



Annual Report
2016



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VISION

'Energising our Nation'

MISSION

'We aim to provide clean and affordable energy solutions to Fiji with at least 90% of the energy requirements through renewable sources by 2025'

VALUES

- Customer focus
- Honesty
- Courage to do what is right for FEA
- Team work
- Individual accountability
- Transparency
- Innovativeness

CONSTITUTION & FUNCTIONS

The Fiji Electricity Authority was established, incorporated and constituted under the provisions of the Electricity Act of 1966 and began operating from 1st August of that year.

The Board Members of the Authority are appointed by the Government. The Chief Executive Officer is an ex-officio Member of the Board and is responsible to the Members for the Authority's management and for the execution of its policies. The powers, functions and duties of the Authority under the Electricity Act are for the basic purpose of providing and maintaining a power supply that is financially viable, economically sound and consistent with the required standards of safety, security and quality. A uniform tariff rate is charged for electricity used by each consumer group. The tariffs are determined according to government policy and are designed to meet specified targets while achieving a reasonable rate of return for the Shareholder.

The Authority is entrusted with enforcing the Electricity Act and regulations, setting standards, examining and registering electricians, and is empowered to approve and license suppliers to serve certain areas. The Authority is also governed by the requirements under the Public Enterprises Act.



The front cover page of this annual report depicts school children studying at night on receiving FEA grid electricity as part of the Government funded rural electrification project.

The back cover shows the street lights illuminating the Queens Road highway installed by the Fiji Roads Authority as part of the Government's objective to light up the highway near rural communities.



Letter to the Minister

31 May 2017

The Honourable Minister for Infrastructure and Transport
Level 4, Nasilivata House
Ratu Mara Road
Samabula
Suva.

Dear Minister,

Annual Report 2016

In accordance with Section 25 of the Electricity Act Cap 180, I am pleased to present the Fiji Electricity Authority's Annual Report for 2016 which incorporates a detailed summary of its operations and activities including the Financial Statements for the year ended 31st December 2016.

FEA recorded a profit after tax of \$59.6M as compared to a profit after tax of \$39.7M for 2015. This represented an increase in profit of around 51% compared to the previous year despite incurring the TC Winston restoration costs of \$30.1M.

The profit recorded by FEA in 2016 as compared to 2015 is due to the following:

- Increased generation output from both the Monasavu & Nadarivatu hydro schemes due to good rainfall received in 2016; and
- Good management practices adopted by the Board and Management to ensure funding of the TC Winston expenses of \$30.1M and thereafter, achieving good profits.

FEA funded the entire cyclone restoration cost from its own internal funds without any passing on to customers or having to borrow from the local financial institutions. The improved profitability has enabled FEA to undertake many essential development projects which are important to ensure the reliability and security of power supply to all Fijians.

2016 was another milestone year for FEA and more importantly for Fiji, as FEA will now supply electricity to the fourth main island of Fiji. FEA took over the Somosomo Hydro Power Project which was built under a grant by the Chinese Government to Fiji. Further, to supplement the Somosomo Hydro, FEA purchased and installed 2x1MW diesel generator sets at the Waiyevo Diesel Power Station in Taveuni at a cost of \$6.8M, funded by the Government of Fiji. In December last year, FEA commenced the supply of electricity in Taveuni for the first time. Since commencement, some 650 customers are now connected to the power grid in Taveuni.

FEA spent a total sum of \$53.6M on the construction of new rural electrification schemes, grid extension schemes for commercial/industrial projects, power system reinforcement works and contract jobs. FEA commissioned some 39 rural electrification projects in 2016. A total of 4,799 new electricity customers were connected in 2016 which comprised of 3,558 domestic and 1,241 commercial connections.

On behalf of the Members of the Authority, I take this opportunity to thank the Government for its continued support and look forward to the same in 2017 and beyond.

Sincerely,

Daksesh Patel
Chairman

Key Outcomes for 2016

- FEA achieved a financial profit of \$59.6M after tax in 2016 as compared to an audited profit after tax of \$39.7M in 2015. The increase in profit recorded in 2016 as compared to 2015 was due to the lower fuel cost recorded in 2016. The average fuel price was \$981.95/Tonne in 2016 compared to \$1,352.65/Tonne in 2015. The net thermal fuel cost decreased substantially by \$50.8M in 2016 from \$140.7M recorded in 2015 to \$89.9M.
- FEA restored power supply to majority of its commercial, industrial and urban residential customers within 2 weeks after TC Winston. Further, FEA funded the entire cyclone restoration works at a cost of \$30.1M from its own internal funds without any pass through to customers or having to borrow from the local financial institutions to fund this unbudgeted cost.
- The shareholder value of FEA increased from \$647M as at the end of 2015 to \$706M at the end of 2016. The total loans & bonds as at 31st December 2016 was \$319M, a decrease of \$21.2M as compared to 2015.
- FEA carried out Capex works totalling around \$63.1M in 2016, repaid mandatory principal loan repayments aggregating to \$24.7M and funded \$30.1M of cyclone and flood costs from internal cash flows.
- FEA achieved all of the Financial Covenants signed with ANZ Bank and FNPF despite the adverse financial impact of TC Winston. This ensured that Government, being the sovereign Guarantor of FEA's loans, was not exposed.
- FEA's total asset value exceeded F\$1.22Billion at the end of 2016. FEA has added significant shareholder value in recent years.
- FEA's gearing ratio at the end of December 2016 was 22.07% (2015-29.5%) which is within the international benchmark for power utilities of not more than 45%. The decrease in gearing level is a result of the profit recorded and loan repayments that were made during the year.
- In December 2016, the Cabinet approved the renewal of the Government Guarantee facility for all FEA borrowings with the Ministry of Economy till December 2017.
- FEA signed the Extension of the Technical Assistance Agreement with European Investment Bank (EIB) in November 2016 to fund the Transmission Network Development Plan (TNDP) necessary to meet the future demand of electricity and improve the reliability and security of power supply.
- FEA spent a total sum of \$53.6M on the construction of new rural electrification schemes, grid extensions for commercial/industrial projects, power system reinforcement works and contract jobs. Of this amount \$13.5M was authorized for the construction of sixty two (62) rural electrification projects, \$12.7M was authorized for fifty eight (58) general extension projects for commercial and industrial customers and \$3.9M was utilized for twenty five (25) contract jobs. A total amount of \$23.5M was authorized for sixteen (16) distribution power system reinforcement projects.
- FEA completed the final phase of the review of the Power System Protection Scheme for the entire FEA power system in 2016 to ensure safe and reliable system operations. FEA also continued with the upgrading of its aged and obsolete electrical protection relays with modern and intelligent numerical protection relays. Seventy-seven percent (77%) of the electrical protection relays in 11kV, 33kV and 132kV networks are now modern numerical protection relays.
- Achieved a System Average Interruption Duration Index (SAIDI) for unplanned power outages of 448 minutes against a target of 650 minutes.
- Achieved a system average Interruption Frequency Index (SAIFI) for customer's power supply interruption of 6 times against a target of 13 times. The average time that a customer is without power per interruption is measured by the Customer Average Interruption Duration Index (CAIDI). This index was 75 minutes in 2016. The above achievements does not incorporate the power outages due to TC Winston.
- Achieved a record high ICT up-time system performance of 99.92% against a target of 99.80%.
- Completed comprehensive review of the Organisation's Top Business Risks and implemented strategies to mitigate the risks. This reduced the ratings of our top 20 business risks by 20%.
- Work continued on the project to electrify the Korovou – Rakiraki corridor. The 33kV sub-transmission line from Tavua to Volivoli (Rakiraki) was commissioned in 2016, together with the new 33kV/11kV Volivoli zone substation. Work is currently in progress on the construction of the 11kV grid between Waimacia and Nayavu. This project will be completed at a cost of around \$19M and completion has been delayed to 2017 as a result of Tropical Cyclone Winston. The Project is jointly funded by the Government of Fiji and the Fiji Electricity Authority.
- Completed installation and commissioning of the 33kV underground cable between Hibiscus Park and Suva zone substations and 33kV underground circuit between Rokoboli and Hibiscus Park zone substations.
- Designed, procured, installed and commissioned the Tap Changer Control Systems for 132kV/33kV Transformers T1A and T2A at Cunningham Road substation and Vuda substation.
- Completed the replacement of 132kV insulators at the Cunningham and Vuda 132kV switchyards and upgraded the 33kV switchgear at the Cunningham Road 132kV/33kV zone substation.
- Completed Rust refurbishment work on 35 out of 110 steel lattice towers along the 132kV Wailoa – Cunningham Road transmission line as part of the Monasavu half life refurbishment program. The cost of the entire exercise is estimated to be around \$12M.
- Completed the upgrading of 33kV switchgears at the Vatuwaqa, Suva and Rarawai 33kV/11kV zone substations.
- Completed the upgrading of 2x 11kV/33kV 20/25MVA step-up transformers at Kinoya zone substation.
- Installed and commissioned 2x33kV circuit breakers at the new Kinoya zone substation.
- Completed Power supply to the FNPF's new Momi Bay resort with the commissioning of the 33kV sub-transmission line from Waqadra to Momi, the 33kV Switching Station at Nawai and the 33kV/11kV zone substation at Momi, at a cost of around \$12.9M.
- Completed the establishment of a Depot in Waiyevo Taveuni at a cost of around \$6.8M which included the purchase and installation of 2x1MW diesel generator sets to supplement the Somosomo Hydro Power Station. The above project was funded by the Government and has been operational from the 23rd of December 2016.
- A total of 4,799 new electricity customers were connected in 2016 against a target of 4,500. The new electricity customers comprised of 3,558 domestic connections and 1,241 commercial connections.
- A total of 13,560 energy meters were tested by FEA in 2016 against a target of 13,000. Out of these energy meters, 11,968 were single phase meters, 1,363 were prepay meters and 229 were three phase meters.
- Top two (2) FEA Quality Circle Teams participated in the 21st National Convention on Quality. Team FEA was awarded Gold as well the Silver awards in the Competitive Category.
- The FEA Team further received the Gold Award for the most Model Quality Circles Organisation at the NTPC's 21st National Convention on Quality in 2016.



The Honourable Prime Minister, Josaia Voreqe Bainimarama at the opening of the Rural Electrification Scheme at Naitutu Settlement, Namena Village in Korovou. The Government funded this project as part of its plan to make electricity accessible to the rural communities in Fiji.

Members Of The Authority



1. Daksesh Patel
Chairman

2. Gardiner Whiteside
Deputy Chairman

3. Alipate Naiorosui
Member

4. Paul Bayly
Member

5. Kamal Goundar
Member

6. Hasmukh Patel
Ex-Officio Member

Executive Management Team



1. Hasmukh Patel
Chief Executive Officer

2. Om Dutt Sharma
General Manager System
Planning & Control

3. Bobby Naimawi
Chief Financial Officer/
Board Secretary

4. Eparama Tawake
General Manager
Generation

5. Jitendra V. Kumar
General Manager
Network

6. Tuvitu Delairewa
General Manager
Commercial

7. Annabel Ducia
General Manager
Customer Services

8. Naveen Lakshmaiya
General Manager
Human Resources

9. Umesh Chandra
Chief Information Officer

Corporate Governance

FEA considers its inherent responsibility to disclose timely and accurate information regarding our financials and performance as well as to comply with good governance practices.

Board of Directors

The primary function of the Board of Directors is to provide effective leadership and direction to enhance the long-term value of the Authority to its shareholders and other stakeholders. The Board oversees the business affairs of the Authority and all directors exercise due diligence and independent judgement and make decisions objectively in the best interest of the Authority. The Board is also responsible for setting the right direction from the top and ensuring that a robust governance structure is in place to enable the Authority to succeed and deliver long term sustainable growth.

Appointment

The Authority welcomed the appointment of its new Chairman, Mr Daksesh Patel and the Director representing the Minister of Economy, Mr Kamal Goundar. Mr Daksesh Patel and Mr Kamal Goundar were appointed in August 2016.

Expiry of Term

Mr Nizam-ud-Dean, the former Chairman completed his term as the Chairman of the Authority on the 31st of May 2016. The Board of Directors placed on record their appreciation towards Mr. Dean's contributions during his nine (9) year tenure as Chairman of the Authority.

In 2016, Board meetings were held 9 times and the attendance of each member is tabulated below.

As at the 31st of December 2016, the Board composition was as follows together with the number of Board meetings attended:

Director		Number of Board Meetings Attended
Daksesh Patel	Board Chairman (August to December)	4
Nizam-ud-Dean	Board Chairman (January to May)	5
Gardiner Whiteside	Deputy Chairman	9
Paul Bayly	Member - Permanent Secretary for Infrastructure and Transport	9
Kamal Gounder	Member - Ministry of Economy (August to December)	4
Isikeli Vuceduadua	Member - Representative from the Ministry of Economy (January to May)	5
Alipate Naiorosui	Member - Private Sector	9
Hasmukh Patel	Ex-Officio Member - Chief Executive Officer	9

Board Sub-Committees

The following sub-committees of the Board assisted the Board in advisory functions:

Major Projects Sub-Committee

The key role of the sub-committee is to assist the Board in fulfilling its responsibilities by overseeing the delivery of any major infrastructure projects being constructed by the Authority in a timely, efficient and cost effective manner including making decisions in relation to the project as and when required.

Audit & Finance Sub-Committee

The key role of the sub-committee is to oversee the financial performance of the Authority, the Internal Audit function by providing assurance on the effectiveness of the Authority's internal control processes and oversee the financial reporting as well as discuss risk management practices.

HR Sub-Committee

The sub-committee is responsible for overseeing the compliance of corporate governance in relation to Human Resource matters. It provides advice to the Board regarding the development, implementation and effectiveness of Human Resource Policies and Strategies and Occupational Health & Safety Management.

Tender Sub-Committee

The sub-committee is responsible for overseeing the compliance of corporate governance in relation to the evaluation and award of tenders valued above \$700k and make recommendations to the Board for their consideration and approval.

Policy Based Corporate Governance

The Authority has also adopted a policy based on corporate governance to ensure that all employees are committed to the principles of corporate governance standards consistent with best practice, hence, the following policies were implemented to strengthen corporate governance in FEA:

- 1) Whistleblower Policy
- 2) Gifts Policy and
- 3) Anti-Money Laundering Policy



The Minister for Industry, Trade and Tourism, Mr.Faiyaz Siddiq Koya and newly appointed FEA Chairman, Mr.Daksesh Patel shaking hands with former FEA Chairman, Mr.Nizam-ud-Dean at the Grand Pacific Hotel in Suva on the occasion of the former Chairman's farewell.



The members of the Authority and an Observer from the Ministry of Public Enterprises during one of the monthly Board meetings that was held at the FEA Navutu office, in Lautoka.

Chairman's Report



FEA is undertaking another review of its 10 year Power Development Plan (PDP) for the period 2017-2026. The ten (10) year power development plan contains the load forecast for the ten year period, the power generation planning up to 2026 for Viti Levu, Vanua Levu, Taveuni and Ovalau power systems together with the associated transmission and distribution network assets that need to be developed or augmented and the investment plan required to implement the PDP. The total investment required in the generation sector as well as the transmission and distribution sector is estimated to be around \$2.4B over the next ten years for Viti Levu, Vanua Levu, Ovalau and Taveuni. The investment in the transmission and distribution network sector alone is estimated to cost around \$870M and this is expected to be funded either by FEA or from external sources. The private sector is expected to invest substantially in the power generation sector as Independent Power Producers (IPPs) and sell the electricity to FEA via long term Power Purchase Agreements. It will be a huge task for FEA to successfully implement its PDP up to

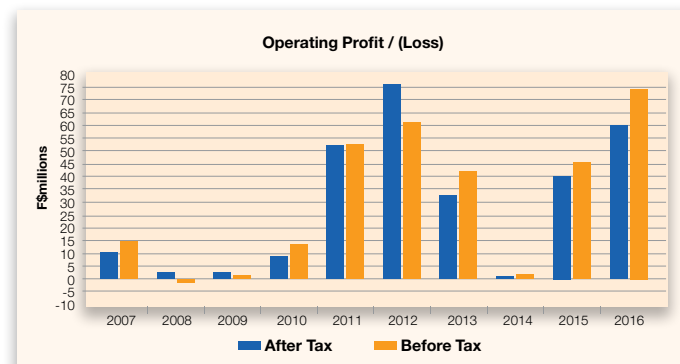
2026 particularly investing heavily in developing and reinforcing its transmission and distribution network infrastructure. The key enabler in achieving this plan is to have the right electricity tariff rate in place to ensure that FEA has the capability to borrow to fund its Optimum Power Development plan and also ensure the financial sustainability of FEA in the medium to long term.

2016 Profitability

FEA achieved a financial profit after tax of \$59.6M in 2016 as compared to a profit after tax of \$39.7M in 2015 despite incurring unbudgeted expenditure of around \$30.1M in carrying out repairs to infrastructure which was substantially damaged as a result of TC Winston. This equates to a Return on Shareholder Funds (ROSF) of 8.44%. The increase in the profit recorded in 2016 as compared to 2015 was due to the following:

- Lower fuel price recorded in 2016. The average fuel price was \$981.95 per Metric Tonne in 2016 compared to \$1,352.65 per Metric Tonne in 2015.
- Good management and increased generation output from both the Monasavu & Nadarivatu hydro schemes;
- Increase in sales and other miscellaneous income ; and
- Cost control measures implemented by Management throughout the year in view of the additional cost brought about as a result of TC Winston.

The profitability of FEA for the period 2007 to 2016 is illustrated in the graph shown below.

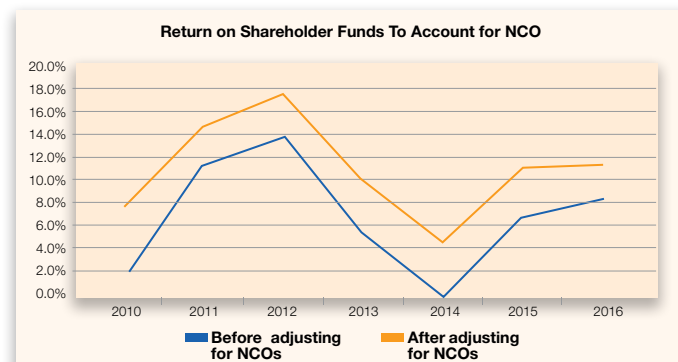
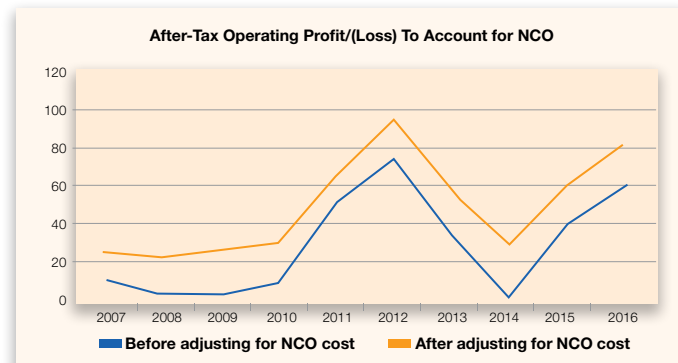


FEA incurs significant non-commercial obligation (NCO) cost each year when supplying subsidised electricity to rural Viti Levu and to the whole of Vanua Levu and Ovalau. FEA incurred around \$27.4M of NCO cost when fulfilling its social obligations in 2016. Although the Public Enterprises Act requires the Government to reimburse the NCO cost to FEA, such cost is not refunded.

