switch (Generator Control Cubicle) around Fiji.

Capabilities Addressed

- ⊙ To understand the Black Out and the Restoration Process
- ⊙ To know the Generator Operation Process
- ⊙ Starting Mode
- ⊙ Stopping Mode
- ⊙ Transfer Switch
- ⊙ Sensing Circuit
- ⊙ Single Line, Circuit & Schematic Diagram
- ⊙ Blackout Process
- ⊙ Isolation Process

UNIT 1: Overview of Blackout and Restoration Process

- Overview

UNIT 2 : Generator Operation Procedures

- Safety
- Pre-start
- Starting Mode
- Stopping Mode
- Generator Set Control

UNIT 3: Transfer Switch

- Transfer Switch
- Sensing
- Single and Schematic Diagram

UNIT 4 SLD, Blackstart & Isolation Procedure

- Single Line Diagram
- Cuircut Diagram
- Schematic Diagram
- Blackstart Procedure
- Isolation Procedure

COURSE TIME TABLE:

TOPIC	TIME	TOPIC	TRAINING AID	PARTICIPANTS
DAY 1				
Attendance	8:00 – 8:15	House Rules	White Board	Watch & Listen
Course Opening	8:15 – 8:30		Give out the Manual	Receive Manual
Unit 1 – Overview of Blackout and Restoration Process	8:30 – 10:00	1. Overview	Lap top & Data Protector – powerpoint slides 2 Movie – Transfer Switch	Watch & Listen
MORNING TEA BREAK				
Unit 2 – Generator Operation Procedures	10:15 – 12:00	1. Safety 2. Pre-Start 3. Starting Mode 4. Stopping Mode 5. Generator Set Control	Lap top & Data Protector Movie – On Site Generator Training	Watch & Listen
LUNCH BREAK				
Unit 3 – Transfer Switch	13:00 – 15:00	1. Transfer Switch 2. Sensing	Lap top & Data Protector	Watch & Listen
AFTERNOON TEA BREAK				
Unit 3 – Transfer Switch	15:15 – 16:30	3. Single Line Diagram 4. Schematic Diagram	Lap Top & Data Projector Manuals & Diagrams	Watch & Listen Read Diagrams
COMPLETE DAY 1				
DAY 2				
Review of day 1	8:00 – 9:00	1. Review of Unit 1- 3	Butcher Paper	2 teams to present the operation of the Transfer Switch
Unit 4 – SLD, Blackstart, Isolation Procedures	9:00 – 10:00	1. Single Diagram Line 2. Circuit Diagram	Lap Top & Data Projector, Butcher Paper	Team to explain their Procedures
MORNING TEA BREAK				
Unit 4 –	10:15 – 12:00	3. Schematic Diagram 4. Black Start Procedures	Lap Top & Data Projector,	Team to explain their procedures

		5. Isolation Procedures	Butcher Paper	Discuss procedures
LUNCH BREAK				
Servicing & Preventive Mtce	12:00 – 15:00	Field Visit	Field Visit – To a Transfer Switch site	Inspect Generator & Transfer Switch
AFTERNOON TEA BREAK				
Test & Review	15:15 – 16:30		Hand out Test Papers Collect Test Papers	Give out evaluation forms Collect evaluation forms
COMPLETION OF TRAINING				

TARGET GROUP

- ⊙ Engineering Engineers
- ⊙ Mechanical Engineers
- ⊙ Diploma in Electrical Engineering
- ⊙ Diploma in Mechanic Engineering
- ⊙ Apprentice in Electrical
- ⊙ Apprentice in Mechanical
- ⊙ 3 years in Electrical Field
- ⊙ 4 years Mechanical Field
- ⊙ 3 year as a Power Station Operator
- ⊙ 4 years as an Assistant Generator Operator
- ⊙ Marine Electrician
- ⊙ Wiremen's License's Holder

Note

All person that **undergo this training (Transfer Switch & Generator) must go through the Stand Alone Generator training first.**

TRAINERS: Joji Bakoso

DATES: Tentative

VENUE: Training Room/On Site

METHODOLOGY: Lecture, Group Discussions and Presentation, Overhead Slides, Video Clips, Diagram Reading

Acknowledgement : -

- 1. Transfer Switch Principle – Cummins**
- 2. Emergency Diesel Generator – Hassen A Hassane**
- 3. Preventative Maintenances – Power System Specialist, Inc**

COURSE PROGRAM

Day 1	Day 2
08:00 – 08:15 Attendance/House rules	08:00 – 10:00 UNIT 4 SLD, Blackstart & Isolation Procedure
08:15 – 08:30 Course opening	<ul style="list-style-type: none">• Single Line Diagram• Circuit Diagram• Schematic Diagram• Blackstart Procedure• Isolation Procedure
08:30 – 9:00 UNIT 1 OVERVIEW OF BLACKOUT AND RESTORATION PROCESS	
10:00 – 10:15 <i>Morning Tea</i>	10:00 – 10:15 <i>Morning Tea</i>
10:15 – 12:00 UNIT 2: GENERATOR OPERATION PROCEDURE	10:15 – 12:00 Unit 4
12:00 – 13:00 <i>Lunch</i>	12:00 – 13:00 <i>Lunch</i>
13:00 – 15:00 UNIT 3: TRANSFER SWITCH	13:00 – 15:00 FIELD VISIT
15:00 – 15:15 <i>Afternoon Tea</i>	15:00 – 15:15 <i>Afternoon Tea</i>
15:15 – 16:30 UNIT 3: TRANSFER SWITCH	15:15 – 16:30 TEST & REVIEW
16:30 End of day 1	16:30 End of Training