Instead, the Government has accepted via decision CR2002

18th Meeting dated 10th September 2002 that FEA's non-commercial contribution to social and community services through its electricity subsidies be recognised as its annual dividend to the Government. Therefore, the deemed dividend paid to the Government by FEA for 2016 is a notional adjustment to account for the NCO cost which would have resulted in an after tax financial profit of \$81.52M and a ROSF of 11.19% for the year.

The adjusted profitability numbers and ROSF are shown below for the period 2007 to 2016.



FEA appreciates the support provided by the Government through the granting of duty concessions for its Renewable Energy Projects and guaranteeing of FEA's borrowings. It is essential that the Government continues to support FEA to ensure the long term financial sustainability of the organisation and achievement of its long term Power Development Plan.

Taveuni Electrification Project

In early August 2016, the Government paid FEA \$6.8M being the cost to establish a depot and a diesel power station to supplement the Somosomo Hydro Scheme in order to supply electricity throughout the year to customers in Taveuni. FEA has spent a total of around \$5.42M on this project as at the end of December 2016. It is anticipated that FEA will incur a further \$1.96M to procure and install a fire protection system at the Somosomo Hydro Power Station, install optic fibre for the Somosomo Hydro Project and the upgrade of the road to the dam site. The additional costs of around \$0.58M will be borne by FEA. The project has been operational from 23rd December 2016.

The Taveuni Island Power System consists of 2x375kW of Hydro generating sets (Somosomo Hydro Scheme) and 10 km in total of 11,000Volts/415Volts transmission line with 11 distribution transformers for power supply to the various villages and settlements along the west coast of the island. This was a grant-in-aid project from the Peoples Republic of China to the Government of Fiji.

The Government of Fiji operated a diesel power station supplying a small reticulated section of the west coast from Wairiki Holy Cross School through Waiyevo Government Station to Bucalevu Secondary School. It was planned to connect the new 11kV network being developed by the Chinese to the existing network thus extending the 11kV network from Bucalevu Secondary School to a point approximately 7km from the Matei Airport.

Somosomo Hydropower Station

FEA was handed over the Somosomo Hydropower Scheme to operate and maintain by the Government.

Network Establishment:

The electricity from the Somosomo Power Station will be transmitted via the two 11 kV transmission lines towards Wairiki in the South and towards Weilagi in the North. The two transmission lines are approximately 10km each in length and will have distribution transformers supplying customers at low voltage levels.

The existing 11 kV and 415 V lines from Waiyevo to Wairiki and towards Bucalevu Secondary School, which are constructed to FEA standards, were incorporated into the grid. The Chinese constructed 11kV grid was inspected prior to it being energised and connected to the existing Government 11kV Grid.

Connection and Customer Service:

A total of 650 customers were connected in the initial phase in December 2016. There were 557 prepay meters for Domestic and small business customers with 37 conventional meters for big businesses, schools and Government departments. The prepay customers purchase their electricity tokens through the Vodafone Mpaia and Digicel Mobile Wallet platforms. Awareness has been carried out for this. The number of customers will increase in Taveuni as installations are still in progress.

Productivity Improvements

FEA has achieved significant productivity improvements since 2000. The number of employees has decreased by around 21%, from 960 in 2000 to 756 in 2016, at a time when:

- Number of customers has increased by around 48%, from 117,315 in 2000 to 174,530 in 2016
- Electricity Generation output has increased by around 78%, from 523 gigawatt-hours (GWh) in 2000 to 934GWh in 2016;
- Route Length of power lines and underground cables has increased by around 39%, from 7,124 km in 2000 to 9,929 km in 2016;
- Total assets have increased by around 158% from \$473M in 2000 to \$1.22B in 2016.

As a result, the following productivity improvements have been achieved between 2000 and 2016:

- Customers per employee have increased by around 88%;
- Electricity Generation output per employee has increased by around 126%;
- Route Length of power lines and underground cables per employee has increased by around 76%; and
- Asset value per employee has increased by around 228%.

Financial Strength

FEA's balance sheet continues to display a strong position despite the adverse impact of the TC Winston cost on FEA's financials in 2016. The Authority's financial gearing ratio has improved from 29.5% at the end of 2015 to 22.07% at the end of 2016, and is well within the maximum industry benchmark of 45%. The low gearing level recorded as at end of December 2016 is attributed primarily to the profits recorded by FEA in 2016 which has positively increased the shareholder value in addition to the reduction in debt level by \$20.8M (net) as compared to 2015. All this was achieved without the Authority defaulting on any of its debt covenants signed with lenders.

I am pleased to report that the Authority's shareholders' funds rose from \$647M at the end of 2015 to \$706M at the end of 2016, while its total assets rose from \$1.17B at the end of 2015 to \$1.22B at the end of last year, indicating a positive growth in terms of both its asset base as well as its shareholder value.

FEA Restructure

The restructuring process of the Fiji Electricity Authority, with the intention to partially privatize the Authority, continued in 2016. The Government of Fiji appointed Ernest & Young, the Accounting firm and Squire Patton Boggs, a legal firm to undertake this exercise as the transaction advisors. The Ministry of Public Enterprises has been jointly coordinating this exercise with FEA and the transaction advisors. In 2016, FEA submitted a lot of information relating to the FEA restructure to the transaction advisors in the form of request for information (RFI) through the establishment of a data room.

Progress on Renewable Energy Projects

For the year 2016, a review of the hydrology was undertaken on the potential of the hydropower project at the Qaliwana Catchment. This review will form the basis of the detailed feasibility studies that will be undertaken in the forthcoming years to determine the economic viability of the Qaliwana – Upper Wailoa Diversion Hydropower Scheme.

The Land Affairs Unit was tasked to acquire the land identified for the Qaliwana and Upper Wailoa Catchment areas. A land acquisition taskforce was established which consisted of FEA staff, iTLTB staff and the office of the Commissioner Western. Several stakeholder meetings were held with the landowners and several site visits were organized during the year. This enabled FEA to secure landowner consents in principle for the leasing of the required land for the Qaliwana and Upper Wailoa Catchment. A portion of the Qaliwana land belongs to Government and FEA has prepared a Cabinet Paper seeking Cabinet approval for the use of this land for hydropower generation purposes.

The year 2016 also saw the close out of the Nadarivatu Hydropower Scheme's contractual obligations with Sinohydro Corporation Ltd. All pending work under the Contract was successfully completed.

FEA also tendered out Expressions of Interest (EOI) for the development of a 5MW solar PV for Viti Levu. Two reputable parties have been short listed and FEA is discussing their technologies and commercial terms. Further, FEA hired the services of an expert waste to energy consultant from Australia to assist FEA with the evaluation of the initial bids for the development of the Naboro Waste to Energy Project. The Consultant and the FEA evaluation Team together with the team from the Ministry of Local Government have shortlisted a reputable organisation for this project.

Acknowledgement

I wish to convey my sincere appreciation and thanks to the former Board Chairman Mr. Nizam-Ud-Dean, FEA Board Members for their continuous support and contribution throughout the year. Their commitment and direction were instrumental in ensuring that FEA remained focused and on-track to achieve its strategic goals and objectives.

I wish to thank the Cabinet, especially the Honourable Minister for Infrastructure and Transport and the Honourable Minister for Public Enterprises, for their invaluable support provided to FEA during the year.

To our valued customers, we will continue to explore and implement ways in which we can further improve our services to meet or exceed their expectations.

To our Management Team and employees, I am highly appreciative of their efforts and contribution during the year especially in restoring power supply after TC Winston. The level of dedication and commitment that they and our outsourced service providers showed throughout the year has enabled us to energise our nation under very challenging conditions.



Daksesh Patel
Chairman



The Attorney-General and Honourable Minister for Public Enterprises, Mr. Aiyaz Sayed-Khaiyum, EU Ambassador Mr. Andrew Jacobs and Mr. Ambroise Fayolle, the EIB Vice President during the signing of the Extension of the Technical Assistance Agreement at the FEA Head Office in Suva.

Achievement of Board Key Performance Indicators

The FEA Board developed eight (8) Key Performance Indicators (KPIs) for 2016 to enable Government to measure the performance of the FEA Board. The KPIs were included as part of the FEA's Statement of Corporate Intent (SCI) for 2016. The actual achievement of the KPIs is detailed below:

Key Performance Indicators	Final Outcome
1. Ensure that FEA Comply with the debt covenants set by Lenders subject to the key assumptions for 2016 becoming a reality.	ACHIEVED. FEA achieved a financial profit after tax of \$59.6M in 2016. This profitability level has assisted in the achievement of all the Financial Covenants signed with lenders namely ANZ Bank and FPNP.
2. Fully comply with the following statutory requirements: <ul style="list-style-type: none"> Submission of 2017 to 2019 Corporate Plan, SCI and EIRP by 30th September 2016 to the Ministry of Public Enterprises Submission of half year report for 2016 financial year by 1st August 2016 Submission of draft un-audited financial accounts for 2015 by 31st January 2016 Submission of draft 2015 annual report by 31st March 2016 Submission of the annual report and audited financial accounts for 2015 by 31st May 2016 	ACHIEVED. Submitted in early November 2016 due to appointment of a new Board. ACHIEVED. Submitted on 31st July 2016. ACHIEVED. Submitted on 31st January 2016. ACHIEVED. Submitted on 27th March 2016. ACHIEVED. Submitted on 30th May 2016.
3. Ensure that the Customer Satisfaction Level for 2016 as per the Corporate KPI is achieved.	ACHIEVED. As per the Corporate KPI for 2016.
4. Sign a Power Purchase Agreement with an Independent Power Producer (IPP) by 31st December 2016 to develop at least one new IPP plant.	IN PROGRESS. In the process of negotiating with the prospective developer.
5. Implement all FEA Action Items as per the Agreed Timetable with the Ministry of Public Enterprises regarding the divestment of FEA.	ACHIEVED. FEA assisted the Ministry by providing all the information required by the Ministry.
6. Ensure that the extension of the transmission line from Korovou to Tavua which is jointly funded by Government and FEA progresses according to the project schedule for the year 2016.	ACHIEVED. Project progressed according to the work schedule for 2016.
7. Ensure that the construction of the new 33kV Zone Substation at Momi Bay progress according to the project schedule for 2016	ACHIEVED. The Project was completed and commissioned on 23rd December 2016.
8. Make a firm recommendation on the way forward for the development of the Qaliwana Upper Wailoa Diversion Hydro Development.	IN PROGRESS. FEA terminated the "Early Works" Agreement signed with Hawkins Infrastructure Limited (HIL) of New Zealand due to non performance on their part. As a result, the FEA Board decided not to move ahead with the project development with HIL as an IPP.

Chief Executive Officer's Report



2016 will go down in the history of FEA as one of the most challenging year. Our resources particularly our employees were put to one of their biggest tests when TC Winston, a Category 5 Cyclone ran havoc throughout Fiji causing extensive damage to the FEA Power System infrastructure. FEA rose to this challenge and admirably restored power supply to most of its customers within two weeks despite early assessments that the estimated time for power restoration works will take at least a year. FEA completed the entire exercise of Power Restoration to its customers by September 2016 and unexpectedly ended the year on a high note by recording a profit after tax of \$59.6M, which is a milestone achievement.

It was a huge challenge for FEA and its employees to restore power supply to the affected areas. Damaged caused by Cyclone Winston was one of the worst FEA has ever sustained. FEA incurred a cost of around \$30.1M to carry out the repairs to the damaged power system infrastructure.

FEA performed admirably in 2016 recording a profit after tax of \$59.6M despite the two flash floods in early January & December and Cyclone Winston in February causing substantial damages to the FEA transmission and distribution network infrastructures throughout Fiji. This profit was achieved mainly due to:

- FEA restoring power supply to bulk of its commercial and industrial customers in the first two weeks after TC Winston which is the highlight of its excellent performance for 2016;
- the good management of FEA's financials throughout the year;
- good management of the Monasavu and Nadarivatu Hydros in 2016. Monasavu Hydro Scheme produced some 384GWh of energy in 2016 while Nadarivatu produced 85GWh of energy in 2016; and
- cost control measures that had to be implemented by management to mitigate the unbudgeted expenditure incurred in 2016 as a result of TC Winston.

On 20th February 2016, a Category 5 Tropical cyclone Winston struck Fiji with wind gusts of up to 300km/hr. The cyclone caused extensive damage to the FEA power system at all levels; Generation, Transmission, Sub-transmission, Distribution and SCADA & Telecommunications.

A total of five (5) steel lattice transmission towers sustained damages during the cyclone and plans are underway to get the damaged towers replaced with new ones. Temporary structures were installed and the Wailoa – Vuda 132kV transmission line was re-energised on 5th March, while the Nadarivatu 132kV tie-line was re-energised on 21st March 2016.

The Central 33kV underground sub-transmission network was re-energised on 21st February. The Central and Northern 33kV overhead sub-transmission circuits sustained minimal damages and were restored by 24th February. The Western 33kV sub-transmission network between Lautoka and Sigatoka sustained minor damages and were re-energised on 22nd February 2016. The 33kV sub-transmission network to Nacocolevu and Korolevu was re-energised on 27th February 2016. The 33kV sub-transmission lines from Vuda towards Tavua sustained severe damages, with the line to Rarawai being energised on 10th March 2016 and the line to Tavua

being energised on 15th March 2016. The Wailoa – Wainikasou 33kV line was re-energised on 16th March 2016.

The Distribution network sustained the severest of damages, with the Western Division Network being the worst affected. Restoration of the entire distribution network was completed in September 2016. Assistance in the repair of the damaged infrastructure was received from the ADB who funded a team from Tonga for two (2) months and the New Zealand Government who funded repair works by engaging four teams over a period of two (2) months. The Australian Government provided tools and equipment to the value of AUD270k in addition to providing 7 x specialized heavy goods vehicles. As at the end of 2016 the total restoration costs stood at \$30.1M which was funded entirely by FEA from its internal cash flows without any pass through to customers. An additional \$5.3M is expected to be spent to replace the 4 x damaged 132kV Transmission Lattice Steel towers with new ones in 2017.

Damaged caused by Cyclone Winston was one of the worst FEA has ever sustained in its history and recorded one of the highest one-off unbudgeted expenditure.

In addition to this, work continued on the Monasavu Hydro Electric Scheme Half Life Refurbishment project that commenced in 2011. FEA spent around \$7M to upgrade Zone Substations at Suva, Vatuwaqa, Rarawai & Kinoya, completed installation and commissioning of 33kV cable between Hibiscus Park and Suva zone substations and further completed installation and commissioning of the 33kV circuit between Rokobili and Hibiscus Park zone substations.

The Government in early August 2016 had paid FEA \$6.8M as the cost to establish a depot and a diesel power station to supplement the Somosomo Hydro Scheme in order to supply electricity throughout the year to customers in Taveuni. FEA has spent a total of around \$5.42M on this project at the end of December 2016. It is anticipated that FEA will incur a further \$1.96M to procure and install a fire protection system at the Somosomo Hydro Power Station, installation of optic fibre for the Somosomo Hydro Project and upgrade of the road to the dam site. The project has been operational from 23rd December 2016.

FEA spent a total of around \$63.1M in capex as at end of December 2016 as compared to around \$80.6M that was spent on capex for the same period last year. The capital expenditure of FEA for this year, historically, has been low comparatively due to the financial impact of Tropical Cyclone

Winston where some of the major FEA projects were deferred as the power restoration work became the utmost priority for FEA. The power restoration work exhausted the FEA resources including the external Power line Contractors. However, it is envisaged that the capex spending will pick up from first quarter of 2017 onwards. Despite funding around \$30.1M of the TC Winston & Flash flood Power Restoration Works internally, FEA also funded around \$63.1M for the 2016 capex from its internal cash flows. There was no external loan raised by FEA in 2016 which is a positive achievement in light of the huge financial commitments faced by the Authority. This was partially achieved due to the good management of FEA's financials throughout the year and increased generation output from both the Monasavu & Nadarivatu hydro schemes in 2016.

Work continued on the project to electrify the Korovou – Rakiraki corridor. The 33kV sub-transmission line from Tavua to Volivoli (Rakiraki) was commissioned in 2016, together with the new 33kV/11kV Volivoli zone substation. Work is currently in progress on the construction of the 11kV grid between Waimecia and Nayavu. This project will be completed at a cost of around \$19M and completion has been delayed to 2017 as a result of Tropical Cyclone Winston. The Project is jointly funded by the Government of Fiji and the Fiji Electricity Authority. The Power supply to the FNPF's new Momi Bay development was successfully commissioned in December 2016 with the commissioning of the 33kV sub-transmission line from Waqadra to Momi, the 33kV Switching Station at Nawai and the 33kV/11kV zone substation at Momi, at a cost of \$12.9M which was fully funded by FNPF.

Finally, I thank the former Chairman Mr. Nizam-ud-Dean and the incoming Chairman Mr. Daksesh Patel, the FEA Board

Members for their valuable guidance and constructive support throughout the year. I wish to record my thanks and appreciation to my colleagues in the Executive Management team and to all the employees of our organisation and other external service providers for their continuing support, dedication and patience throughout 2016.

I also record my sincere thanks and appreciation to the Honourable Prime Minister and his Cabinet Ministers, Permanent Secretaries and Government officials, the Reserve Bank of Fiji, the Fiji Commerce Commission, the Fiji Revenue & Customs Authority and the executives of the FEA Bargaining Units for their kind assistance, support and cooperation rendered in 2016.

Further, I also wish to record my sincere thanks and appreciation to ADB and the Tongan delegation, the New Zealand Government and the Australian Government for their assistance towards the restoration of power supply after TC Winston.

The invaluable contribution of one and all mentioned above made it easier for FEA to rise above the challenges it faced during the year and end the year with a record profit.

I look forward to their continued support in delivering increased value to our Shareholder and Stakeholders in the coming years.

Hasmukh Patel
Chief Executive Officer



The Unit Trust of Fiji Chairperson Ms. Shaenaz Voss, Unit Trust of Fiji Chief Executive Mr. Vilash Chand and FEA CEO after the signing of the Memorandum of Agreement at FEA Head office in Suva to enable the FEA employees to buy shares in Unit Trust of Fiji via payroll deduction.

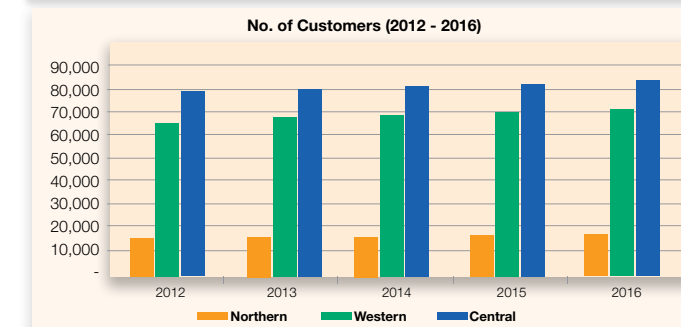
2016 - Year in Review

CUSTOMERS

Customer Services

The total number of customer accounts increased by 1.51% from 171,939 in December 2015 to 174,530 in December 2016.

CUSTOMER BASE / GROWTH					
Year	2012	2013	2014	2015	2016
Customer Base	159,017	162,656	167,017	171,939	174,530
% Growth	1.99%	2.29%	2.68%	2.95%	1.51%

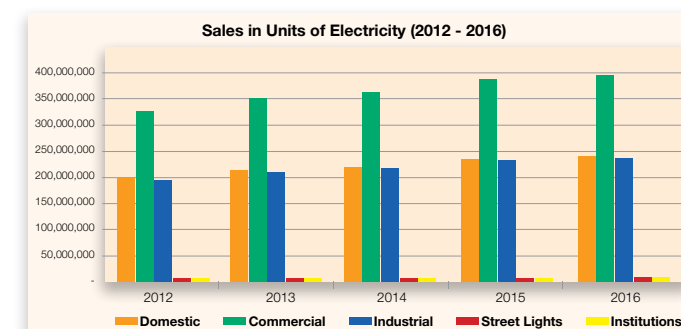


The customer numbers for 2016 are made up of 100 Industrial customers, 17,483 Commercial and 156,947 Domestic and Institutional customers.

2015	CONSUMER COUNT		2016
155,091	90.20%	Domestic	156,947
16,749	9.74%	Commercial	17,483
99	0.06%	Industrial	100
171,939	100%	TOTAL	174,530

The increase in customer accounts from 2015 to 2016 was in all sectors.

There was an increase in demand for electricity by an overall 1.90% from 826.11 million units in 2015 to 841.83 million units in 2016. The electricity demand for domestic customers decreased by 1.05% as a result of TC Winston. Demand increased by 3.52% in the Commercial sector as well as in the Industrial (Maximum Demand) sector which increased by 2.44%. The increase in electricity consumption in the Commercial and Industrial sectors is attributed to the growth in the economy.



Customer Care

A total of 113,891 customer visits were made to our Customer Care Centres Fiji wide. Most customers who visited our Customer Care Centres in the three (3) regions made enquires on the approved 2016 Government subsidy, new installation request, reconnection of power supply, enquiries on bill amount, due dates for payment of bills, complaints of no power, broken consumer service mains and credit balance refunds.

Customer Visits 2016	
Central	47,235
North	9,923
West	56,733
Total	113,891

Contact Centre

The beginning of 2016 was very challenging for the Contact Centre where we saw a substantial increase in the number of calls after the devastation of Tropical Cyclone Winston. This high call volumes normalized in July as majority of the customers' power supply had been restored. The Grade of Service (GOS) achieved for the year was 83.5% with Calls Abandoned at 8.6%. The low GOS and high Calls Abandoned was due to the high call volumes received during the floods and TC Winston.

However, our GOS from the month of July 2016 to December 2016 was 90.9% with Calls Abandoned at 4.9%. Contact Centre continued to manage information flow to customers on the revised regulatory fees and ancillary charges, revised 2016 Government Electricity Subsidy, Vat reduction that was implemented from 1st January 2016, continuous review of consumer security deposits, disconnection and reconnection of electricity accounts, prepay customer issues, and planned and unplanned power outages. Total calls received as at 31st December 2016 were 491,124 an average of 40,927 calls a month.

Contact Center	2014	2015	2016
Total Calls Received	377,445	402,021	491,124
Percentage Change		6.5%	22.2%

There was an increase of around 22.2% of calls received in the year 2016 when compared to year 2015. The increase in call volume was the result of customers enquiring about power restoration after Tropical Cyclone Winston & TC Ula, unplanned outages, revised regulatory fees and ancillary charges and the Government Subsidy. The focus continues to be on the quality of service & timely service delivered to the individual customers by Contact Centre staff when answering the calls. The Contact Centre continues to operate 24hours, 7days a week with the main Contact Centre in Suva closing at 9.00pm and the services then taken over by the Contact Centre staff at the National Control Centre in Vuda.



The FEA CEO, Mr Hasmukh Patel with Vodafone CEO, Mr. Pradeep Lal, signing the M-Paisa Agreement for the sale of prepaid electricity tokens to its rural customers in Fiji at the FEA Head Office in Suva.

The Acting CEO, Mr. Bobby Naimawi, shaking hands with Digicel CEO, Mr. Darren McLean, after the signing of the Agreement for Mobile Bill pay Services at the FEA Head Office in Suva.



The FEA CEO, Mr. Hasmukh Patel, shaking hands with iTaukei Board member Ratu Epeli Mataitini, after signing the Memorandum of Understanding (MOU) on the information sharing between FEA and iTaukei at the FEA Head Office in Suva.

Usage of the emergency 913 number for non-emergency calls by customers continues to be a concern with a total of 21,231 calls received on this number of which only 4,762 were genuine emergency calls and 16,469 were non-emergency calls.

For the 2016 Customer Services Survey, six survey questions were prepared and survey forms sent out to customers with their electricity bills in November 2016. Customer Service Survey forms were also available at all Customer Service Centres and at all Prepay Vendor locations. Customer Service Satisfaction Survey will close on 31st January, 2017 when all forms received will be analyzed.

FEA achieved an improvement in its overall customer satisfaction level for both domestic customers and commercial/industrial customers in 2016. However, FEA wishes to improve further on its level of service to all customers. Accordingly, it will put in place appropriate action plans to address the areas of improvement highlighted in the survey. In the meantime, FEA is also investigating on how it could improve on the overall customer response going forward into the future by obtaining views from a majority of its customers.



The FEA Contact Centre located at the Head Office in Suva continues to address the concerns of customers Fiji wide with urgency.

Prepay Customers

The on-line Syntel prepayment vending system is now being used by all prepay vendors and there is a total of 33 such vendors located in the Central, Western and Northern divisions. There were only 30 Point Of Sale (POS) machines operational by the end of 2016 and they will be phased out and as such, SMS vending options were implemented in the year 2016 to enable FEA's prepaid electricity customers to purchase tokens from Vodafone MPaiSA and Digicel Mobile wallet platform. Using these network platforms, the prepaid customers would be able to purchase electricity tokens from the convenience of their homes simply by sending an SMS from their mobile phones. Through this online vending system, the Authority is able to manage its prepay customers better. There were a total of 24,601 rural customers on prepay meters as at 31st December 2016, an addition of 1,067 new prepay customers in 2016.

Product Awareness

Awareness on energy savings and electrical safety tips were the main focus of FEA's communication activities to its customers. Presentations were carried out in schools and communities to create awareness on energy savings and electrical safety.

FEA made full use of its billing network to maximize the exposure of its safety messages by printing messages on the electricity bill itself and on bill inserts.

Visits were made to prospective rural customers in villages to complete customer documentation, provide information on energy conservation and electrical safety.

Awareness has been carried out for prepaid Customers on how to utilize their mobile phones to purchase electricity tokens. Television interviews and participation in radio talkback shows were also carried out for creating public awareness and dissemination of information regarding the Authority's operations.

Demand Side Management

FEA carried out energy meter re-calibration of its fifth batch of top 150 customers and upgraded 6 two-transformer fed installations to summation CT metering to ensure that the Customers' meters were functioning properly and recording correct consumption of electricity.

FEA also replaced 2,190 old energy meters installed at customers' premises and will continue with this replacement of old energy meters during the next year to ensure correct recording and billing of electricity consumption. 2016 was supposed to be the last year for the project to remove a total of 5,024 of this old energy meters. Due to Cyclone Winston, only 2,190 were removed and the remainder of 2,834 will be removed in 2017.

FEA also replaced 396 old electricity meters with new FEA meters in Taveuni and these customers were then connected to the FEA grid in December 2016.

FEA continues to assist its customers to become more energy efficient by providing technical advice and billing data to those customers who request for such data. FEA's Reactive Energy Metering Policy was strictly enforced during 2016 with penalties imposed on those customers using excessive reactive energy and not complying with the power factor requirements as stipulated under the Electricity Act.

Customers' excessive reactive energy usage increased by around 5.95% in 2016 when compared to 2015. In 2016, top 400 customers in this category were scanned and those customers whose installations recorded a power factor less than 0.85 power factor (pf), letters were issued to them advising them to rectify their low power factor within three (3) months otherwise penalties will be levied.



FEA Metering Technicians carrying out metering system re-calibration to ensure that the customers meters are functioning properly and recording correct consumption.

Electricity Subsidy

Government, as part of its 2016 National Budget, approved the increase in the threshold for the residential customer's electricity subsidy from 85 kWh per month to 95 kWh per month with an additional requirement of a combined household income to be \$30,000 per annum or below. Customers who registered for Government Subsidy with FEA and met the requirements qualify for this subsidy. The new electricity subsidy threshold of 95 kWh per month was implemented effective from 1st January 2016 for residential customers. The electricity consumed by residential customers in January 2016 was considered for the subsidy in February 2016 at a rate of 15.90 cent per unit (VEP) which was then paid by Government as subsidy. The customers paid 17.20 cents per unit (VEP). As a result of the increase in the threshold for residential customer's electricity subsidy and the additional requirement regarding the combined household income to be \$30,000 per annum or less, the total customers benefiting from this subsidy decreased from approximately 69,000 customers in 2015 to approximately 11,000 customers in 2016.

For Primary and Secondary Schools, the electricity subsidy scheme remained the same as in 2015. A step up subsidy model applies where the first 200 units consumed in a month by schools was subjected to a subsidized tariff and units in excess of 200 units per month was charged the full commercial tariff of 33.10 cents per unit (VEP). The Government subsidy was 12.51 cents per unit (VEP) and the Schools were charged a subsidized electricity tariff of 20.59 cents per unit (VEP) for the first 200 units consumed in a month. A total of 517 schools benefited from this subsidy in 2016.

Consumer Security Deposit

The review of the consumer security deposit was ongoing, based on the changes in the consumption pattern. Customers have the option to pay the required consumer security deposit either in cash or by providing a Bank Guarantee.



The Attorney-General and the Honourable Minister for Public Enterprises, Mr Aiyaz Sayed-Khaiyum with FEA Head Office employees after the announcement of the performance pay for the financial year 2015 at the FEA Head Office in Suva.

HUMAN RESOURCES

Best practice Human Resources initiatives are something that emerging Human Resource practitioners aspire to develop and implement. To explore this further, there is absolutely no doubt that 2016 saw some positive outcomes of our various initiatives and processes implemented which were attained successfully.

Some of the major achievements in 2016 are a reflection of the enormous effort put in by Management and Staff to ensure FEA is recognized as an exemplary organization with Human Resources policies designed to foster productivity and learning throughout the organization.

Milestone achievements for HR SBA in 2016 were:

Reduce Sick Leave Initiative

The Human Resources Team had placed several measures to educate staff on reducing sick leave, such as having the Zero Sick Leave Awards, Employee of the Quarter Awards via Induction Training, Employment / Industrial Relations Training and counselling.

NCD Screening for all FEA Staff

In consultation with the Risk & Audit Department and QBE (Provider of Medical Insurance), the Ministry of Health carried out health screening of FEA employees in all FEA locations where Body Mass Index (BMI) – Height & Weight, Blood Pressure, Blood Sugar and Cholesterol levels of employee were measured to monitor the health status of employees and record this for comparative analysis purposes. This exercise was carried out in recognition of the fact that the good health of FEA employees is a vital element for our workforce to be productive. Those in the unhealthy range were counselled about their health status and how they can turn it around.

Employment / Industrial Relations Training

Post repeal of the ENI Decree from October 2016, the Authority conducted the Employment Relations Promulgation (ERP) training for one hundred and sixty four (164) employees to understand the new features of ERP.

FEA Apprentices win the Top Awards at FNU's 2016 Apprenticeship Graduation

FEA's three young and enterprising Apprentices stood tall at the 2016 National Apprenticeship Graduation where they were recognized for their hard work and commitment. The Apprentices were awarded the following:

- NTPC Overall best Apprentice: Jolame Rokoduru
- NTPC Best Apprentice Electrical Fitter Mechanic: Michael Kava
- NTPC 1st Runner Up Overall Best Apprentice of the Year: Michael Kava
- NTPC Merit Award Electrical Fitter Mechanic: Kameli Tacikalou

- NTPC Merit Award Plant Maintenance Engineering: Jotama Sogonalawa.

21st National Convention on Quality

Top two (2) FEA Quality Circle Teams: Team Inspire and Team RHIZOME participated in the 21st National Convention on Quality. Team FEA was awarded the following prizes:

- **Gold Award Winner** - Competitive Category-Team RHIZOME
- **Silver Award Winner** - Competitive Category-Team Inspire
- **Outstanding Quality Circles Facilitator** - Bob Mitchell

Team RHIZOME qualifies for participation at the International Exposition on Team Excellence (IETEX) in Singapore in 2017.



FEA Team RHIZOME receiving the 2016 Gold Award from the Honourable Minister for Education, Heritage and Arts, Dr Mahendra Reddy during the 21st National Convention on Quality held at Novotel Hotel in Suva.

HEALTH & SAFETY (H&S)

A successful organization knows the value of a positive safety culture and FEA places great importance on protecting the health, safety and welfare of its people. This preventative effort has produced one of the most outstanding results in H&S as the year 2016 recorded one of the lowest accident rates with a Lost Time Injury Duration (LTID) of 2.57 and a Lost Time Injury Frequency (LTIF) of 3.38. This is a remarkable achievement given that in the aftermath of Tropical Cyclone Winston, FEA resources, including its employees, were stretched to their limits in restoring power supply.

Driver Initiated Motor Vehicle accidents reduced by 31% in 2016 (with a total repair cost of \$209,554) in comparison to 2015 (which incurred a total cost of \$302,722). Once again this result is a reflection of the preventative efforts put in by FEA drivers and management.

Defensive driving was conducted by LTA to upgrade the knowledge and skills for a total of one hundred and forty eight (148) authorized drivers. In addition, a total of three (3) H&S and Fleet Roadshows were carried out at all FEA locations whereby recent health and safety performance was highlighted and learnings from past incidents discussed.

An Audiometric testing was also conducted for a total of ninety (90) employees from Generation SBA who are frequently exposed to loud noise. Basic Water Safety Training was conducted for our seventy one (71) operational employees who cross the rivers and creeks while carrying out their duties and responsibilities.

The H&S Team also embarked on safety visits with a total of three hundred and twenty (320) safety visits recorded and workplace audits carried out for major worksites. This was part of our wider behavioural safety program where we try to observe and reward positive safety behaviour while curtailing at-risk behaviour.

TRAINING & DEVELOPMENT

The mission of the Fiji Electricity Authority Training Centre is based on building partnerships with various institutions in our human resources development and support development programs. We always prioritize to treat the workforce of our growing economy in a remarkable and unique way. Our distinctive training programs always thrive to provide with exceptional experiences to both our

customers and our Staff in training and development.

FEA also engaged in providing external Training in collaboration with Pacific Power Association (PPA), Japan International Cooperation Association (JICA) and Public Service Commission, not only to organizations in Fiji but to other organizations from the Pacific Island countries. Various technical training programs were conducted for external organizations and the total revenue derived from these training programs was FJ\$69,507.65 in 2016.

FEA has been providing work attachment and training to the neighbouring Pacific Island Electricity Utilities in Technical and Non-Technical areas. In 2016, FEA provided work attachment and training for the Nauru Electricity Utility and the Solomon Islands Electricity Authority.

Despite the destruction of Tropical Cyclone Winston, the Training team was able to conduct and facilitate a total of 223 Training Courses in 2016 with a total number of 27,841 training hours.

The Authority continues to engage practical attachees from the Fiji National University (FNU), University of the South Pacific (USP) and University of Fiji (UoF) as part of their program requirement so that they are able to graduate. This is an opportunity for the Authority to ensure that these practical attachees receive the relevant practical training and development in house in preparation for employment opportunities that may arise. There are fifty-two (52) USP Engineering students attached during USP semester breaks and twenty-five (25) students from FNU on industrial attachment to gain valuable work experience and also to fulfill their program requirements and eight (8) from UoF.



FEA CEO, Hasmukh Patel, the Honourable Assistant Minister for Infrastructure & Transport (MoIT), Mr. Vijay Nath, the Honourable Minister for Infrastructure & Transport, Mr. Parveen Bala, the Acting Australian High Commissioner to Fiji, Ms. Karinda D'Alsoisio, the PS of the Ministry of Infrastructure & Transport, Mr. Paul Bayly and the former FEA Chairman, Mr. Nizam-ud-Dean during the handover of the specialized vehicles and equipment at the FEA depot in Kinoya.



The above pictures show the FEA employees installing temporary structures in the interior of Viti Levu to restore the power supply to the Western division via the Wailoa – Vuda 132kV transmission line. A total of five (5) steel lattice transmission towers sustained damages during TC Winston and they will be replaced in 2017.

PRODUCTION OF ELECTRICITY

Hydro Generation

• Wailoa Power Station

Typically, some 400 million units of electricity generation is expected annually from the Wailoa Hydro Power Station. In 2016, 384 million units were generated as compared to 321 million units in 2015. The increase in generation was due to a good dam level at the beginning of the year and in December 2016.

• Nadarivatu Hydro Power Station

The annual long term average generation output of Nadarivatu is 100 million units. In 2016, some 86 million units were generated compared to 53 million units in 2015. The increase in generation was due to good rainfall at the beginning of the year and in December 2016.

• Wainikasou Hydro Power Station

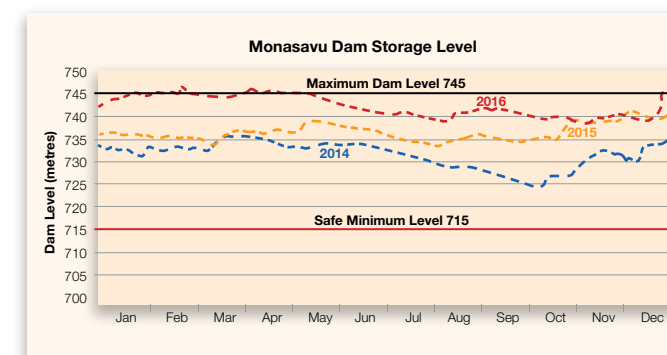
The annual long term average generation output for Wainikasou is 18 million units. In 2016, some 21 million units were generated as compared to 20 million units in 2015. The increase was due to the raising of the Wainisavulevu weir.