Manual compile by George RS Bakoso aka Joji Bakoso

Trainer Profile



Name: Joji Bakoso

Contact Details:

Phone - Mobile- +679 904 1942

Email -

- jbakoso@gmail.com
- georgerichard276@gmail.com

Designation:

Training Officer - Electrical

Qualifications:

- Cert IV in Training & Assessment TAA 40104 (APTC) • TOT I-IV (NTPC) • Registered Training Instructor • Registered Training Officer • Higher Technician Certificate (P&T) • Craft Apprenticeship Certificate – Electrical Fitter Mechanic (FNTC)

Work Experience:

43 years of relevant electrical work experience.



ENERGISING OUR PEOPLE AND OUR
NATION

Fiji Electricity Authority

CATEGORY H REFRESHER & AUTHORISATION **TRAINING REPORT FOR RENEWABLE & THERMAL** **TEAM (NAVUTU & WAILOA)**



Prepared by: Joji Bakoso & Semesa Qalo

Location of Course: Navutu Training Center, Lautoka

Date of Course: 13th to 15th October, 2010

TABLE OF CONTENTS

1.0 INTRODUCTION

2.0 CONTENTS & OBJECTIVES

2.1 CONTENTS

2.2 OBJECTIVES

2.3 RESOURCE PERSONNEL

2.4 METHODOLOGY

3.0 PARTICIPANTS

4.0 EVALUATION

4.1 Reaction Evaluation

4.2 Learning Evaluation

5.0 CONCLUSION

6.0 RECOMMENDATIONS

1. INTRODUCTION

This is a new Category of Authorization implemented after discussion with personnel from the following Departments: System Control, Network, Production and Training.

This Category of Authorisation is targeted to the Power Station Environment where it is required to isolate the Plant from all sources of energy. The voltage levels of the plant to be isolated are : up to and including 11KV.

Field personnel to attend Category H shall have practical experience of At least 1 year with hands on experience with Switchgears after getting Authorized in Category A.

2.0 CONTENTS AND OBJECTIVES

2.1 CONTENTS

Unit 1 SWITCHGEAR ARRANGEMENT & IDENTIFICATION

- 1.1.1** Knowledge of the general arrangement of plants in sub stations
- 1.1.2** Methods of plant identifications

Unit 2 POWER STATION EQUIPMENT

- 2.1** A basic theoretical explanation of:- Prime mover, Generator, Exciter, AVR, Plant Auxiliaries, Control Panel, LV board, Blackstart set, DC supply, circuit breaker, earth switch.

Unit 3 ENGINE AND GENERATOR PROTECTION RELAYS

- 3.1** Engine Protections
- 3.2** Emergency Handling
- 3.3** Types of Generator Protection Relays used in Power Stations
- 3.4** Reading Plug and TMS reading
- 3.5** Identification of fault protection flags that operated.
- 3.6** Types of Faults
- 3.7** Procedures to follow when protection operates

UNIT 4 POWER STATION LOCAL PERMIT

- 4.1** LV Isolation and tests
- 4.2** Earthing
- 4.3** Filling of the Local PTW form

Unit 5 PRACTICAL

- 5.1** Rack in & out of 11kV generator Circuit Breaker
- 5.2** Use of HV Tester

2.2 OBJECTIVES:

At the End of the Session, participants will be able to:

- Know the general arrangement of plants in substations
- Identify the plants in a substation
- Know the equipment used in a power station

- Know how to isolate a MV plant.
- Know how to fill the Power Station Local Permit form
- Know factors limiting load on Engine
- Know the emergency handling procedures of a power plant
- Know the log entry
- Know the types of protection relays used in our system
- Operate switchgear on Local Control
- Know the need to protect our systems

2.3 RESOURCE PERSONNEL:

- Joji Bakoso- Training Officer Electrical
- Semesa Qalo- Training Officer Mechanical.

2.4 METHODOLOGY

Lectures

Power Point Presentation

Whiteboard

Discussions

Practical

3.0 PARTICIPANTS

1. Keni Rokotunidau – Team Leader Thermal, Navutu
2. Aminiasi Sawau – Technical Officer, Generation
3. Rusiate Faivakibau – Diesel Mechanic A, Navutu
4. Sanjay Nand – Electrician A, Navutu
5. Josese Atama – TeamLeader Renewable, Wailoa
6. Sumendra Prasad – Diesel mechanic A, Navutu
7. Inoke Benedito – Graduate Engineer Renewable, Wailoa
8. Louis Wilson – Electrical Technician Renewable, Wailoa
9. Pita Soqila – Mechanical Technician Renewable, Wailoa

4.0 EVALUATION:

4.1 Reaction Evaluation: Summary of the FEA course Evaluation.

No	Area of evaluation	Reaction Evaluation Summary (As per forms received)
A	The administration of the program and presentation of the training personnel:	<ul style="list-style-type: none">➤ 35% ticked for Excellent➤ 25% ticked for Very Good➤ 30% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor
B	The workload of the course in terms of Course Contents:	<ul style="list-style-type: none">➤ 45% ticked for Excellent➤ 55% ticked for Very Good➤ 10% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor
C	The instructional method used in the course in relation to the materials provided:	<ul style="list-style-type: none">➤ 40% ticked for Excellent➤ 60% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor
	The overall rating of the course (Calculated from A,B & C) :	<ul style="list-style-type: none">➤ 40% ticked for Excellent➤ 60% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor

4.2 Reaction Evaluation

Learning Evaluation Moderated results for Cat H' Refresher & Authorisation held at Navutu Training Room, dated 13th – 15th May, 2010.