• Nagado Hydro Power Station

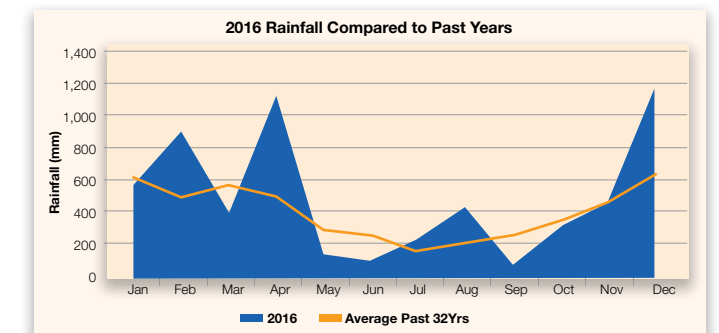
The annual long term average generation output for Nagado is 12 million units. In 2016, only 3.3 million units were generated as compared to 11 million units in 2015. The decrease was due to low water pressure in the pipeline from Vaturu dam to Nagado power station as a result of the pipeline leakages and blockages.

Monasavu Dam Storage Level graph

The water level at the Monasavu Dam at the beginning of January 2016 was 742.34 metres above mean sea level (AMSL), which was 27.34 metres above the minimum safe operating level of 715 metres. At the end of December 2016, the dam was spilling and the water level was 745.38 metres above sea level which was 30.38 metres above the minimum safe operating level.



Total rainfall received at the Monasavu dam in 2016 was 6,055 mm as compared with 4,223 mm in 2015. The increase was due to above average rainfall received in February, April, July, August, November and December. The lowest ever rainfall recorded was 3,540 mm in 2004.

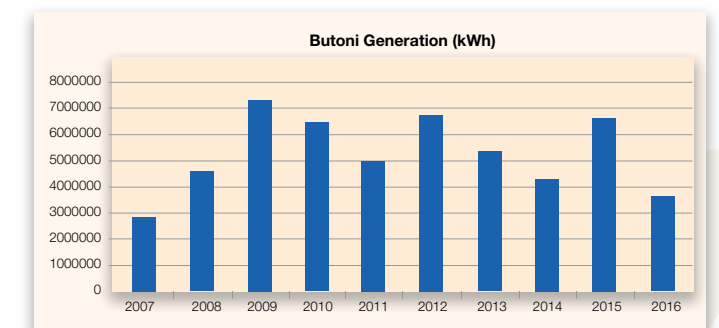


Thermal Generation

FEA generated 45% of its energy requirements from the thermal power stations in 2016 to meet the ever growing demand of electricity in Fiji since the customer demand has been growing at an average of around 4% per annum over the last three years. The major Power Stations namely Kinoya, Vuda and Labasa performed according to expectations and contributed significantly towards meeting the electricity growth in customer demand. The total energy generated from the Industrial Diesel Oil (IDO) and Heavy Fuel Oil (HFO) power stations for 2016 was 424.5 million units, against 480.4 million units in 2015. The decrease in thermal generation was due to increased generation from the hydro power stations and reduced generation required during and the aftermath of TC Winston.

Butoni Wind Farm

Butoni wind farm generated 3.6 million units of electricity in 2016. This is equivalent to a fuel cost saving of around \$0.96M in 2016. Graphically depicted below is the energy output from Butoni Wind Farm since commissioning in 2007.



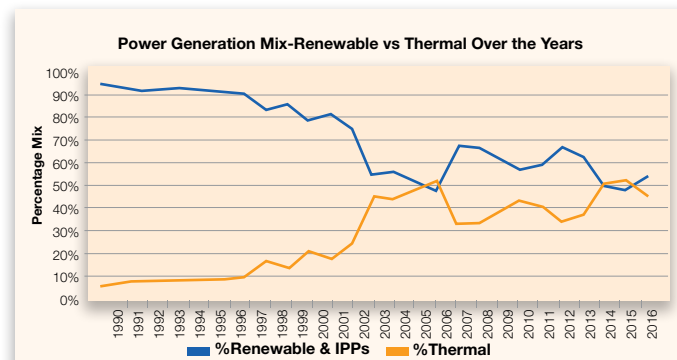
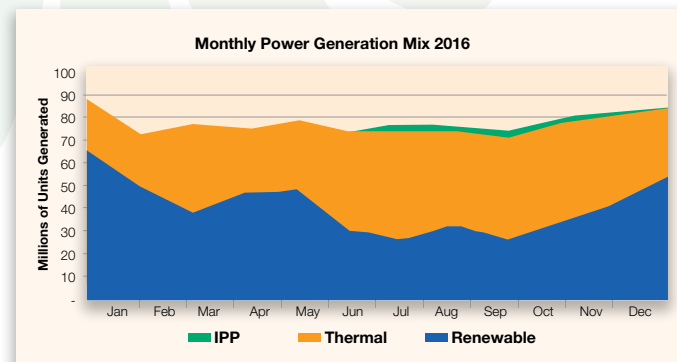
Statistics for the wind farm from the commencement of its operations in June 2007 are given below:

- Total Generation Output = 52.3 million units of electricity
- Total Diesel Fuel Cost Savings = F\$19.10M
- Total Foreign Exchange Savings = USD\$11.05M
- Total Diesel Fuel Saved = 10,995 tonnes of diesel
- Total Green House Gas Emission Reduction = 34,148 tonnes of Carbon Dioxide.

Power Generation Mix

The power generation mix for 2016 was 53.05% hydro, 45.45% industrial diesel oil and heavy fuel oil, 0.39% wind with the remaining 1.11% provided by the Independent Power Producers (IPPs), namely Tropik Wood Industries Limited (TWIL) and Fiji Sugar Corporation (FSC). In comparison, 44.90% was generated from hydro in 2015, 52% from industrial diesel oil and heavy fuel oil, 0.63% from wind with the remaining 2.47% from TWIL and FSC.

In 2016, the FEA renewable power stations generated 499.1 million units of electricity (53%), thermal power stations generated 424.51 million units of electricity (45%) and Independent Power Producers (IPPs) generated 10.43 million units of electricity (2%).



Power System Reliability

Three (3) internationally accepted performance indicators are used each year to measure FEA's power system reliability:

- The average total length of time that a customer is without power over a year is measured by the System Average Interruption Duration Index (SAIDI). Against a target of maximum 650 minutes, the Authority achieved a SAIDI of 448 minutes in 2016.
- The average number of times that a customer's power supply is interrupted in a year is measured by the System Average Interruption Frequency Index (SAIFI). Against a target of 13 times, the Authority achieved a SAIFI of 6 times in 2016.
- The average time that a customer is without power per interruption is measured by the Customer Average Interruption Duration Index (CAIDI). This index was 75 minutes in 2016.

The main reasons for the power interruptions that occurred in 2016 were:

- Major extension works on power grid required planned power shutdowns for connectivity purposes
- Planned maintenance works on the Power System requiring planned power outages
- Heavy rain, lightning and storms
- Faults on power line hardware
- Overgrown vegetation or trees clashing with power lines
- Third party damaging FEA underground cables
- Motor vehicles colliding with power poles
- Bushfires
- Vandalism on FEA overhead power network

FEA continues to spend a substantial amount of money to reinforce its power system in order to improve the reliability and security of power supply to be in line with international benchmarks for power utilities of similar size and nature. Furthermore, as the power network ages (most of the FEA power distribution systems have been in service for more than 31 years) they urgently require upgrading or refurbishment. FEA has incorporated these upgrades and repair works in its development plan.

The initiatives FEA are currently pursuing include:

- Live-line maintenance of its power lines at all voltage levels;
- Effective vegetation management program;
- Use of appropriate technology to detect defects that can be fixed on time and equipment that can assist in restoring power supply quickly;
- Ensuring that adequate supply capacity is available to meet the demand for electricity at all times; and
- On-going program to replace ageing assets.



FEA employees carrying out underground cable repairs in Suva.

Profitability

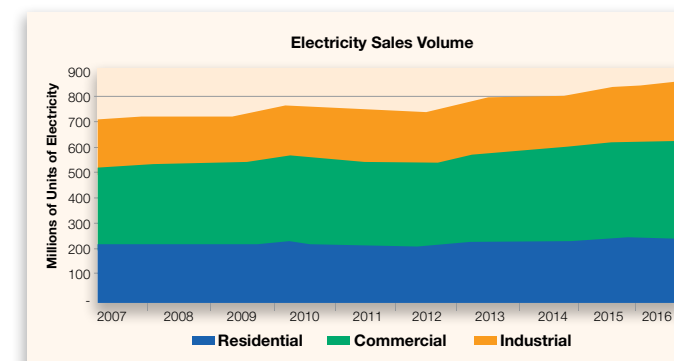
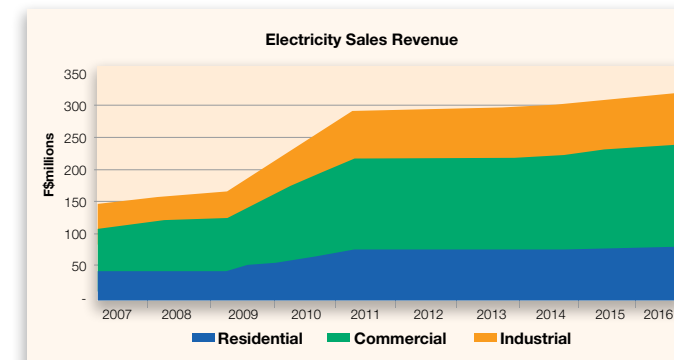
FEA made a financial profit after tax of \$59.6M in 2016 as compared to a profit after tax of \$39.7M in 2015. This equates to a Return on Shareholder Funds (ROSF) of positive 8.44%. The increase in profit recorded in 2016 as compared to 2015 was due to the following:

- Good management of FEA's financials throughout the year as it has to absorb an unbudgeted TC Winston cost of around \$30.1M and increased generation output from both the Monasavu & Nadarivatu hydro schemes.
- The lower fuel price recorded in 2016. The average fuel price was \$981.95 per Metric Tonne in 2016 compared to \$1,352.65 per Metric Tonne in 2015. The thermal fuel cost decreased substantially by \$50.8M in 2016 from \$140.7M recorded in 2015;
- Increase in sales and other miscellaneous income ; and
- The cost control measures implemented by Management throughout the year.

FEA incurred around \$27.4M of Non-Commercial Obligation Cost (NCO) when fulfilling its social obligation in 2016. Taking into account the NCO cost above, the Return on Shareholder Funds (ROSF) for 2016 is 11.19%.

Earnings before interest, tax, depreciation and amortization (EBITDA) for 2016 was \$125.5M. This provided a net interest coverage ratio of 9.7 times.

Revenue from electricity sales for 2016 was \$317.8M compared to \$311.9M in 2015, an increase of \$5.9M. This is attributed to the increase in demand in the Commercial sector by 3.52% as well as the increase in demand recorded in the Industrial sector by 2.44%. The increase in electricity consumption for both the Commercial and Industrial sectors is attributed to the growth in the Fijian economy despite the adverse impact of TC Winston.

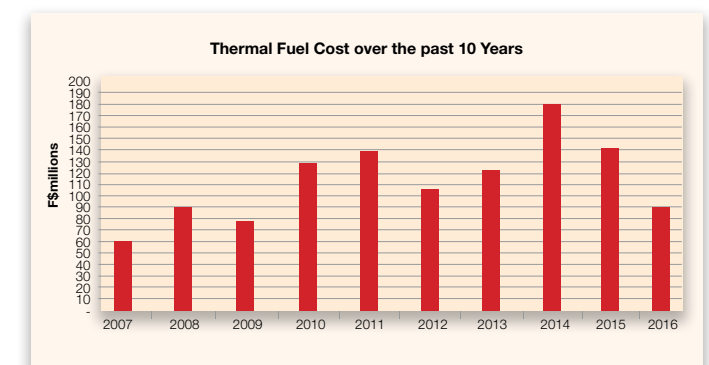


There was an increase in demand for electricity by an overall

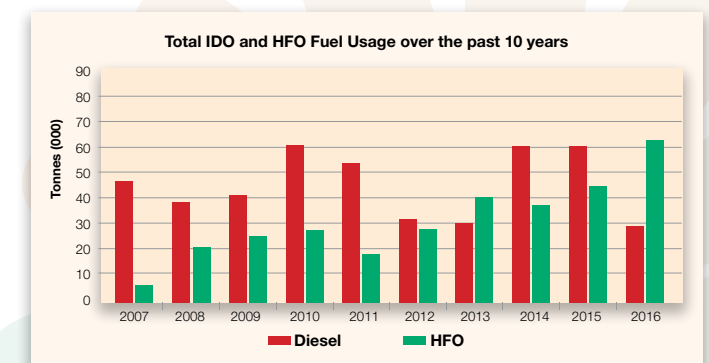
1.90% from 826.11 million units in 2015 to 841.83 million units in 2016.

Other Operating revenue of \$10.5M in 2016 was more by \$0.6M compared to the \$9.9M earned in 2015 due to the increase in the contract income and realized foreign exchange gains recorded during the year.

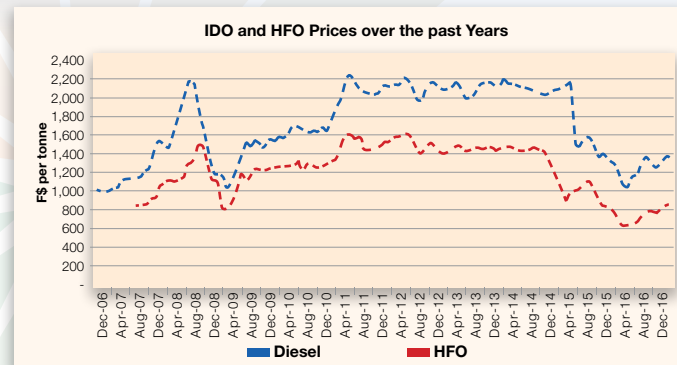
The total operating expense of FEA excluding fuel costs, depreciation and amortization was \$83.6M. This decreased by \$3.8M when compared with the \$87.4M recorded in 2015. Depreciation and amortisation expense increased by \$1.5M in 2016 due largely to the capitalization into the Fixed Asset Register of the establishment of a new 33kV/11kV Zone Substation at Momi, installation of the new HFO tank at Kinoya, purchase and installation of 2 X 1MW Generator sets for Taveuni, purchase of vehicles and other capitalised assets.



The thermal fuel cost decreased substantially by around \$50.8M in 2016, from \$140.7M in 2015 to \$89.9M in 2016. This was due to the lower fuel price recorded in 2016 for both HFO and IDO and good management of the Monasavu & Nadarivatu hydro schemes. The Wailoa hydro power station generated 384 million units of electricity in 2016, which is higher than the 321 million units of electricity that was recorded in 2015 and similarly, the Nadarivatu Hydro Scheme produced 86 million units of electricity in 2016, which is higher than the 53 million units of electricity that was recorded in 2015. FEA used 91,501 tonnes of fossil fuels in 2016 to generate electricity compared to 104,021 tonnes in 2015. The thermal fuel cost accounted for around 42% of FEA's total operating expense of \$213M in 2016 compared with 53% in 2015.



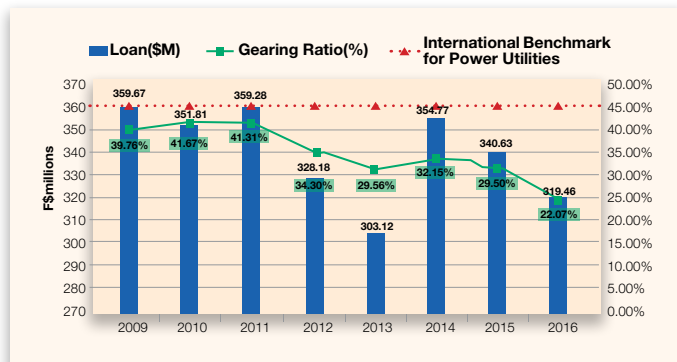
Total quantity of Industrial Diesel Oil (IDO) fuel burnt in 2016 was 29,349 tonnes and Heavy Fuel Oil (HFO) burnt was 62,152 tonnes, aggregating to 91,501 tonnes. In comparison, the total quantity of IDO fuel burnt in 2015 was 60,504 tonnes and HFO fuel was 43,517 tonnes, aggregating to 104,021 tonnes.



The average price of IDO fuel was \$1,310 VEP per Metric tonne in 2016 compared to an average price of \$1,628 VEP per Metric tonne in 2015. The IDO price peaked at \$1,385 VEP per Metric tonne in November 2016. The average price for HFO was \$827 VEP per Metric tonne in 2016 compared with an average price of \$988 VEP per Metric tonne in 2015.

The net financing costs increased by around \$3M in 2016 from \$9.9M in 2015 to \$12.9M in 2016. This is due to the Government Guarantee fee paid to the Ministry of Economy and decline in the borrowing costs capitalised to the projects. The Government Guarantee fee is charged at a rate of 0.75% per annum based on the outstanding balance of the guaranteed loans as at June and December respectively. FEA paid around \$2.5M Government Guarantee fee to the Ministry of Economy in 2016.

FEA's gearing ratio, as measured by Debt to Debt plus Capital and Reserves excluding cash-in-hand, was 22.07% as at 31st December 2016 and has reduced from the 29.5% reported for 2015. This gearing ratio is well within the industry benchmark of maximum 45%. The low gearing level recorded as at end of December 2016 is attributed primarily due to the profits recorded by FEA in 2016 which has positively increased the shareholder value in addition to the reduction in debt level by \$20.79M (net) as compared to 2015. All this was achieved without the Authority defaulting on any of its debt covenants signed with lenders or defaulting on its loan repayments. The positive gearing level provides opportunities for additional borrowing by FEA to fund its long term Power Development Plan.



Furthermore, FEA's balance sheet will continue to show reasonably high borrowing cost due to the nature of the industry as it is highly capital intensive. In the past, the gearing level has been maintained at a reasonably safe level by FEA due to the prudent debt management adopted by Management to ensure that debts are repaid when they fall due without defaulting and increasing the shareholder value by achieving business profits. Further, FEA borrows for Capital Expenditure funding only.

The shareholder value of FEA was \$706M at the end of 2016 which has increased from \$647M at the end of 2015 and \$394.1M at the end of 2006. FEA's total assets are worth \$1.22B, an increase from \$1.17B in 2015 and \$597.2M in 2006. This shows that FEA has added significant shareholder value over the last 10 years since the implementation of organizational reforms.

Capital Expenditure & Funding

FEA spent a total of around \$63.1M in capex as at end of December 2016 as compared to around \$80.6M that was spent for the same period last year. The capital expenditure of FEA for this year, historically, has been low in comparison due to the effect of Tropical Cyclone Winston where some of the major FEA projects were deferred as the power restoration work became the utmost priority to FEA. The power restoration work exhausted the FEA resources including the external Electrical Powerline Contractors. It is envisaged that the capex spending will pick up from first quarter of 2017 onwards. Despite funding around \$30.1M of the TC Winston & Flash flood Power Restoration Works internally, FEA also funded around \$63M of capex from its internal cash flows. There was no external loan raised by FEA in 2016 which is a positive achievement in light of the huge financial commitments faced by the Authority as a result of TC Winston.

Management will be carrying out a reprioritization exercise of its 2017 capex in early 2017 to ascertain the level of funding required for 2017 onwards. It is envisaged that FEA will be funding most of its 2017 capex from internal cash and borrowings from external financial institutions will only be considered for larger projects with long term benefits to FEA. All the debt covenants imposed by the lenders namely, ANZ Bank and FPNP were satisfactorily met in 2016. A total of \$24.67M of Loans and Bonds repayment was executed in 2016 which is really a great achievement for FEA taking into account the additional \$30.1M that it had to absorb internally. FEA had a total debt portfolio of around \$319.5M as at 31st December 2016. This debt has to be serviced and repaid over the next 10-15 years.

The capital expenditure planned for the next 3 years are \$112.5M, \$113M and \$112.5M for 2017, 2018 and 2019 respectively, aggregating to \$338 million over the next 3 years.

The projected Capital expenditure for 2017 of \$112.5 million comprises of the following;

- Distribution System Reinforcement, Urban Reticulation, and Rural Electrification,
- Upgrade of 33kV Line & Substations (Nausori/Korovou, Vuda/Naikabula, Waqadra/Denarau),
- Construction of new 132kV Transmission Line from Koronubu, Ba to Virara,
- Transformer Upgrade & Replacement - Suva / Kinoya / Sawani / Rarawai / Hibiscus & Vuda, Wainikasou,
- 132kv steel Tower Replacement,
- 33kV Underground Cabling Works - Suva/Vatuwaqa/ Hibiscus/Kinoya Cunningham,
- New Nadarivatu Staff Quarters,
- Upgrade of 415 volt board at Vuda/ Upgrade of Vuda G1

- & G2 MCC panel & Amot control panels ,
- Wainiqueu Hydro Station 11kV Switchgears & Control Upgrade,
- Main Inlet Valve, Nozzel & Runners at Wailoa Power Station,
- Upgrade of 415 volt board, Levuka - 2 x 600kw & H/O 1 x 350kw &
- 500,000 litres of Water Storage Tank at Kinoya Power Station.

In view of FEA's huge capital expenditure plan, the Cabinet has approved the extension of the Government guarantee facility of FJ\$404M and US\$50M till the end of December 2017. FEA has utilised around FJ\$314.4M of this government guarantee as at the end of 2016. Cabinet approved the extension of the Government Guarantee facility till the end of December 2017 to accommodate any new loans that FEA will borrow in 2017 to fund its 2017 capital expenditure plan.

Therefore, FEA's financial performance over the next 3 years will be critical in determining how successful it can fund the above commitments. It will have to keep aside cash surplus of at least \$40M-50M a year and this means that FEA has to record reasonable levels of profits to generate the necessary cashflows required. It will be very difficult for FEA to achieve this required level of profitability given that there are two uncontrollable factors being the global fuel price and the weather pattern that largely influence its business. Therefore, it is imperative that FEA adopt a business model that is robust and will achieve the desired profitability level to ensure that it remains financially sustainable over this period to fund the above capital expenditures and loan commitments.

FEA had a total debt portfolio of around \$319.5M as at 31st December 2016 compared to \$340.6M as at end of 2015. The reduction in debt level is due to the mandatory loan repayments made during the year. During the year, FEA withdrew the final drawdown of \$3.8M from FPNP to cater for the supplier retention payments. In 2016, FEA paid around \$20.19M to ANZ Bank, \$4.44M to FPNP and a further \$46k to Suva City Council as its mandatory loan repayments. FEA's average cost of borrowing increased to 3.9% per annum in 2016 from 3.4% in 2015 as a result of the new loans raised in 2015 at higher interest rates.

FEA is undertaking another review of its 10 year Power Development Plan (PDP) ending 2026. The ten (10) year power development plan contains the load forecasting, the power generation planning up to 2026 for Viti Levu, Vanua Levu, Taveuni and Ovalau power systems together with the associated network assets to be developed and the investment plan required for the development and augmentation of the 132kV and 33kV transmission networks. The total investment required in the generation sector as well as the transmission and distribution sector is estimated to be around \$2.4B over the next ten years for Viti Levu, Vanua Levu, Ovalau and Taveuni. The investments in reinforcing the transmission network are expected to be funded by FEA at a cost of around \$870M over the next ten years. The private sector is expected to invest substantially in the power generation sector as Independent Power Producers (IPPs) and sell the electricity to FEA via long term Power Purchase Agreements. It will be a huge task for FEA to successfully implement its PDP up to 2026 particularly investing heavily in reinforcing its transmission network infrastructures at the prevailing electricity tariff rates. The key enabler in achieving this plan is to have the right electricity tariff rate in place to ensure that FEA has the capability to borrow to fund its Optimum Power Development plan and also ensure

the financial sustainability of FEA in the medium and long term.

Internal Audit

The Internal Audit department continuously monitors the effectiveness of the internal controls with an objective to provide the Audit & Finance Sub Committee and the Board with an independent, objective and reasonable assurance of the adequacy and effectiveness of the Authority's risk management practice, internal controls and governance processes. The Internal Audit Department also assesses opportunities for improvement in business processes, systems & controls and provides recommendations, designed to add value to the Authority as well as follow up on the implementation of corrective actions and improvements in business processes after review by the Audit & Finance Sub-Committee and the Board.

The scope and authority of the Audit Department is derived from the Audit Charter approved by the Board. The department develops an annual audit plan based on the risk profile of the business processes of various functions and the audit activities are undertaken accordingly.

During the year, the Audit & Finance Sub-Committee met regularly on a monthly basis to review the reports submitted by the Audit Department. All significant audit observations and follow-up actions thereon were reported to the Committee.

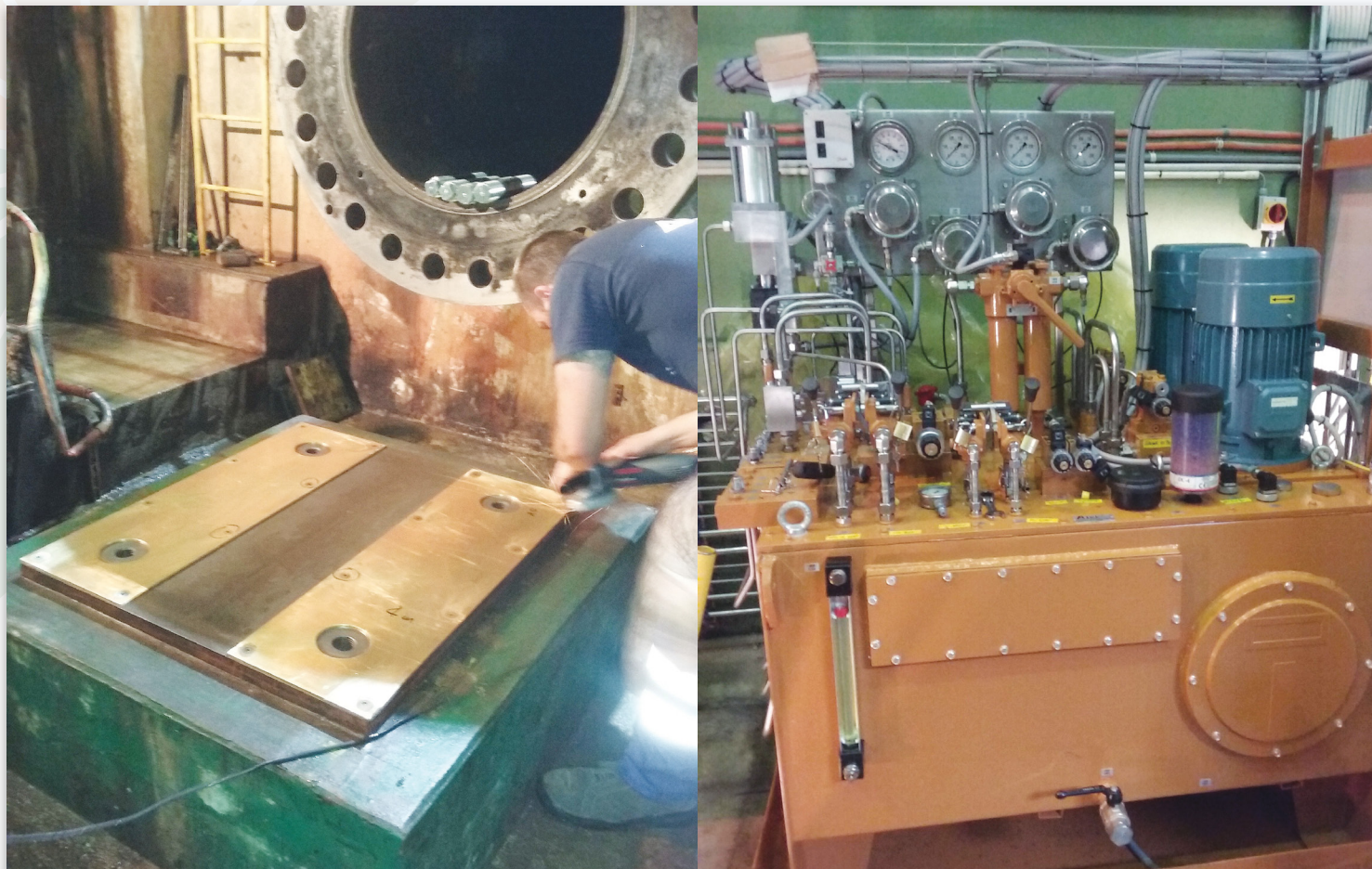
The Authority has a well-established internal audit department that reports to the Chief Executive Officer on a day-to-day basis and has direct access to the Chairman of the Audit & Finance Sub-Committee. The internal audit department also works very closely with the external auditors. It provides independent and objective assurance to the Board, the Audit & Finance Sub-Committee and the Executive members on the systems of internal control deployed in the Authority.

Risk Management

The Risk Management Framework supports the processes to oversee and manage the risks in the Authority. It is used to recognise business improvement opportunities through the management of risks. The framework is action-oriented and requires employees to focus on the right things, prepare active action plans and to be held accountable for their actions. The framework acknowledges that all employees have a role in managing risk and in particular, they are encouraged to report incidents, hazards and risks without fear.

In 2016, the management continued with the implementation of appropriate risk mitigation strategies to address the risks identified in the Risk Review Workshop for FEA's Top 20 Business Risks undertaken in July 2016 jointly by the Risk Consultants from Marsh Ltd, the Executive Management Team and the Unit Leaders of the Authority to reduce the rating of our top 20 business risk by 20%.

Furthermore, external risk inspections of our power stations were conducted by an independent third party and recommendations were implemented to ensure FEA's risk profile specifically for most of its critical assets, improved. Significant improvements were noted in the risk scores of all the power stations with one Power Station receiving the score of 100%.



The pictures above depict work in progress on the installation of a Main Inlet Valve (MIV) at the Wailoa Hydro Power Station, FEA's most strategic asset that was commissioned in 1983. The total estimated cost of the replacement of the MIVs, nozzles and runners is around \$13.3M and this will be completed by mid 2019.

RENEWABLE ENERGY DEVELOPMENTS AND INDEPENDENT POWER PRODUCERS (IPPs)

1. Solar Project at Qeleloa, Nadi

FEA had called for Expressions of Interest in December 2015 for the Supply and Installation of 2MW - 5MW of solar hybrid system. This EOI closed in January, 2016 and there were twenty (20) bids received. Some bids that were received proposed an energy fee which was higher than the Fiji Commerce Commission IPP fee determination. Upon evaluation and discussions with the two shortlisted bidders, the project was deemed uneconomical. The FEA Board at its meeting in April 2016 decided not to proceed with the Solar Hybrid System. Instead, the Board approved that FEA call for EOIs for a 2MW-5MW Pure Solar PV system. A revised EOI was called for in June 2016 for a Pure Solar PV System. All the sixteen (16) bids were evaluated and two (2) bids were shortlisted. Discussions are underway with the two shortlisted bidders and it is anticipated that a Power Purchase Agreement (PPA) will be signed with at least one of the bidders for the establishment of a 5MW solar PV plant with a one to two hour battery back up.

2. Waste to Energy Project at Naboro

The Expressions of Interest (EOIs) were called for the development of the Naboro Waste to Energy Plant from prospective Independent Power Producers (IPPs). There were a total of six (6) EOIs received for this project.

A Memorandum of Understanding has been signed with one of the bidders and discussions are continuing regarding this project and a final decision is expected to be made in consultation with the relevant stakeholders by late 2017.

3. Hydro Projects

A proposal was received from a potential Independent Power Producer (IPP), for the development of three run-of-river hydro-electricity projects in South East Viti Levu at Namosi. Discussions are continuing with this IPP with the objective of signing a Power Purchase Agreement by third quarter 2017. The IPP will also be responsible for evacuating the energy output from these three hydro power stations to Wailekutu in Suva which will involve the construction of high voltage substations and 33kV and 132kV transmission lines.

4. Biomass Projects

4.1. FSC Labasa and Lautoka

The Fiji Sugar Corporation has been supplying electricity from its power stations in Labasa and Lautoka to the FEA grid during the crushing season only.

4.2. Nabou Green Energy Limited (NGEL) (initially known as Tropik GIMCO)

NGEL is a joint venture project between Tropik Wood Industries Limited & Korean investors. A PPA was signed between FEA and NGEL on the 8th of December, 2014 for the development of a 10MW Biomass Plant in Nabou, (between Sigatoka and Nadi). The project is expected to be completed by mid of 2017 and the plant is scheduled to be commissioned in the second quarter of 2017. Output from this power plant will be fed into the FEA western grid.

4.3. Tropik Wood Industries Limited (TWIL), Lautoka

The 9.3MW TWIL biomass power plant was out of operation during 2016 and is expected to be back on-line by May 2017 after completion of repairs to the power plant.



The above picture shows the biomass power project under construction by an Independent Power Producer, Nabou Green Energy Limited (NGEL) at Nabou between Sigatoka and Nadi.

Entry of Other IPPs

FEA continues to engage with all the prospective IPPs to promote the development of renewable energy schemes to achieve the FEA's mission of generating 90% of the energy requirements of Fiji through renewable energy sources by 2025.

Augmentation of the Transmission Grid

FEA completed the final phase of the review of the Power System Protection Scheme for the entire FEA power system in 2016 to ensure safe and reliable system operations. FEA also continued with the upgrading of its aged and obsolete electrical protection relays with modern and intelligent numerical protection relays. Seventy-seven percent (77%) of the electrical protection relays in 11kV, 33kV and 132kV networks are now modern numerical protection relays.

Monasavu Hydro Scheme Half-Life Repair & Maintenance Works

Work continued on the Monasavu Hydro Electric Scheme Half Life Refurbishment project that commenced in 2011. Below is a summary of work carried out in 2016 at a cost of around \$6M:

- New 132kV circuit breakers were delivered to FEA in 2016. The replacement of the old circuit breakers will be carried out in 2017.
- Design of the new 132kV Mimic Panel, HMI System and Annunciation Panel for the 132kV Cunningham Road substation was completed in 2016.
- Work under a contract for the Design, Build, Supply, Test and Commissioning of the Tap Changer Control for the 132kV/33kV Transformers T1A and T2A at Cunningham Road substation was completed and commissioned on 13th November 2016.
- New tap changer controls for the 132kV/33kV Transformers T1A and T2A at Vuda substation were commissioned on 20th November 2016.
- Completed the replacement of the 132kV insulators at the Cunningham and Vuda 132kV switchyards.

- Completed the upgrading of the 33kV switchgear at the Cunningham Road 132kV/33kV zone substation
- Rust refurbishment work was completed on 35 towers along the 132kV Wailoa – Cunningham Road transmission line. Upgrading of access roads to the transmission towers was also carried out in 2016 and the remaining work will be completed in 2017.
- 132kV insulators were replaced on a total of 11 transmission towers.



The above picture shows the FEA Team replacing 132kV insulators at Cunningham 132kV Zone Substation.

Maintenance at Other Zone Substations

- Completed the upgrading of 33kV switchgear at the Vatuwaqa 33kV/11kV zone substation
- Completed the upgrading of 33kV switchgear at the Suva 33kV/11kV zone substation.
- Completed the upgrading of 11kV switchgear at the Rarawai 33kV/11kV zone substation.
- Completed the upgrading of 2 x 11kV/33kV 20/25MVA step-up transformers at Kinoya zone substation.
- Installed and commissioned 2 x 33kV circuit breakers at the new Kinoya zone substation.

33kV Underground Cabling Works in Suva

- Completed installation and commissioning of the 33kV cables between Hibiscus Park and Suva zone zone substations.
- Completed installation and commissioning of a 33kV transmission circuit between Rokobili and Hibiscus Park zone substations.

Power Reticulation along the Korovou to Rakiraki Corridor in Viti Levu

Work continued on the project to electrify the Korovou – Rakiraki corridor. The 33kV sub-transmission line from Tavua to Volivoli (Rakiraki) was commissioned in 2016, together with the new 33kV/11kV Volivoli zone substation. Work is currently

in progress on the construction of the 11kV grid between Waimecia and Nayavu. This project will be completed at a cost of around \$19M and completion has been delayed to 2017 as a result of Tropical Cyclone Winston. The Project is jointly funded by the Government of Fiji and the Fiji Electricity Authority.

Power Reticulation for FNPF's Momi Bay Resort

Power supply to the FNPF's new Momi Bay development was successfully commissioned in December 2016 with the commissioning of the 33kV sub-transmission line from Waqadra to Momi, the 33kV Switching Station at Nawai and the 33kV/11kV zone substation at Momi, at a cost of \$12.9M which was fully funded by FNPF.

Rural, Urban and Contract Projects

FEA spent a total sum of \$53.6M on construction of new rural electrification schemes, grid extensions for commercial/industrial projects, power system reinforcement works and contract jobs. Of this amount, \$13.5M was authorized for construction of sixty two (62) rural electrification projects, \$12.7M was authorized for fifty eight (58) general extension projects for commercial and industrial customers and \$3.9M was utilized for twenty five (25) contract jobs. A total amount of \$23.5M was authorized for sixteen (16) distribution power system reinforcement projects.



FEA employees repairing overhead conductors to restore power supply to the affected customers.

INFORMATION TECHNOLOGY

The IT SBA embarked on a number of major projects to implement technologies/solutions that are relevant and can be leveraged to improve business efficiency, reduce operating costs and assist mitigate business risks.

The IT System uptime recorded for 2016 was 99.919%, exceeding the Board mandated target of 99.80%.