Participants	FNPF Nos.	Unit 1 Switchgear Arrangement & Identification MPM = 85%	Unit 2 Power Station Equipment MPM = 80%	Unit 3 Engine & Generator Protection Relays MPM = 80%	Unit 4 Power Station Local Permit MPM = 85%	Practical MPM = 100%
Keni Rokotunidau	HL 748	100	97	96.3	100	100
Aminiasi Sawau	HY 837	100	94.3	98	100	100
Rusiate Faivakabau	2522813	100	100	98	100	100
Sanjay Nand	2314685	100	100	100	100	100
Sumendra Prasad	VL 011	100	100	98	100	100
Inoke Benedito	OG 403	100	97	98	100	100
Josese Atama	QK 509	100	100	100	100	100
Louis Wilson	2505043	100	97	97	100	100
Pita Soqila	NA590	100	94.3	96.3	100	100

D. Other Strengths of the course:

- Inclusion of the ZIP message
- Interactive & Practical
- Really learn a lot
- Inclusion of SEL basics

E. Suggestions to improve the course/administration:

- Appreciate the call out for training
- Issues brought up during training should be taken up to Generation management team for action.

F. General Comments:

- Practical to be carried out on all types of switchgears

4.2 Learning Evaluation

Theoretical test was the assessment tool used as evaluation/evidence of competency in cognitive learning

Practical was the assessment tool used as evaluation/evidence of competency in the psychomotor learning

COURSE: Category H Authorisation & Refresher DATE: 13th to 15th October 2010

INSTRUCTOR'S REMARKS: Conducted for refresher and authorisation for thermal and renewable generation staffs of Navutu and Wailoa.

5.0 CONCLUSION:

Participants were from the thermal and renewable generation sections of Navutu and Wailoa and the course was both for authorisation and refresher.

Generally the knowledge and skills of the participants in regard to isolation of 11kV plants and switchgears were updated and enhanced.

Unit 2, Power Station Equipment was covered in detail apart from what were in the course materials/notes.

Practical was carried out at the spare feeder circuit breaker of the new Nadi Power Station.

After completion of this training, participants are competent to carry out isolation works on power plant and switchgears upto 11kV

After the test papers have been assessed and moderated, the names will be submitted to NCC to be included in the Category H authorisation listing.

6.0 RECOMMENDATIONS:

1. Focus is now on changing and updating the course contents to be relevant to the new authorisation criteria manual standard.

Pics & Photos during Training





Compiled By: Joji Bakoso & Semesa Qalo

Training Officers Electrical/Generation



CAT K AUTHORIZATION TRAINING- AUTHORIZED SYSTEM PLANNER & GENERATION DISPATCHER

2015

*Prepared by – Joji Baqoso
Fiji Electricity Authority Training Services
Held at NCC Training Room – (15th – 17th September, 2015)*

1.0 CONTENTS

1.0 RESOURCE PERSONNEL & TRAINERS

Joji Bakoso & Manoj Kumar

2.0 METHODOLOGY

Lectures, Whiteboard, Group Discussion, Movies & Generator Inspection

3.0 COURSE CONTENTS

1. ZIP
2. Effective Communication
3. Electrical Safety
4. Single Line Diagram Reading and Identification of Symbols
5. Analyze and Redistribute Feeder Loads
6. Familiarize with Live Line Work Procedures
7. BOS Calculation
8. Generation Dispatch Plan
9. Managing System Data
10. Generation Isolation Procedures

4.0 POST COURSE EVALUATION

No	Area of evaluation	Reaction Evaluation Summary (As per forms received)
1	Trainer's program administration (enrolment, timelines, notes & room setup)	<ul style="list-style-type: none"> ➤ 50% ticked for very good ➤ 50% ticked for Good ➤ 0% ticked for Refer to Feedback
2	Presentation of Trainer (neatly dressed, well groomed, close shoes & uniform)	<ul style="list-style-type: none"> ➤ 70% ticked for Very Good ➤ 30% ticked for Good ➤ 0% ticked for Refer to Feedback
3	Trainer's deliberation on Health & Safety	<ul style="list-style-type: none"> ➤ 70% ticked for Very Good ➤ 30% ticked for Good ➤ 0% ticked for Refer to Feedback
4	Trainer's introduction of the Training Program innovatively	<ul style="list-style-type: none"> ➤ 50% ticked for Very Good ➤ 50% ticked for Good ➤ 0% ticked for Refer to feedback
5	Relevance of practical activities to the theory	<ul style="list-style-type: none"> ➤ 40% ticked for Very Good ➤ 60% ticked for Good ➤ 0% ticked for Refer to feedback
6	Quality of teaching aids	<ul style="list-style-type: none"> ➤ 30% ticked for Very Good ➤ 70% ticked for Good ➤ 0% ticked for Refer to Feedback
7	Trainer's knowledge of the subject matter with reference materials (textbook and websites)	<ul style="list-style-type: none"> ➤ 50% ticked for Very Good ➤ 50% ticked for Good ➤ 0% ticked for Refer to Feedback
8	Achievement of Training Objectives	<ul style="list-style-type: none"> ➤ 60% ticked for Very Good ➤ 40% ticked for Good ➤ 0% ticked for Refer to Feedback
9	Concluded with tangible summary	<ul style="list-style-type: none"> ➤ 30% ticked for Very Good ➤ 70% ticked for Good ➤ 0% ticked for Refer to Feedback
10	Trainer's usage of mobile phone, email, wifi and breaks while delivering training	<ul style="list-style-type: none"> ➤ 30% ticked for Very Good ➤ 70% ticked for Good ➤ 0% ticked for Refer to Feedback