Some of the projects that were commissioned or started in 2016 were as follows:

- Replacement of the Video Conferencing System;
- Replacement of the Primary Data Centre & Primary DR Server Infrastructure;
- Replacement of the traditional Firewall;
- Commencement of the upgrade for the Customer Information & Billing System; and
- Improvement of the Disaster Recovery (DR) capability by setting up a second DR site.

The IT SBA continues to explore strategies that will enable the Authority's Information systems to remain relevant to the needs of the business and to keep abreast with the advancements in technology to ensure direct financial savings, improve efficiency of business processes, improve productivity and enhance the user experience to deliver better customer service.

COMMERCIAL

The Fiji Electricity Authority's Commercial division comprises of two major operational units namely Supply Chain having a total of twenty five (25) team members and Regulatory Unit having a manpower total of fifty-two (52) team members. Both units are distributed over the main FEA Depots in Kinoya, Navutu and Labasa.

Performance and process optimization of the division have been driven and achieved through implementation of the following simple but key objectives:

- Increase Speed of delivery of goods & services rendered to internal & external customers.
- Improve Quality of goods & services rendered to internal & external customers.
- Reduce Costs of providing goods & services rendered to internal & external customers.

1) Supply Chain Unit

The Supply Chain Unit has maintained its ongoing focus on optimizing its performance in the critical result areas of procurement of goods & services, inventory management, as well as Fleet & Property Services for 2016.

1.1 Supply Chain Unit 2016 Performance Outcomes

When measured against the Corporate Plan objectives and related divisional key performance indicators, the following main outcomes were achieved as at 31st December 2016:

- Procurement of goods & services:**
 - The actual average tender turnaround time of 4.36 weeks was accomplished for the year (for tenders valued at > = \$10k and < = \$100k medium tenders) against a target of 6 weeks.

- In addition, corporate savings of around \$948k was achieved via procurement/tender negotiations and other supply chain efficiency cost initiatives.

- Sound Inventory management, vigilance, and best practices:**

- FEA achieved the normal operational inventory stockholding level KPI (not including fuel & engine spares) of \$10,342,879.47 against a corporate target of \$11M.
- Stock-turns KPI (Improvement of rate of stock Utilization) was achieved at 9.9% against a target of greater than 6%. This achievement indicates that FEA's stock items were managed efficiently and that stock was turned over regularly.
- The number of stock takes achieved was 3 out of 3 as Cyclone Winston impact was huge and rendered it only possible for only 3 stock takes to be made instead of the usual 4 quarterly stock takes per year. The final stock take variance percentage at Kinoya stores was 0.000542% and Navutu & Labasa stores variances of 0.0029% against a target of 0.01%.

- Corporate KPIs - Projects Construction**

- The Supply Chain Unit played a critical role in ensuring timeliness of tendering, contract preparation, negotiations and procurement of project materials for Corporate Project KPIs for Network and Generation SBAs were achieved. The Supply Chain Unit assisted in the successful completion of all the Government's Rural Electrification projects Fiji wide as well as large projects such as 33kV/11kV Substations and transmission line hardware for Tavua /Volivoli, Rarawai substation, Suva Substation /Rokobili / Hibiscus Park substation underground cabling and substation works, Monasavu Hydro Power Scheme half-life refurbishment programme.

- Fleet Services**

- Although the Corporate Fleet Accidents KPI target was not achieved in 2016 as desired, our Fleet team worked together with the Health & Safety team (HSE) to mitigate and reduce driving risks through specific driver attitude & defensive training including specialist vehicle training programmes. Additionally, at the end of 2016, a Fatigue Monitoring pilot project was implemented to test 5 vehicles in the Central Division. This initiative will dovetail well with the Vehicle monitoring system installed in 2015 to specifically assist in reducing vehicle accidents, maintaining safe speeds and highlighting over speeding breaches as well as abuse of vehicle usage and management of fuel efficiency.

- Property Services:**

- Ensured that all FEA properties were well maintained & building services contracts were executed monthly in a timely manner throughout the year.

2) Regulatory Unit

The Fiji Electricity Authority Regulatory Unit is tasked with its major core function of regulation and compliance enforcement of the Electricity Act for all stakeholders in the Electricity sector. Its other functions include (but are not limited) to the following:

- Registration and licensing of electricians & electrical contractors.
- Licensing of electrical generation equipment and retailers including licensing of new Independent Power Producers (IPPs).
- Ensuring industry compliance in accordance with the Electricity Act and AS/NZS Wiring standards.
- Electrical testing of imported electrical appliances and fittings used in Fiji upon request.
- Investigation and submission of Independent reports on electrocution incidents to Resident Magistrates.
- Testing of electricity meters to ensure compliance (within plus or minus 2.5%).

2.1 Regulatory Unit 2016 Performance Outcomes

The following major achievements of this Unit as at 31st December 2016 were:

• Customer focus and Efficiency

- ▶ A new Inspection Regulatory team which was established at Tavua Depot in 2016 to cater for the increasing number of customers located at Ba, Tavua and Rakiraki districts has proven its worth in terms of attending to customer request in a timely manner.
- ▶ The new energy meter test bench installed at Kinoya and the old meter test bench installed at Navutu Depot in Lautoka, continue to bring about efficiencies in the testing of meters and eliminates the transportation costs of energy meters from Suva to Lautoka as done in previous years.

• Maintenance of Registers for Electricians & Electrical Contractors

- ▶ Total number of registered licensed electricians in 2016 were 2,006 whilst 1,372 had their licenses validated after the required renewal fees were paid up.
- ▶ Total number of registered electrical contractors in 2016 were 307 and 9 had their licenses validated after the required renewal fees were paid up.
- ▶ The public were regularly advised of the importance of engaging only licenced electrical contractors via direct customer contact, publication on FEA Website and through advertisements every six months in the daily newspaper.

• Number of new installations inspected and approved for connections:

- ▶ A total of 4,799 new connections were made in 2016 against a target of 4,500. The new connections comprised of 3,558 domestic connections and 1,241 commercial connections.

• Number of energy meters tested at FEA meter test bench

- ▶ A total of 13,560 energy meters were tested by FEA in 2016 against a target of 13,000. Out of these meters, 11,968 were single phase meters, 1,363 were prepaid meters and 229 were three phase meters.

• Target of fixing 90 per cent of the power line faults in urban areas within 3 hours and for rural areas within 4 hours.

- ▶ Exceeded target for both rural customers and urban customers by achieving 92% and 94% respectively.

• Ongoing and proactive Public Safety Awareness campaign

- ▶ Achieved a target of 4 safety awareness presentations to various communities, villages & schools in Central and Western divisions to ensure life and property are protected and safe.

• Proposed Transfer of Regulatory Unit

- ▶ In 2016, FEA continued its support for the proposed transfer of the Regulatory functions by collaborating and providing relevant policy & operational information to the Ministry of Public Enterprises and its Consultant.

• Cyclone Winston Restoration

- ▶ Both Supply Chain and Regulatory units were very instrumental together with the Network division in the swift turnaround time in completing the restoration works within a record time of six months given the very high level of devastation caused by TC Winston.



FEA employees re-aligning the electricity power poles in the western region after Cyclone Winston damaged the overhead lines to restore power supply to its customers.



The newly built Somosomo Hydro Power Station in Taveuni.



The newly constructed Naibili Weir at Somosomo in Taveuni.



The FEA Team as part of their corporate social responsibility hosted a morning tea to raise funds and support cancer awareness in Fiji.

AUDITED FINANCIAL STATEMENTS

for the year ended 31 December 2016

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Statement By Members of the Authority for the year ended 31 December 2016

In accordance with a resolution of the Members of the Fiji Electricity Authority ("the Authority") in the opinion of the Members:

1. the financial statements and accompanying notes show a true and fair view of the financial position, results of operations, changes in capital and reserves and cash flows of the Fiji Electricity Authority as at and for the year ended 31 December 2016;
2. the statements have been prepared in accordance with the provisions of the Electricity Act 1966 (Cap 180) and International Financial Reporting Standards;
3. the basis of preparation of the financial statements and the classification and carrying amounts of assets and liabilities as stated in these financial statements are appropriate;
4. at the date of this statement there are reasonable grounds to believe that the Authority will be able to pay its debts as and when they fall due; and
5. all related party transactions have been adequately recorded in the books of the Authority.



Daksesh Patel
CHAIRMAN

28th April 2017, Suva



Gardiner Whiteside
DEPUTY CHAIRMAN

28th April 2017, Suva

Independent Auditor's Report

To the Members of Fiji Electricity Authority

Report on the Audit of the Financial Statements

Opinion

I have audited the financial statements of Fiji Electricity Authority (the Authority), which comprise the statement of financial position as at 31 December 2016, the statement of comprehensive income, statement of changes in capital and reserves and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying financial statements give a true and fair view of the financial position of the Authority as at 31 December 2016, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

I conducted my audit in accordance with International Standards on Auditing (ISA). My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the financial Statements* section of my report. I am independent of the Authority in accordance with the International Ethics Standards Board for Accountant's Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to my audit of the financial statements in Fiji and I have fulfilled other ethical responsibilities in accordance with these requirements and the IESBA Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Responsibilities of the Management and Directors for the Financial Statements

The management is responsible for the preparation and fair presentation of these financial statements in accordance with IFRS, companies Act, 2015, Electricity Act, 1966 and Public Enterprise Act, 1996 and for such internal control as the management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the management intend to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for overseeing the Authority's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with ISA, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

Independent Auditor's Report

To the Members of Fiji Electricity Authority

Report on the Audit of the Financial Statements (CONT'D)

- Conclude on the appropriateness of the management's and directors' use of going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures, are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the management and directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Report on Other Legal and Regulatory Requirements

In accordance with the requirements of the Companies Act, 2015, Public Enterprise Act, 1996 and the Electricity Act, 1966, in my opinion:

- a) proper books of account have been kept by the Authority, so far as it appears from my examination of those books,
- b) the accompanying financial statements:
 - a. are in agreement with the books of accounts; and
 - b. to the best of my information and according to the explanations given to me, give the information required by the Fiji Companies Act, 2015, Public Enterprise Act, 1996 and the Electricity Act, 1966 in the manner so required.



Ajay Nand
AUDITOR GENERAL

Suva, Fiji
9th May, 2017

Statement Of Comprehensive Income

For The Year Ended 31 December 2016

	Notes	2016 \$'000	2015 \$'000
Revenue - electricity sales	5	317,835	311,989
Other operating revenue	5	10,550	9,877
Total revenue		328,385	321,866
Personnel costs		(21,723)	(19,975)
Fuel costs		(89,849)	(140,704)
Electricity purchases		(12,262)	(16,894)
Lease and rent expenses		(1,620)	(1,567)
Depreciation on property, plant and equipment		(39,268)	(37,714)
Amortisation of intangible assets		(112)	(180)
Other operating expenses		(48,041)	(48,924)
Total expenses		(212,875)	(265,958)
Profit before finance costs, cyclone restoration costs and income tax		115,510	55,908
Finance Cost:			
Finance Cost		(12,911)	(9,885)
Interest income		1,404	1,004
Unrealised foreign exchange gain / (loss),net		716	(1,673)
Profit before cyclone restoration costs and income tax		104,719	45,354
Cyclone Winston - restoration costs	22(a)	(30,066)	-
Profit before income tax	6	74,653	45,354
Income tax expense	7(a)	(15,055)	(5,664)
Profit after income tax		59,598	39,690
Other comprehensive income		-	-
Total comprehensive income for the year		59,598	39,690

The above statement of comprehensive income has been prepared in accordance with the International Financial Reporting Standards (IFRS) and should be read in conjunction with the accompanying notes.

Statement Of Financial Position

As at 31 December 2016

CAPITAL AND RESERVES

Retained profits
Capital contribution

Represented by:

CURRENT ASSETS

Cash on hand and at bank
Short term deposits
Held to maturity financial assets
Receivables and prepayments
Inventories
Tax refund due

NON-CURRENT ASSETS

Property, plant and equipment
Intangible assets
Deferred tax assets

TOTAL ASSETS

CURRENT LIABILITIES

Trade and other payables
Employee benefit liability
Interest bearing borrowings
Current tax liabilities

NON-CURRENT LIABILITIES

Trade and other payables
Interest bearing borrowings
Deferred income
Deferred tax liabilities

TOTAL LIABILITIES NET ASSETS

The above statement of financial position has been prepared in accordance with the International Financial Reporting Standards (IFRS) and should be read in conjunction with the accompanying notes.

	Notes	2016 \$'000	2015 \$'000
		611,132	551,999
		95,175	95,175
		706,307	647,174
		59,466	37,343
8(a)		60,000	20,000
12		-	12,468
9		36,459	39,587
10		32,362	29,566
		-	308
		188,287	139,272
		1,034,662	1,029,748
11		670	782
13		157	2,009
7(b)		1,035,489	1,032,539
		1,223,776	1,171,811
		27,616	49,288
14		2,649	2,465
15		24,540	23,975
16		8,145	-
7(d)		62,950	75,728
		89,386	84,257
14		294,919	316,654
16		24,870	7,280
17		45,344	40,718
7(c)		454,519	448,909
		517,469	524,637
		706,307	647,174

Statement Of Cash Flows

For The Year Ended 31 December 2016

Cash flows from operating activities

Receipts from customers	328,637	321,111
Payments to suppliers and employees	(212,561)	(228,922)
Interest received	1,312	977
Interest paid	(13,109)	(12,449)
1% Transitional tax paid	(465)	-
Insurance proceeds for business interruption	5	2
Withholding taxes paid	(123)	(194)

Net cash flows provided by operating activities

	103,696	80,525
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Cash flows from investing activities

Proceeds from term deposit	12,468	-
Acquisition of property, plant, and equipment	(63,117)	(80,633)
Proceeds from capital contribution for rural electrification, net	18,324	6,835
Proceeds from refundable contribution for general extension, net	11,114	7,279
Proceeds from disposal of property, plant and equipment	143	211

Net cash flows used in investing activities

	(21,068)	(66,308)
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Cash flows from financing activities

Repayment of bonds and loans	(24,674)	(56,764)
Proceeds from borrowings - local	3,883	40,668

Net cash flows used in financing activities

	(20,791)	(16,096)
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Net increase/(decrease) in cash and cash equivalents

	61,837	(1,879)
--	---------------	----------------

Effect of exchange rate movement on cash and cash equivalents	286	699
Cash and cash equivalents - at the beginning of the year	57,343	58,523

Cash and cash equivalents - at the end of the year

8

	119,466	57,343
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The above statement of financial position has been prepared in accordance with the International Financial Reporting Standards (IFRS) and should be read in conjunction with the accompanying notes.

Statement Of Changes In Capital And Reserves

For The Year Ended 31 December 2016

Balance as at 31 December 2015

Capital contribution during the year	6,835	-	6,835
Total comprehensive income for the year	-	39,690	39,690

Balance as at 31 December 2015

	95,175	551,999	647,174
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Total comprehensive income for the year	-	59,598	59,598
1% Transitional tax on undistributed profits (2014 and 2015)	-	(465)	(465)

Balance as at 31 December 2016

	95,175	611,132	706,307
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The above statement of changes in capital and reserves has been prepared in accordance with the International Financial Reporting Standards (IFRS) and should be read in conjunction with the accompanying notes.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES

Statement of Compliance

The financial statements have been prepared in accordance with the Electricity Act 1966 (Cap 180) and International Financial Reporting Standards ('IFRS') as issued by the International Accounting Standards Board (IASB).

Issue of Financial Statements

The financial statements were approved for issue by the Authority's Board of Directors at its meeting held on 27th April 2017.

Basis of Preparation

The financial statements have been prepared on the basis of historical cost, except for the revaluation of certain non-current assets and financial instruments. Cost is based on the fair values of the consideration given in exchange for assets.

In the application of IFRS, management is required to make judgements, estimates and assumptions about carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstance, the results of which form the basis of making the judgements. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods. Judgements made by management in the application of IFRS that have significant effects on the financial statements and estimates with a significant risk of material adjustments in the next year are disclosed, where applicable, in the relevant notes to the financial statements.

Accounting policies are selected and applied in a manner which ensures that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported.

The areas involving higher degree of judgement or complexity, or areas where assumptions and estimates are critical to the financial statements are disclosed in Note 4.

Functional and Presentation Currency

Items included in the financial statements of the Authority are measured using the currency of the primary economic environment in which the Authority operates ('the functional currency').

The Authority operates in Fiji and hence, the financial statements are presented in Fiji Dollars, which is the Authority's functional and presentation currency.

Amendments to standards and annual improvements effective from 1 January 2016

A number of amendments to standards and annual improvements are effective for the first time for periods beginning on (or after) 1 January 2016. None of the amendments and annual improvements have a material effect on the Authority's annual financial statements.

Amendments which are relevant to the entity are summarised below:

Amendments to IAS 1 – Disclosure Initiative

The amendments clarify guidance in IAS 1 on materiality and aggregation, the presentation of subtotals, the structure of financial statements and the disclosure of accounting policies.

Although the amendments do not require specific changes, they clarify a number of presentation issues and highlight that preparers are permitted to tailor the format and presentation of financial statements to their circumstances and the needs of users.

Amendments to IAS 16 and IAS 38 – Clarification of Acceptable Methods of Depreciation and Amortisation

The amendments clarify the principle in IAS 16 and IAS 38 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortise intangible assets. These amendments are not expected to have any impact to the Authority given that the Authority has not used a revenue-based method to depreciate its non-current assets.

Annual improvements have been made to the following standards:

- IFRS 5 – Non – Current Assets Held for sale and Discontinued Operations
- IFRS 7 – Financial Instruments – Disclosures
- IAS 19 – Employee Benefits
- IAS 34 – Interim Financial Statements

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

New standards, amendments, annual improvements and interpretation that have been issued but are not mandatorily effective as at 31 December 2016

Certain new standards, amendments, annual improvements and interpretation which are not yet mandatorily effective and have not been adopted early in these financial statements, will or may have an effect on the Authority's future financial statements. The Authority intends to adopt these standards, amendments, annual improvements and interpretation if applicable, when they become effective.

Amendments which are applicable to the entity are:

IAS 12: Income Taxes – Recognition of Deferred Tax Assets for Unrealised Losses

The amendment to IAS 12 is effective from 1 January 2017 and clarifies the accounting for deferred tax assets related to debt instruments measured at fair value but are not deemed to be impaired. Deductible temporary differences arise from unrealised losses on debt instruments measured at fair value. This is regardless of whether the instrument is recovered through sale, or by holding it to maturity. Therefore, entities are required to recognise deferred taxes for temporary differences from unrealised losses of debt instruments measured at fair value if all other recognition criteria for deferred taxes is met.

IAS 7: Statement of Cash Flows

These amendments are effective from 1 January 2017 and aim to improve information about an entity's debt, including movements in that debt. Disclosures are required to enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

Annual Improvements to IFRSs 2014 – 2016 Cycle (IFRS 1, IFRS 12 and IAS 28) effective from 1 January 2018

IFRS 1 – A number of short term exemptions in IFRS 1 were deleted. The relief provided by these exemptions were no longer applicable.

IFRS 12 – The scope was clarified to make it clear that the disclosure requirements in this Standard, except for those in paragraphs B10 – B16, apply to interests irrespective of whether they are classified as held for sale, as held for distribution to owners or as discontinued operations in accordance with IFRS 5.

IFRIC Interpretation 22: Foreign Currency Transactions and Advance Consideration

IFRIC interpretation 22 is effective from 1 January 2018 and addresses how to determine the date of transaction for the purpose of determining the spot exchange rate used to translate foreign currency transactions on initial recognition in circumstances when an entity pays or receives some or all of the foreign currency in advance of the recognition of the related asset, expense or income.

New Standards which are applicable to the entity are:

IFRS 9 - Financial Instruments

IFRS 9 Financial Instruments replaces IAS 39 Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early application permitted. Retrospective application is required, but comparative information is not compulsory. Early application of previous versions of IFRS 9 (2009, 2010 and 2013) is permitted if the date of initial application is before 1 February 2015. The adoption of IFRS 9 will have an effect on the classification and measurement of the Authority's financial assets, but no impact on the classification and measurement of the Authority's financial liabilities.

IFRS 15 - Revenue from Contracts with Customers

IFRS 15 was issued in May 2014 and establishes a new five-step model that will apply to revenue arising from contracts with customers. Under IFRS 15 revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The principles in IFRS 15 provide a more structured approach to measuring and recognising revenue.

The new revenue standard is applicable to all entities and will supersede all current revenue recognition requirements under IFRS. Either a full or modified retrospective application is required for annual periods beginning on or after 1 January 2018 with early adoption permitted. The Authority is currently assessing the impact of IFRS 15 and plans to adopt the new standard on the required effective date.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

IFRS 16 - Leases

IFRS 16 Leases, which supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC 15 Operating Leases-Incentives and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

IFRS 16 eliminates the classification by a lessee of leases as either operating or finance. Instead all leases are treated in a similar way to finance leases in accordance with IAS 17. Under IFRS 16, leases are recorded on the balance sheet by recognising a liability for the present value of its obligation to make future lease payments with an asset (comprised of the amount of the lease liability plus certain other amounts) either being disclosed separately in the statement of financial position (within right-of-use assets) or together with property, plant and equipment. The most significant effect of the new requirements will be an increase in recognised lease assets and financial liabilities.

IFRS 16 applies to annual periods commencing on or after 1 January 2019. Earlier adoption is permitted, but only IFRS 15 Revenue from Contracts with Customers is also adopted. The Authority is currently assessing the impact of IFRS 16 and plans to adopt the new standard on the required effective date.

The following significant accounting policies have been adopted in the preparation and presentation of the financial statements:

(a) Allowance for doubtful debts

The Authority establishes an allowance for any doubtful debts based on a review of all outstanding amounts at year-end. Bad debts are written off during the period in which they are identified.

(b) Bond instruments

Bonds issued are recorded at cost which reflects the face value of these instruments. Transaction costs on the issue of bond instruments are capitalised and amortised to the statement of comprehensive income over the maturity life of the bond instruments. Transaction costs are the costs that are incurred directly in connection with the issue of those bond instruments and which would not have been incurred had those instruments not been issued.

(c) Borrowings

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the statement of comprehensive income over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Authority has an unconditional right to defer settlement of the liability for at least 12 months after the balance date.

(d) Borrowing costs

The borrowing costs that are directly attributable to major capital expenditures and projects under construction are capitalized as part of the cost of these assets. Other borrowing costs are recognized as an expense in the year in which they are incurred.

The government guarantee fees on loans drawdown specifically for capital projects are capitalised. Other guarantee fees paid are expensed.

(e) Refundable and non refundable capital contribution

A 100% refundable capital contribution represents the cost of the extension, received from the developer or a prospective consumer. The cost of the extension is the estimated cost incurred from the Authority's nearest mains supply point capable of providing the assessed load required. The developer or a prospective consumer applying for a general extension provides a 100% refundable capital contribution in relation to the cost of the extension which is credited to trade and other payables and is refunded to the customer over a period of 5 and 8 years. This is in accordance with the determination by the Fiji Commerce Commission.

Non refundable capital contribution are treated as deferred revenue which are brought to income over the assets estimated useful life.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(f) Cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents comprise of cash on hand, cash in banks, short term deposits held with banks and bank overdrafts. Bank overdrafts are shown within borrowings under current liabilities in the statement of financial position.

(g) Comparative figures

Where necessary, amounts relating to prior years have been reclassified to facilitate comparison and achieve consistency in disclosure with current year amounts.

(h) Deferred income

Government grant in aid and assets acquired at no cost to the Authority are capitalised and systematically recognised as other income on the basis of the expected lives of the assets to which the grants relate.

(i) Employee benefits

i) Annual leave

Provision for annual leave represents the amount which the Authority has a present obligation to pay for employees' services provided up to the balance date. The provision has been calculated on the current wage and salary rate.

ii) Performance pay

The Authority maintains a Performance Management System which is used to remunerate employees based on the achievement of certain Key Performance Indicators (KPIs). These KPIs are established based on predetermined objectives of the Authority. The liability is measured at the wage or salary rates prevailing during the year.

(j) Foreign currency translation

Transactions denominated in a foreign currency are translated to Fiji currency at the exchange rate at the date of the transaction.

Foreign currency receivables and payables at balance date are translated to Fiji currency at exchange rates prevailing at balance date.

All gains and losses arising there-from (realised and unrealised) are brought to account in determining the profit or loss for the year.

(k) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is based on the weighted average cost principle and includes expenditure incurred in acquiring the stock and bringing it to its existing condition and location. Consumables are valued at cost plus the associated delivery charges.

(l) Impairment of non-financial assets

The Authority assesses at each reporting date whether there is an indication that an asset may be impaired. If any such indication exists, or when annual impairment testing for an asset is required, the Authority estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or group of assets. When the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate value model is used.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(l) Impairment of non-financial assets (cont'd)

An assessment is made at each reporting date for non-financial assets as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the Authority makes an estimate of the recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. If that is the case the carrying amount of the asset is increased to its recoverable amount. The increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of comprehensive income.

(m) Financial instruments - initial recognition and subsequent measurement

i) Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments, available for sale (AFS) financial assets, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Authority commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement financial assets are classified in four categories:

- ▶ Financial assets at value through profit and loss
- ▶ Loans and receivables
- ▶ Held-to-maturity investments
- ▶ AFS financial assets

Financial assets at value through profit and loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. The Authority has not designated any financial assets at fair value through profit or loss.

Loans and receivables

This category is the most relevant to the Authority. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method, less impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The losses arising from impairment are recognised in the statement of profit or loss in finance costs for loans and in cost of sales or other operating expenses for receivables.

This category generally applies to trade and other receivables. For more, information on receivables, refer to Note 9.

Held-to-maturity investments

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held to maturity when the Authority has the positive intention and ability to hold them to maturity. After initial measurement, held to maturity investments are measured at amortised cost using the EIR, less impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance income in the statement of profit or loss. The losses arising from impairment are recognised in the statement of profit or loss as finance costs.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(m) Financial instruments - initial recognition and subsequent measurement (cont'd)

i) Financial assets (cont'd)

AFS financial assets

AFS financial assets include equity investments and debt securities. Equity investments classified as AFS are those that are neither classified as held for trading nor designated at fair value through profit or loss. Debt securities in this category are those that are intended to be held for an indefinite period of time and that may be sold in response to needs for liquidity or in response to changes in the market conditions. The Authority holds no AFS financial assets at reporting date.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Authority's statement of financial position) when:

- ▶ The rights to receive cash flows from assets have expired
- ▶ The Authority has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Authority has transferred substantially all the risks and rewards of the asset, or (b) the Authority has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

The Authority assesses, at each reporting date, whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event'), has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

ii) Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Authority's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Authority that are not designated as hedging instruments in hedge relationships as defined by IAS 39. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the statement of profit and loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IAS 39 are satisfied. The Authority has not designated any financial liability at fair value through profit or loss.

Notes To And Forming Part Of The Financial Statements
For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(m) Financial instruments - initial recognition and subsequent measurement (cont'd)

ii) Financial liabilities (cont'd)

Loans and borrowings

This is the category most relevant to the Authority. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit or loss.

This category generally applies to the interest-bearing loans and borrowings.

Financial guarantee contracts

Financial guarantee contracts issued by the Authority are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the liability is measured at the higher of the best estimate of the expenditure required to settle the present obligation at the reporting date and the amount recognised less cumulative amortisation.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expired. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit or loss.

(n) Intangible assets

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

Costs associated with developing or maintaining computer software programmes are recognised as an expense as incurred. Costs that are directly associated with the development of identifiable and unique software products controlled by the Authority, and that will probably generate economic benefits exceeding costs beyond one year, are recognised as intangible assets.

(o) Leased assets

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lease. All other leases are classified as operating leases. The Authority has various crown lands, native lands and premises under operating lease arrangements.

The Authority, the Monasavu landowners and the iTaukei Land Trust Board (iTLTB) in 2005 signed an agreement to lease approximately 23,000 acres of the Monasavu catchment area for a period of 99 years in return for specified payments. These lease commitments are disclosed in Note 19.

Authority as Lessor

Rental income from operating leases is recognised on a straight line basis over the term of the relevant lease.

(p) Payables

Trade payables and other accounts payable are recognised when the Authority becomes obliged to make future payments resulting from the purchase of goods and services.

Notes To And Forming Part Of The Financial Statements
For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(q) Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and impairment loss. Cost includes expenditure that is directly attributable to the acquisition of the item. Cost of leasehold land includes initial premium payment or price paid to acquire leasehold land including acquisition costs.

Additions

While expenditure on assets with a value of less than \$300 is generally not capitalised, physical control is maintained over all items regardless of cost.

Depreciation rates

Depreciation is calculated using the straight line method to write off the cost of each asset over their estimated useful lives as follows:

	Rates
Leasehold land	0.50% - 1.25%
Buildings - concrete	1.25%
Buildings - others	1.25%
Hydro Assets - dams	1.33% - 2.50%
Hydro Assets - tunnels	1.33% - 2.44%
Hydro Assets - plant and machinery	2.50% - 3.00%
Thermal assets	4.00% - 7.00%
Transmission	2.50%
Communication system and control	2.86%
Reticulation	4.00%
Wind mill	5.00%
Furniture and fittings	7.00% - 24.00%
Motor vehicles	20.00%
Computers	33.30%

Other fixed assets except for capital spares, are depreciated when they are brought into service.

Freehold land is not depreciated. Leasehold land is amortised over the remaining lease period.

Capital spares

Capital spares represent items held primarily for use in thermal stations in the event of a breakdown. In recognition of the increased risk of obsolescence over a protracted period, capital spares are amortised in line with the depreciation rates applicable to the related plant and machinery. Capital spares are reported as part of Authority's fixed assets.

Disposals

Gains and losses on disposals are determined by comparing proceeds with carrying amounts and are included in the statement of comprehensive income.

Repairs and maintenance

Repairs and maintenance is charged to the statement of comprehensive income during the financial period in which it is incurred. The cost of major renovations are included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Authority. Major renovations are depreciated over the remaining useful life of the related asset.

(r) Provisions

Provisions are recognised:

- ▶ When the Authority has a present legal or constructive obligation as a result of past events;
- ▶ It is probable that an outflow of resources will be required to settle the obligation; and
- ▶ The amount can be reliably estimated.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(r) Provisions (cont'd)

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation.

(s) Revenue recognition

Electricity income

Electricity income is recorded in the statement of comprehensive income on an accrual basis by estimating the usage for customers till balance date.

Other income

Rental income earned from leasing FEA properties is recorded in the statement of comprehensive income on an accrual basis.

Interest income is recognised on a time proportionate basis that takes into account the effective yield on the financial asset.

(t) Rounding off amounts

Amounts in the financial statements have been rounded off to the nearest thousand dollars unless specifically stated to be otherwise.

(u) Taxation

Current tax:

Current tax is calculated by reference to the amount of income taxes payable or recoverable in respect of the taxable profit or tax loss for the year. It is calculated using tax rates and tax laws that have been enacted or substantively enacted at the reporting date. Current tax for the current and prior years is recognised as a liability or asset to the extent that it is unpaid or refundable.

Deferred tax:

Deferred tax is accounted for using the liability method on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax base of those items.

In principle, deferred tax liabilities are recognised for all taxable temporary differences. Deferred tax assets are recognised to the extent that it is probable that sufficient taxable amounts will be available against which deductible temporary differences or unused tax losses and tax offsets can be utilised. However, deferred tax assets and liabilities are not recognised if the temporary differences giving rise to them arise from the initial recognition of assets and liabilities (other than as a result of a business combination) which affects neither taxable income nor accounting profit.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the periods when the asset and liability giving rise to them are realised or settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Authority expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the Authority intends to settle its current tax assets and liabilities on a net basis.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

1. STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(u) Taxation (cont'd)

Current and deferred tax for the period:

Current and deferred tax is recognised as an expense or income in the statement of comprehensive income, except when it relates to items credited or debited directly to equity, in which case the deferred tax is also recognised directly in equity, or where it arises from the initial accounting for a business combination, in which case it is taken into account in the determination of goodwill or excess.

Transitional Tax

Under Section 143(7) of the Income Tax Act 2015, Transitional Tax of 1% is applicable on any undistributed net profit after tax for the 2014 and 2015 tax years.

(v) Segment information

The Authority is not required to report segment information as it is not applicable to the nature of the Authority's operations. Whilst electricity revenue is distinguished by key operating segments, this is done purely for information purposes. The Authority has only one product in electricity, and costs associated with this product are totally common to all operating segments, and it is not possible nor practical to attempt to allocate costs across the operating segments. The Authority's power generating and distribution systems are operated on a fully integrated basis.

(w) Value Added Tax (VAT)

Revenues, expenses, assets and liabilities are recognised net of the amount of Value Added Tax (VAT), except:

- i. where the amount of VAT incurred is not recoverable from the taxation authority, it is recognised as part of the cost of acquisition of an asset or as part of an item of expense; or
- ii. for trade receivables and trade payables which are recognised inclusive of VAT.

The net amount of VAT recoverable from, or payable to, the taxation authority is included as part of receivables or payables.

The VAT component of cash flows arising from operating and investing activities which are recoverable from or payable to the taxation authority is classified as operating cash flows.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

2. FINANCIAL RISK MANAGEMENT

2.1 Financial risk factors

The Authority's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and price risk), credit risk and liquidity risk. The Authority's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Authority's financial performance. The Authority does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes. The Authority's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates.

(a) Market risk

(i) Foreign exchange risk

The Authority undertakes various transactions denominated in foreign currencies, hence exposures to exchange rate fluctuations arise. Exchange rate exposures are closely managed within approved policy parameters.

As at year end, USD0.69M assets are denominated in USD. Hence, changes in the USD by 10% (increase or decrease) is expected to have significant impact on the net profit and equity balances currently reflected in the Authority's financial statements.

	Financial assets (US\$'000)	Average exchange rate (USD)	Financial assets (F\$'000)
31 December 2016 (Actual)	US\$ 690	0.4848	1,424
Exchange rates - USD weakens by 10%	US\$ 690	0.5333	1,294
Exchange rates - USD strengthens by 10%	US\$ 690	0.4363	1,581

Based on the above, if USD weakens by 10% the Authority's investments in financial assets would decrease by \$0.13 million and if the USD strengthens by 10% the Authority's investments in financial assets would increase by \$0.16 million.

However, a risk also arises on the Authority's obligation with respect to the foreign currency loan of USD11.0 million (2015: USD12.11 million) which remains outstanding as at year end. For the year ended 31 December 2016, the restatement of the Authority's foreign currency loans has resulted in an unrealised foreign currency gain of \$0.38 million. Further sensitivities are provided to establish the impact to the profit before tax if foreign currency exchange rate differs by 10% (increase or decrease) from that used at balance date:

	Foreign currency borrowings (US\$'000)	Average exchange rate (USD)	Foreign currency borrowings (F\$000)
31 December 2016 (Actual)	US\$ 11,001	0.4780	23,016
Exchange rates - USD weakens by 10%	US\$ 11,001	0.5258	20,924
Exchange rates - USD strengthens by 10%	US\$ 11,001	0.4302	25,573

Based on the above, if USD weakens by 10% the Authority's foreign currency borrowings would decrease by \$2.09 million and if the USD strengthens by 10% the Authority's foreign currency borrowings would increase by \$2.56 million.

The Authority enters into forward foreign exchange contracts on a selective basis to manage its exposure to foreign exchange rate risk.

Forward exchange contracts are initially recognised at fair value on the date a derivative contract is entered into and are subsequently restated to their fair value at each reporting date. There were no outstanding forward foreign exchange contracts as at 31 December 2016.

(ii) Price risk

The Authority does not have investments in equity securities and hence is not exposed to equity securities price risk. However, the Authority is exposed to commodity price risk as it purchases fuel through a local agent from offshore. The volatility on international fuel prices and its impact on the Authority's profitability is given below considering two scenarios based on price, quantity mix, demand growth and hydro availability.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

2. FINANCIAL RISK MANAGEMENT (CONT'D)

2.1 Financial risk factors (cont'd)

(a) Market risk (cont'd)

(ii) Price risk (cont'd)

	Average Fuel Price (F\$/Metric Tonne)	Consumption (Metric Tonne)	Fuel costs \$'000
31 December 2016 (Actual)	981.95	91,501	89,849
Fuel price-increase by 10%	1,080.14	91,501	98,834
Fuel price-decrease by 10%	883.75	91,501	80,864

Based on the above, if fuel price increase or decrease by 10%, the fuel costs to the Authority would increase or decrease by \$8.98 million annually. The above sensitivity calculation is based on the 2016 fuel consumption levels.

(iii) Interest rate risk

The Authority has significant interest-bearing assets in the form of short-term cash deposits. These are at fixed interest rates hence there are no interest rate risks during the period of investment. For re-investment of short and long term cash deposits, the Authority negotiates an appropriate interest rate with the banks and invests with the bank which offers the highest interest return.

Given the fixed nature of interest rates described above, the Authority has a high level of certainty over the impact on cash flows arising from interest income. Accordingly, the Authority does not require simulations to be performed over the impact on net profits arising from changes in interest rates.

All debts of the Authority raised through bond issues bear fixed interest rates. Therefore, the Authority is not exposed to interest rate risk.

The Authority is not exposed to interest rate risk from its borrowings from Suva City Council, as it borrows funds at fixed interest rates.

In relation to the borrowings from other commercial banks, the Authority to a certain extent is not exposed to interest rate risk as these borrowed funds are at fixed interest rates, for the agreed term. Thereafter, the interest rates are re-negotiated and new interest rates are agreed upon. The risk is managed closely within the approved policy parameters.