4.1 Opportunities for improvement of the Course

1. Updated course content. In depth training on carrying out switching program preparation
2. More field trips and hands on training
3. More time to be given to field trips
4. Upgrading at the generation dispatch plan and managing system data
5. Having refresher course and improvements annually
6. Some of the units to be revised to reflect job scope
7. More field visit on various sites
8. There should be a unit on Roles and Responsibilities of other stakeholders
9. There should be a unit on Roles and Responsibilities of other stakeholders

4.2 Did the trainer add value innovatively to the training program? If yes, please explain:

1. Yes, participants were taken on a field trip where we were able to see electrical equipment used.
2. Yes, given a real life situation
3. Yes, by taking us to the field and showing us what we do is out there in the field
4. Yes, through the use of personal video and documentary
5. Yes, improvement to current manual & safety manual
6. Yes, he explains the art of improving our work
7. Yes, providing teaching aids and site visit
8. Yes, by giving us unique assessments to test each individual separately
9. Yes, by means of class exercise, he showed films on the subject. Also individuals were allowed to explain to the class on chosen subjects.

5. Participants

No.	FNPF No.	NAMES	DESIGNATION	SECTION
1	PF 599	Armogam Odaiyar	Team Leader System Planning	System Planning & Control, Vuda
2	UN 183	Sovaia Vakasoqo	Generation Dispatch Coordinator	“
3	NA 603	Inoke Qilu	National Control Coordinator	“
4	NX 364	Jone Talemaibau	Switching Programmer	“
5	2543400	Shameel Ali	System Coordinator	“

6	MN12916739T	Amitesh Kumar	Graduate Electrical Engineer	“
7	2543395	Vaciseva Dimuri	Switching Programmer	“
8	2613737	Ropate Loiti	“	“
9	2509514	Semi Laweloa	“	“
10	2509514	Tivam Kumar	Graduate Attache	“

5.0 PICTURES

Classroom Scenario



Field Trip









6.0 CONCLUSION

- To update training materials next year
- To run refresher every year

Compiled by: Joji Bakoso

Training Officer- Electrical/Generation

23/09/2015.



NADARIVATU BLACKSTART & POWER RESTORATION TRAINING REPORT



2016

*Prepared by – Joji Baqoso
Fiji Electricity Authority Training Services
Held at Nadarivatu Control Room – (25th – 27th October, 2016)*

1.0 CONTENTS

1.0 RESOURCE PERSONNEL & TRAINERS

Joji Bakoso, Talib Mohammed, Samisoni Savukimoala, Tariq Bahadur, Maikeli Naciqa & Manoj Kumar

2.0 METHODOLOGY

Lectures, Whiteboard, Group Discussion & Presentation, Field Visit & Inspection

3.0 COURSE CONTENTS

1. Introduction
2. Constrains
3. Generator Ratings & Station Loads
4. Station Auxiliaries
5. System Protection
6. Station Standard Restoration Procedures & 415V circuits
7. Nadarivatu Power Restoration Sequence
8. Generator Ratings & Capabilities
9. SCADA
10. Nadarivatu Switchyards Operation
9. Restoration Steps – OPS 2

4.0 TRAINING DELIVERY

4.1 Introduction

Shared by Joji Bakoso :- Overview, Concept and National Control Centre procedures of the Blackstart and Power Restoration.

4.2 Introduction of Nadarivatu Hydro Power Station

Generating capacity and connection

Generator No.	Manufacturer	Installed Capacity	Rated MW	Connection Voltage	Governor & AVR Setting
G1	Alternator = V&P Engineering (China) Ltd Prime Mover = CHONQING CUMMINS	25MVA	20	11kV	Droop
G2	Alternator = V&P Engineering (China) Ltd Prime Mover = CHONQING CUMMINS	25MVA	20	11kV	Droop

4.3 BLACKSTART & POWER RESTORATION PROCEDURES CONSTRAINTS

Divide the group into their sections to identify the constraints they face during blackouts.

4.3.1 Team Findings on Constraints during Blackouts

Team 1 = Maikeli Naciqa, Epeli Rokodrakaya, Jonacani Silatolu, Mitieli Beranadoi

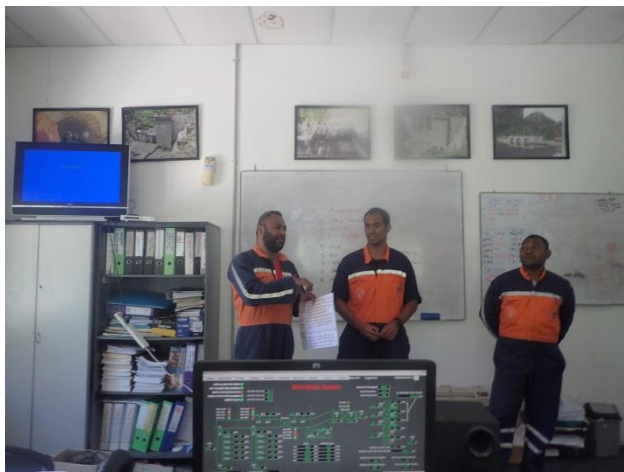
- Time for the genset to reach stationary status
- Waiting time for NCC to inform us to blackstart
- Maintaining 11kV line above 11.2kV once GCB is closed & NCC closing feeders.
- Genset trip due to overvoltage of tie line. Team had to wait for the duration of stopping & starting sequence.
- Mode of communication, no cell phone reception.

Team 2 = Rusiate Faivakibau, Marika Tabutaci, Waisea Mocevata, Christian Fong, Joeli Tanoa

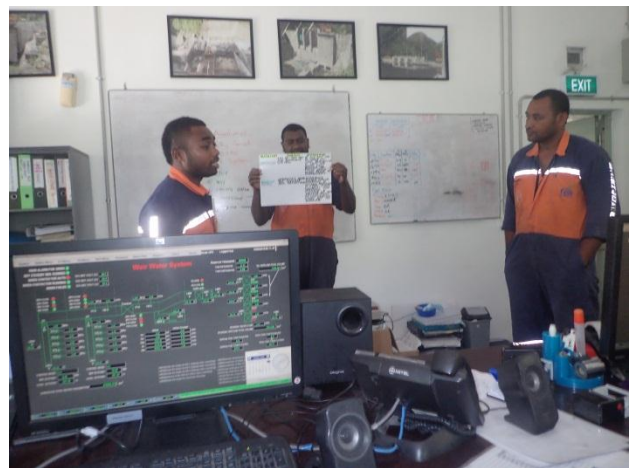
- No one (personal) had Cat B authorization for 132kV CB operation, eg: switchyard fault, unable to operate remotely on HMI (5B10, 5C10, 5B40, 5C40) manually operated at the switchyard.
- Gen online –slow reaction from NCC to load up grid causing genset to trip on high frequency. (engine humming)
- Communication breakdown with NCC (IP phone) –no mobile phone reception

Team Presentationnn

Rusi's Team



Mike's Team



4.4 PRINCIPLE OF POWER GENERATION, POWER FACTOR TRIANGLE & GENERATOR CAPABILITY CURVE

1. Principle of Power Generation, Power Factor Triangle, Vuda Capability Curve and Generator ratings presented by Joji Bakoso

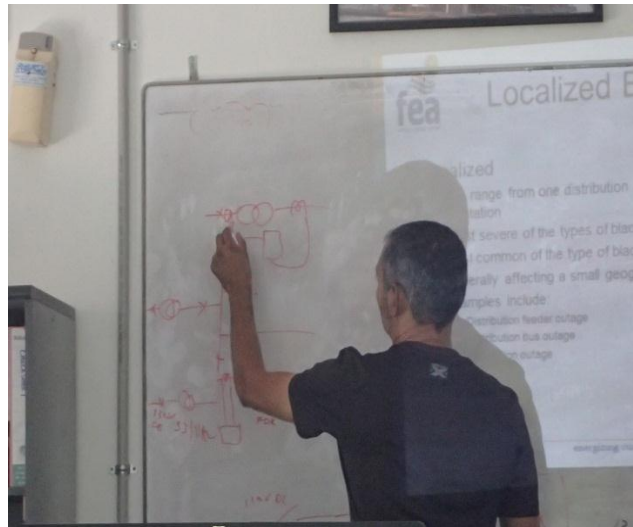
4.5 Nadarivatu 415V Standby Generator and Circuitry & Auxiliaries

Unit covered by Joji Bakoso



4.6 PROTECTION

Covered by Talib Mohammed



4.7 NADARIVATU BLACKSTART PROCEDURES

Presented by Maikeli Naciqa



4.8 NADARIVATU 132kV SWITCHYARDS EQUIPMENT & OPERATION

Unit covered by Tariq Bahadur

Field Visits

Powerhouse 132kV switchyard



Main 132kV Switchyard



5 SCADA

Covered by Samisoni Savukimoala

Test Results

No	Name	Mark (/20)
1	Maikeli Naiqica	17
2	Rusiate Faivakibau	17
3	Jonacani Silatolu	17
4	Waisea Mocevata	20
5	Marika Tabutaci	20
6	Epeli Rokodokaya	20
7	Christian Fong	20
8	Joeli Tanoa	20
9	Mitieli Beranadoi	20



6 POWER RESTORATION OPS 3

Units covered by Manoj Kumar



7.0 POST COURSE EVALUATION

No	Area of evaluation	Reaction Evaluation Summary (As per forms received)
1	Trainer's program administration (enrolment, timelines, notes & room setup)	➤ 22.22 ticked for Very Good ➤ 77.78% ticked for Good
2	Presentation of Trainer (neatly dressed, well groomed, close shoes & uniform)	➤ 33.33% ticked for Very Good ➤ 66.67% ticked for Good
3	Trainer's deliberation on Health & Safety	➤ 22.22% ticked for Very Good ➤ 77.78% ticked for Good
4	Trainer's introduction of the Training Program innovatively	➤ 22.22% ticked for Very Good ➤ 77.78% ticked for Good
5	Relevance of practical activities to the theory	➤ 22.22% ticked for Very Good ➤ 77.78% ticked for Good
6	Quality of teaching aids	➤ 11.99% ticked for Very Good ➤ 88.89% ticked for Good
7	Trainer's knowledge of the subject matter with reference materials (textbook and websites)	➤ 44.44% ticked for Very Good ➤ 55.56% ticked for Good
8	Achievement of Training Objectives	➤ 33.33% ticked for Very Good ➤ 55.56% ticked for Good
9	Concluded with tangible summary	➤ 22.22% ticked for Very Good ➤ 77.78% ticked for Good

7.1 Opportunities for improvement of the Course

1. Explain how the other units (scada, protection) links to the black start procedures.
2. The purpose of the training was for controllers and Nadarivatu to come together and go through the blackstart which did not happen. Defeats the purpose of resolving the problem faced during blackouts for both parties hearing each other.
3. Summarize main points of course and the punctuality of other trainers present during training
4. Some drawings used as illustration weren't up- dated. Need to use new and correct drawings.
5. No, it was OK
6. The course was very informative and beneficial and I would not recommend any change as it is already great.
7. Some of the single line diagrams on the notes were not the updated ones or are the wrong diagrams.
8. More participants and sharing of knowledge from other departments

7.2 Did the trainer add value innovatively to the training program? If yes, please explain: .

1. Yes
2. Yes, through some of his experiences which relates to the safety of personnel and the importance of working according to procedures.
3. Yes, the explanation about the topics were spot on and was understandable.
4. Yes, he used different presenter and included the audiences too.
5. Yes, he uses examples from daily works which makes it easier for us to understand the topic he elaborates on.
6. Yes, by comparing his teachings to situations we can relate to for us to better understand.
7. Yes, made me aware of what is affected in the station during a blackout & the importance of having a standby genset for a blackstart.

8.0 Participants

No.	EMP.	NAMES	DESIGNATION	SBA
1	E00852	Rusiate Faivakibau	Team Leader	Generation
2	E00762	Maikeli Naciqa	"	"
3	E01231	Jonacani Silatolu	Electrical Technician	"

4	E01216	Epeli Rokodaroya	Mechanical Technician	“
5	E01411	Marika Tabutaci	“	“
6	E01410	Mitieli Beranadoi	Electrical Technician	“
7	E01517	Joeli Tanoa	“	“
8	E01136	Waisea Mocevata	Trainee Technician	“
9	E01530	Christian Fong	“	“

9.0 RECOMMENDATIONS

1. To run refresher every year and carry out a dummy practical when generators shut down in the night
2. National Controllers to be part of the Nadarivatu Blackstart and Power Restoration training in 2017

10. CONCLUSION

1. Communication is the common CONSTRAINTS faced by all the stakeholders during blackstart and restoration process.
3. Constrains presented in this training to be analyzed and solutions identified to improve blackstart and power restoration process in the future.

Compiled by: Joji Bakoso

Training Officer- Electrical/Generation

4/11/2016.



Prepared by – Joji Baqoso

Fiji Electricity Authority Training Services

Held at FEA Training Center, Navutu, Lautoka – (23rd – 27th April, 2012)

1.0 CONTENTS

1.0 RESOURCE PERSONNEL

Semesa Qalo, Keni Rokotunidau, Joji Bakoso

2.0 METHODOLOGY

Lectures, Whiteboard, Group Discussion, Group Presentation

3.0 POST COURSE EVALUATION

No	Area of evaluation	Reaction Evaluation Summary (As per forms received)
A	The administration of the program and presentation of the training personnel:	<ul style="list-style-type: none">➤ 85% ticked for Excellent➤ 15% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor
B	The workload of the course in terms of Course Contents:	<ul style="list-style-type: none">➤ 85% ticked for Excellent➤ 15% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor
C	The instructional method used in the course in relation to the materials provided:	<ul style="list-style-type: none">➤ 85% ticked for Excellent➤ 15% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor
	The overall rating of the course (Calculated from A,B & C) :	<ul style="list-style-type: none">➤ 85% ticked for Excellent➤ 15% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Fair➤ 0% ticked for Poor

3.1 Other Strengths of the course

- Very helpful and supportive
- It's very helpful, raise my knowledge into another level
- We need more practical in the mechanical side like dismantling engines
- Supported with field trips, where we see practical applications, sessions are well planned out.
- Very, very important and very interesting course training
- Answering the review question and time given to us to present
- Trainers are well versed in their knowledge of what was taught
- Course content is really excellent
- Excellent
- Course from the beginning was well prepared and organised
- I found the review questions very informative. Meals were very good
- An excellent course supported by experienced field trainers and a well organised system and organisation
- Field visit to generation workshop to sight equipment and witness Megger test being carried out

3.2 Suggestions to improve the course/administration:

- Far better, we just have to improve ours and looking forward for other trainings of this shortly available.
- I suggest if more practical on how to use the test equipment be included
- Everything has been well organized
- Plenty of new things I learn this week will be useful for my future
- Would be of great assistance if trainees carry out practical test on technical metering and test equipment
- Things learned from this first week will greatly improve how I will do things back home
- Course well coordinated
- Excellent
- For our team from Samoa, the training was great and we look forward for some similar trainings
- Some diagrams on the manuals to be clearly labeled. Diagrams to be clearly explained
- A little bit shorter, two weeks could have been better
- Quite satisfactory
- For international training like this, it would be professional to have trainers in company uniform

3.3 General Comments:

- It's really helping us learn a lot of new things. The only thing is for us a to go back and utilize what we got here
- Need further training on this program.
- This training is very important to us in our field, so when we go back to our country, we can share our understanding to our friends in our company. Thanks a lot-vinaka vakalevu
- Overall program is excellent
- I hope more training like this soon, Thank you! Vinaka vakalevu
- My appreciation for the opportunity to be a part of this training and the notes and handout will be very useful
- Training is very helpful to my knowledge and skill and will also benefit my Utility
- Overall training very good and materials used are not just theoretical but what our company should apply practically. Eye opener to me on standards, procedures and system management.
- Big thanks to the FEA generation training officers for a good week and the knowledge pass on to us participants from various utilities in the South Pacific

- Appreciation to the PPA for arranging this course for all Pacific islanders to encourage the participants to improve our knowledge. Thanks for FEA for all good things in the first week, when the time we start till the end. Thanks for the daily refreshment. God Bless You All
- Thanks very much for the opportunity to attend this training. Please provide more training to extend knowledge and skills.
- Thanks for your time and kindness for teaching us
- Very good manual and tutors
- It has been a very interesting course, revising after leaving school some time ago. Very supportive and organised trainers, support staff and improve and established power network system
- I commend the training in which some of the little things being overlooked in my work, as it will assist me and my utility in producing good results
- Very informative

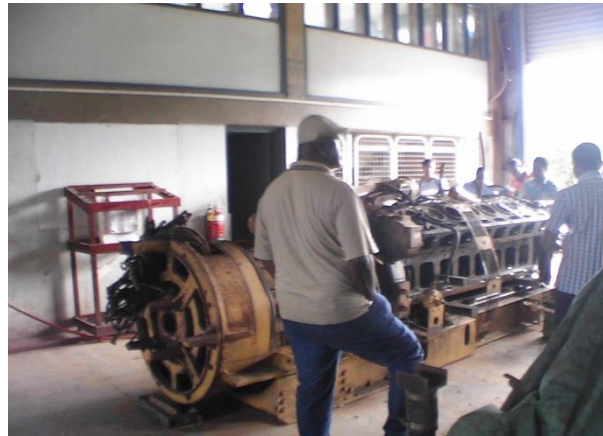
4. Participants

No.	NAMES	UTILITY	DESIGNATION	COUNTRY
1	James Dani	Solomon Islands Electricity Authority	Foreman Electrical	Solomon
2	Mikaele Cakacaka	Fiji Electricity Authority	Mechanical Technician	Fiji
3	Kirite Uriam	Public Utilities Board	Mechanical Supervisor	Kiribati
4	Grant Engar	Nauru utilities Corporation	Line Supervisor	Nauru
5	Amone Kasi Simelika	Niue Power Corporation	Leading Hand Electrician	Niue
6	Thirdson Akeimo	Niue Power Corporation	Electrician	Niue
7	Samisoni Fatai	Tonga Power Limited	Foreman Asset Management	Tonga
8	Alamania Dick	Solomon Island Electricity Authority	Mechanical Engineer	Solomon
9	Ava Fou Malua	Tuvalu Electrical Corporation	Mechanic	Tuvalu

10	Taaku Sekieli	Tuvalu Electrical Corporation	Distribution Manager	Tuvalu
11	Falapeau Sailosi	Tonga Power Limited	Powerstation Technician	Tonga
12	Danden Harris	Nauru Utilities Corporation	Maintenance Trainee	Nauru
13	Tavau Tuimauga	Electric Power Corporation	Overseer Inspector	Samoa
14	Peni Peni	Electric Power Corporation	Electrical Foreman	Samoa
15	Anetema Elisaia	Electric Power Corporation	Overseer	Samoa
16	Ravuni Ululakeba	Fiji Electricity Authority	Graduate Engineer	Fiji
17	John Pokon	PNG Power Limited	Electrical Maintenance Engineer	PNG
18	Bambang Gualin	PNG Power Limited	Maintenance Engineer	PNG
19	Jese Dautei	Fiji Electricity Authority	Training Officer Regulatory	Fiji
20	Kiriate Birita	Power Utility Board	Engineering Manager	Kiribati

5.0 Pictures

Generation Workshop Tour





Group Presentation

Kiribati



Tonga



Fiji



Nauru



Niue



Solomon



Tuvalu



Samoa



PNG



Classroom Delivery



Field Visit – Nadarivatu Hydro Station





6.0 CONCLUSION

- Course contents as per requested by PPA
- Course materials will be reviewed to suit the PPA needs for future generation training.

Compiled by: Joji Bakoso

Training Officer- Electrical

30/04/2012.

STAND ALONE AC GENERATOR TRAINING FOR PWD, WALUBAY, SUVA



2022

Prepared by – Joji Baqoso

Yannyanu Generator Consultant & Training Provider

Held at PWD Training Room, Walu Bay – (14th – 15th November, 2022)

1.0 CONTENTS

1.0 RESOURCE PERSONNEL & TRAINERS

George R S Bakoso aka Joji Bakoso = Training Officer

Ben Volavola = Training Instructor

Gus Heritage = Resource Personnel

2.0 METHODOLOGY

Lectures, Whiteboard, Group Discussion, Movies & Generator Inspection

3.0 COURSE CONTENTS

1. Principle of Power Generation
2. Speed Governor
3. Power Factor
4. Preventative Maintenance
5. Protection
6. Generator Operation Procedures

4.0 POST COURSE EVALUATION

No	Area of evaluation	Reaction Evaluation Summary (As per forms received)
1	Trainer's program administration (enrolment, timelines, notes & room setup)	<ul style="list-style-type: none">➤ 80% ticked for very good➤ 20% ticked for Good➤ 0% ticked for Refer to Feedback
2	Presentation of Trainer (neatly dressed, well groomed, close shoes & uniform)	<ul style="list-style-type: none">➤ 90% ticked for Very Good➤ 10% ticked for Good➤ 0% ticked for Refer to Feedback
3	Trainer's deliberation on Health & Safety	<ul style="list-style-type: none">➤ 100% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Refer to Feedback
4	Trainer's introduction of the Training Program innovatively	<ul style="list-style-type: none">➤ 100% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Refer to feedback
5	Relevance of practical activities to the theory	<ul style="list-style-type: none">➤ 100% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Refer to feedback
6	Quality of teaching aids	<ul style="list-style-type: none">➤ 100% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Refer to Feedback
7	Trainer's knowledge of the subject matter with reference materials (textbook and websites)	<ul style="list-style-type: none">➤ 100% ticked for Very Good➤ 0% ticked for Good➤ 0% ticked for Refer to Feedback
8	Achievement of Training Objectives	<ul style="list-style-type: none">➤ 90% ticked for Very Good➤ 10% ticked for Good

		➤ 0% ticked for Refer to Feedback
9	Concluded with tangible summary	➤ 90% ticked for Very Good ➤ 10% ticked for Good ➤ 0% ticked for Refer to Feedback
10	Trainer's usage of mobile phone, email, wifi and breaks while delivering training	➤ 70% ticked for Very Good ➤ 30% ticked for Good ➤ 0% ticked for Refer to Feedback

4.1 Strength of course

1. The main objectives or aim of the course has been fully achieved
2. Informative, teaching on single generator was well taught. Refresher course on those that have been in the work force for long
3. Very informative with course materials.
4. Great quality on concepts being taught. Recommended for training on generator
5. Very good data. Very informative.
6. Very good
7. Good knowledge for our field
8. There should be more theory training and course. And it was a great learning
9. The course covered a vast range of topics that is quite related to our field of work
10. They deliver most of the real fact on the ground which they have experienced during their times.

4.2 Opportunities for improvement of the Course

1. More course
2. More time given and would encourage them to have course on control
3. The more the training, the better. Maybe a week training would be far more better.
4. More refreshments
5. If we can do some practical training too just on the basics.
6. Yes, as experience of the trainer was an advantage as he shared all his experience
7. There should be a lot of time given for this course

8. If this training could be held where out station are located so that our staff are informed and trained as well
9. The materials for the course especially presentation slides
10. More practical course to be taught along with theory.

4.3 Did the trainer add value innovatively to the training program? If yes, please explain:

1. Yes, they have given us video's and picture of some of the real scenario's on the ground.
2. Yes, the trainer shared his past experience he had in relation to the training material.
3. No Comment
4. Yes, as experience of the trainer was a advantage as he shared all has experience
5. No Comment
6. Yes, with the help of a projector and slides
7. No Comment
8. Yes, with vast knowledge then have it was both theoretical and practical good eg: related video clips to relate to what was explained
9. Yes, by adding video clips which is give us a clear picture of what we learn, theoretically and verbally.
10. No Comment

4.4 Any other comments

1. Support the idea to conduct and continue this training.
2. No Comment
3. No Comment
4. Excellent training
5. No Comment
6. Very much love to make trip with them to inspect generation at EFL depot or powerhouse

5. Participants

No.	FNPF No.	NAMES	DESIGNATION	SECTION	Mark Gained
1	30494	Setareki Matai	Electrician	Electrical	85
2	XJ 532	Tagi Tupou	Leading Hand	"	93
3	UZ 592	Kartik Kumar	Leading Hand	"	92

4	WV 813	Taito Vatuvei	Foreman	“	96
5	YQ 758	Yaubale Bolekisaineri	Electrician	“	93
6	30594	Asinete Tamani	“	“	83
7	99375	Mereani Likudranivesi Kaivou	Technical Assisstant	“	86
8	30577	Asivorosi Sukanaivalu	Fitter	Mechanical	94
9	91924	Voniani Smith	Supervisor	“	100
10	2216M	Jovilisi Raketekete	Leading Hand	Electrical	94

5.0 PICTURES

Classroom Scenario



Stand Alone AC Generator Training Report



6.0 CONCLUSION

- To run refresher training for generator every 2 years

Compiled by: George R S Bakoso aka Joji Bakoso

Training Officer- Yanuyanu Generator Consultant & Training Provider

16/11/2022