The Authority did not enter into any interest swap contracts during the year.

(b) Credit risk

Credit risk arises from deposits with banks, as well as credit exposures to customers, including outstanding receivables. For deposits with banks, only reputable parties with known sound financial standing are accepted. Trade accounts receivable consist of a large number of customers, residential, industrial and commercial. The Authority does not have any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. The carrying amount of financial assets recorded in the financial statements, net of any allowances for losses, represents the Authority's maximum exposure to credit risk.

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash to ensure availability of funding. The Authority monitors liquidity through rolling forecasts of the Authority's cash flow position on daily basis. Overall, the Authority does not see liquidity risk as high given that a reasonable portion of revenues are billed and collected.

The table below analyses the Authority's financial assets and liabilities into relevant maturity groupings based on the remaining period at the balance date to the contractual maturity date. The amounts disclosed in the table are based on the contractual undiscounted cash flows.

Fair value estimation

The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values. The carrying values of financial liabilities and financial assets and provisions are estimated to approximate their fair values.

Financial Assets	Less than one year \$'000	2 to 5 years \$'000	More than 5 years \$'000	Total \$'000
Short term deposits (Note 8(a))	60,000	-	-	60,000
Receivables and Prepayments (Note 9)	36,459	-	-	36,459
Total	96,459	-	-	96,459
Financial Liabilities	Less than one year \$'000	2 to 5 years \$'000	More than 5 years \$'000	Total \$'000
Trade and other payables (Note 14)	27,616	19,443	69,943	117,002
Bonds payable (Note 16)	-	15,000	22,250	37,250
Interest bearing borrowings (Note 16)	24,540	98,162	159,507	282,209
Total	52,156	132,605	251,700	436,461

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

2. FINANCIAL RISK MANAGEMENT (CONT'D)

2.2 Other risk

(i) Regulatory risk

The Authority's profitability can be significantly impacted by regulatory agencies established which govern and control the electricity sector in Fiji. Specifically, fuel surcharges, regulatory fees and electricity tariffs are regulated by the Fiji Commerce Commission.

(ii) Operational Risk

Operational risk is the risk of loss arising from systems failure, human error, and fraud to external events. When controls fail to perform, operational risks can cause damage to reputation, have legal or regulatory implications, or lead to financial crisis. The Authority cannot eliminate all operational risk, but through a control framework and by monitoring and responding to potential risks, the Authority is able to manage risks. Controls include effective segregation of duties, access, authorisation and reconciliation procedures, staff education and assessment procedures.

3. CAPITAL RISK MANAGEMENT

The Authority's objectives when managing capital are to safeguard the Authority's ability to continue as a going concern in order to provide returns and benefits for stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Authority monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including 'current and non-current borrowings' as shown in the statement of financial position) less cash and cash equivalents and held to maturity financial assets. Total capital is calculated as 'equity' as shown in the statement of financial position plus net debt.

The gearing ratios at 31 December 2016 and 2015 were as follows:

Total borrowings (Note 16)
Less: Held to maturity financial assets (Note 12)
Less: Cash and cash equivalents (Note 8)

Net debt

Total capital and reserves

Total capital (total capital and reserves plus net debt)

Gearing ratio (net debt / total capital and reserves plus net debt)

	31-Dec-16 \$'000	31-Dec-15 \$'000
Total borrowings (Note 16)	319,459	340,629
Less: Held to maturity financial assets (Note 12)	-	(12,468)
Less: Cash and cash equivalents (Note 8)	(119,466)	(57,343)
Net debt	199,993	270,818
Total capital and reserves	706,307	647,174
Total capital (total capital and reserves plus net debt)	906,300	917,992
Gearing ratio (net debt / total capital and reserves plus net debt)	22.07%	29.50%

The decrease in the gearing ratio during the year resulted from the repayment's of loans amounting to \$24.67M in 2016.

4. CRITICAL ACCOUNTING ESTIMATES, JUDGEMENTS AND ASSUMPTIONS

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Critical accounting estimates, judgements and assumptions

The Authority makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(a) Impairment of property, plant and equipment

The Authority assesses whether there are any indicators of impairment for all property, plant and equipment at each reporting date. Property, plant and equipment are tested for impairment and when there are indicators that the carrying amount may not be recoverable, reasonable provision for impairment are created. As at balance date, no provision for impairment has been made as the Authority reasonably believes that no indicators for impairment exist.

(b) Impairment of accounts receivable

Impairment of accounts receivable balances is assessed at an individual level and impairment tests are performed on a more specific basis. All receivable balances relating to the closed customer accounts are estimated to have been impaired and are accordingly provided for.

(c) Provision for stock obsolescence

Provision for stock obsolescence is assessed and raised on a specific basis based on a review of inventories. Inventories considered obsolete or un-serviceable are written off in the year in which they are identified.

(d) Customer Security Deposit and General Extension Refundable Deposits

The customer security deposits and general extension refundable deposits are classified as Current and Non Current Liability based on regular assessment by the Authority, taking into consideration the history of refunds. Refer Note 14.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

5. OPERATING REVENUE

ELECTRICITY SALES

Commercial
Industrial
Domestic
Others

Total electricity sales

OTHER OPERATING REVENUE

Bad debts recovered
Business interruption insurance claims received
Contract sales
Deferred income
Gain/(Loss) on disposal of plant and equipment
Lease rental - fibre optic
Power pole rentals
Rentals
Realised exchange gain, net
Sales and commissions
Service and licence fees
Training revenue

Total other operating revenue

Total revenue

6. PROFIT BEFORE INCOME TAX

Profit before income tax has been determined after charging the following expenses:

Allowance for doubtful debts, net
Auditors' remuneration for auditing services
Professional fees for other services
Directors' fees
Depreciation on property, plant and equipment
Amortisation of intangible assets
Insurance
Personnel costs

	2016 \$'000	2015 \$'000
ELECTRICITY SALES		
Commercial	157,525	152,263
Industrial	80,336	78,940
Domestic	75,688	76,546
Others	4,286	4,240
Total electricity sales	317,835	311,989
OTHER OPERATING REVENUE		
Bad debts recovered	14	16
Business interruption insurance claims received	5	2
Contract sales	6,013	3,935
Deferred income	873	856
Gain/(Loss) on disposal of plant and equipment	(719)	8
Lease rental - fibre optic	494	488
Power pole rentals	584	621
Rentals	17	17
Realised exchange gain, net	957	1,437
Sales and commissions	622	1,515
Service and licence fees	1,623	905
Training revenue	67	77
Total other operating revenue	10,550	9,877
Total revenue	328,385	321,866
Profit before income tax has been determined after charging the following expenses:		
Allowance for doubtful debts, net	450	(130)
Auditors' remuneration for auditing services	38	34
Professional fees for other services	517	488
Directors' fees	38	51
Depreciation on property, plant and equipment	39,268	37,714
Amortisation of intangible assets	112	180
Insurance	8,509	6,963
Personnel costs	21,723	19,975

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

7. a) INCOME TAX EXPENSE

The prima facie income tax on the pre-tax profit reconciles to the income tax expense as follows:

Profit before income tax	74,653	45,354
Prima facie income tax payable at 20%	14,931	9,070
Tax effect of amounts which are not taxable in calculating taxable income:		
- Employee taxation scheme	(26)	(24)
- Deferred income	(175)	(171)
- Fuel Economy Investment Allowance	-	(3,459)
- Tax effect of non - deductible items	325	264
- Over provision in prior year	-	(16)
Income tax expense attributable to profit	15,055	5,664

b) DEFERRED TAX ASSET

The deferred tax assets consist of the following deductible temporary differences at future tax rates:

Tax losses	-	1,064
Provision for doubtful debts	153	96
Unrealized exchange losses	4	849
	157	2,009

c) DEFERRED TAX LIABILITY

The deferred tax liabilities consist of the following taxable temporary differences at future tax rates:

Property, plant and equipment	45,198	40,111
Unrealized exchange gain	146	607
	45,344	40,718

Income tax expense comprises movements in:

Deferred tax assets	1,853	4,944
Deferred tax liabilities	4,626	720
Current tax liabilities	8,576	-
	15,055	5,664

d) CURRENT TAX LIABILITIES/(ASSETS)

Movement during the year were as follows:

Balance at the beginning of the year	(308)	(114)
Tax liability for the current year	8,576	-
Resident Interest Withholding Tax deducted at source	(123)	(194)
Balance at the end of the year	8,145	(308)

8. CASH AND CASH EQUIVALENTS

Short term deposits (a)	60,000	20,000
Cash at bank and on hand - FEA operation	8,722	2,350
USD project bank account - off-shore (b)	1,424	2,930
Project bank account - on-shore (b)	49,320	32,063
Total cash and cash equivalents	119,466	57,343

(a) The short term deposit's amounting to \$20M with Westpac Banking Corporation (WBC) and \$40M with Home Finance Company Limited (HFC) matures in January 2017. Accordingly, this deposit has been considered as cash and cash equivalents for the purpose of the statement of cash flows.

(b) The off-shore and on-shore project bank accounts are in respect to funds committed to projects that are still Work-in-Progress (WIP) at year end.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

9. RECEIVABLES AND PREPAYMENTS

Electricity debtors (a)
Other debtors
Prepayments and deposits

Allowance for doubtful debts

- Electricity debtors

Total receivables and prepayments (net)

(a) Electricity debtors include receivable from Government of Fiji amounting to \$3.45M (2015: \$3.32M).

(b) The terms of trade for electricity debtors are 14 days from the date of billing.

(c) Electricity debtors that are less than 3 months past due are not considered impaired. As at 31 December 2016, electricity debtors of \$31.16M (2015: \$31.74M) were not considered impaired.

As of 31 December 2016, the amount of electricity debtors impaired was \$764,560 (2015: \$477,590) net off deposits held. The individual receivables are mainly customers, who have defaulted in payments. It was assessed that a portion of the receivables are expected to be recovered.

Movements in the provision for impairment of electricity debtors and other debtors are as follows:

Balance as at 1 January	478	608
Amounts allowed/(recovered) during the year, net	450	(130)
Bad debts written off	(163)	-
Balance as at 31 December	765	478

The creation and releasing of provision for impaired receivables has been included in "other operating expenses" in the statement of comprehensive income. Amounts charged to the allowance account are generally written off, when there is no expectation of recovering the debt.

The other classes within receivables and prepayments do not contain impaired assets.

As at 31 December, the ageing analysis of trade receivables is, as follows:

	Current (F\$'000)	<15-30 Days (F\$'000)	30-45 Days (F\$'000)	45-60 Days (F\$'000)	60-90 Days (F\$'000)	over 90 Days (F\$'000)	Total (F\$'000)
2016	24,749	5,260	512	362	273	1,049	32,205
2015	26,020	4,019	744	790	171	1,041	32,785

The maximum exposure to credit risk at the reporting date is the fair value of each classes of receivables mentioned above less electricity deposits. The Authority generally obtains security deposits in the form of bank guarantees and cash deposits from all electricity customers which is estimated based on two months electricity consumptions. The total carrying amount of security deposits in relation to the above trade receivables carried by the Authority is \$41M (2015: \$40M). The rest are secured through bank guarantees maintained by the Authority. A portion of this security deposit is refunded to customers on a daily basis.

10. INVENTORIES

Consumables - at cost

Goods in transit

Total inventories

Consumables - at cost	31,628	28,777
Goods in transit	734	789
Total inventories	32,362	29,566

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

11. PROPERTY, PLANT AND EQUIPMENT

Freehold land

At cost

Leasehold land

At cost

Accumulated depreciation

Buildings and improvements

At cost

Accumulated depreciation

Dam, tunnels, water conductor

At cost

Accumulated depreciation

Plant, equipment and transmission assets

At cost

Accumulated depreciation

Furniture and fittings

At cost

Accumulated depreciation

Wind mill

At cost

Accumulated depreciation

Motor vehicles

At cost

Accumulated depreciation

Capital spares

At cost

Capital works in progress

- Rural and Urban Reticulation Project
- Switchgear Upgrade (Labasa, Hibiscus Park & Suva Substation)
- Momi Bay Project
- Tavua Volivoli Grid Extension Project
- Underground Cabling Project
- Main Inlet Valve (MIV) Wailoa Power Station (PS)
- Establishment of Taveuni Power Station
- 25MVA Transformer Upgrade & Replacement at Kinoya PS
- Others

Total

- At cost

- Accumulated depreciation

Closing net book value

	2016 \$'000	2015 \$'000
Freehold land	28,943	28,943
At cost	14,333	13,960
Accumulated depreciation	(2,055)	(1,907)
Leasehold land	12,278	12,053
At cost	82,267	82,267
Accumulated depreciation	(19,354)	(18,292)
Buildings and improvements	62,913	63,975
At cost	534,839	537,265
Accumulated depreciation	(75,108)	(65,342)
Dam, tunnels, water conductor	459,731	471,923
At cost	608,165	587,096
Accumulated depreciation	(238,576)	(214,747)
Plant, equipment and transmission assets	369,589	372,349
At cost	29,037	28,315
Accumulated depreciation	(18,515)	(17,118)
Furniture and fittings	10,522	11,197
At cost	34,393	34,393
Accumulated depreciation	(16,312)	(14,573)
Wind mill	18,081	19,820
At cost	18,830	17,017
Accumulated depreciation	(16,169)	(15,075)
Motor vehicles	2,661	1,942
At cost	4,490	4,430
Capital spares		
- Rural and Urban Reticulation Project	11,151	8,496
- Switchgear Upgrade (Labasa, Hibiscus Park & Suva Substation)	11,363	8,135
- Momi Bay Project	9,079	3,057
- Tavua Volivoli Grid Extension Project	10,210	4,854
- Underground Cabling Project	7,701	6,287
- Main Inlet Valve (MIV) Wailoa Power Station (PS)	4,515	-
- Establishment of Taveuni Power Station	3,612	-
- 25MVA Transformer Upgrade & Replacement at Kinoya PS	2,132	-
- Others	5,691	12,287
Capital works in progress	65,454	43,116
Total	1,420,751	1,376,802
- At cost	(386,089)	(347,054)
- Accumulated depreciation	1,034,662	1,029,748
Closing net book value		

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

11. PROPERTY, PLANT AND EQUIPMENT (CONT'D)

Reconciliation of the carrying amounts of each class of property, plant and equipment at the beginning and end of the current financial year is set out as follows:

	Freehold land \$'000	Leasehold land \$'000	Buildings & improvements \$'000	Dam, tunnels and water conductor \$'000	Plant, equipment & transmission assets \$'000	Furniture & fittings \$'000	Wind mill \$'000	Motor vehicles \$'000	Capital spares \$'000	Capital work in progress \$'000	Total \$'000
Balance as at 31 December 2014	28,952	12,149	64,925	438,002	298,972	9,714	21,556	3,006	3,970	97,621	978,867
Additions	-	-	-	-	-	-	-	-	824	88,144	88,968
Disposals	(9)	-	-	-	(135)	-	-	(73)	-	-	(217)
Transfers	-	51	108	43,241	96,200	2,722	-	327	(156)	(142,649)	(156)
Depreciation charge	-	(147)	(1,058)	(9,320)	(22,688)	(1,239)	(1,736)	(1,318)	(208)	-	(37,714)
Balance as at 31 December 2015	28,943	12,053	63,975	471,923	372,349	11,197	19,820	1,942	4,430	43,116	1,029,748
Additions	-	-	-	-	-	-	-	-	575	44,751	45,326
Disposals	-	-	-	(828)	-	(1)	-	(33)	-	-	(862)
Transfers	-	373	-	-	21,069	723	-	1,846	(282)	(22,413)	1,316
Adjustments to plant and equipment	-	-	-	(1,598)	-	-	-	-	-	-	(1,598)
Depreciation charge	-	(148)	(1,062)	(9,766)	(23,829)	(1,397)	(1,739)	(1,094)	(233)	-	(39,268)
Balance as at 31 December 2016	28,943	12,278	62,913	459,731	369,589	10,522	18,081	2,661	4,490	65,454	1,034,662

During the year, the total borrowing costs of \$0.26M was capitalised for Tavua Korovou Electrification Project.

Certain property, plant and equipment forming part of the Authority's Power Infrastructure System are not insured for various risks including risk of losses arising from fire, cyclone, flooding, business interruption and others as the cost of insurance cover is significant.

During the year assets amounting to \$0.46M have been capitalised by the Authority as part of TC Winston related capital works.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

12. HELD-TO-MATURITY FINANCIAL ASSETS

Term deposits with banks

During the year, the USD\$5.86M term deposit was used to repay the retention sum of the Sinohydro Corporation for the construction of the Nadarivatu Renewable Hydro Power Project.

13. INTANGIBLE ASSETS

Software License

Gross carrying amount:

Balance as at 1 January

Additions

Balance as at 31 December

Accumulated amortisation:

Balance as at 1 January

Amortisation for the year

Balance as at 31 December

Net book amount

	2016 \$'000	2015 \$'000
Term deposits with banks	-	12,468
Software License		
Gross carrying amount:		
Balance as at 1 January	6,490	6,490
Additions	-	-
Balance as at 31 December	6,490	6,490
Accumulated amortisation:		
Balance as at 1 January	(5,708)	(5,528)
Amortisation for the year	(112)	(180)
Balance as at 31 December	(5,820)	(5,708)
Net book amount	670	782

Software license are made up of the Authority's Financial Management Information System, Payroll System, Billing System and other specialized Energy Monitoring Information System. The software license has been valued at cost and amortised by an impairment charge over its remaining life to arrive at the carrying amounts.

14. TRADE AND OTHER PAYABLES

Current

Trade creditors

Other creditors and accruals

VAT payable

Accrued interest

Customer security deposits

General extension refundable deposits

Total current trade and other payables

Non-Current

Other creditors and accruals

Customer security deposits

General extension refundable deposits

Total non-current trade and other payables

Trade creditors	2,461	4,857
Other creditors and accruals	21,238	40,313
VAT payable	1,011	1,224
Accrued interest	742	679
Customer security deposits	1,868	1,896
General extension refundable deposits	296	319
Total current trade and other payables	27,616	49,288
Non-Current		
Other creditors and accruals	-	6,988
Customer security deposits	39,135	38,155
General extension refundable deposits	50,251	39,114
Total non-current trade and other payables	89,386	84,257

The fair value of trade and other payables equals their carrying amount, as the impact of discounting is not significant. The customer security deposits relates to the mandatory cash deposit which is equivalent to two months electricity consumptions in accordance with the Electricity Act. This is refunded to the customer when the electricity account is permanently closed. The general extension refundable deposits are the capital contribution from prospective customers or developer for the supply of electricity from the Authority's nearest grid in accordance with the General Extension Policy. The amount is refunded to the customer over a period of 5 and 8 years.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

15. EMPLOYEE BENEFIT LIABILITY

Annual leave

Performance pay

Total employee benefit liability

Balance as at 1 January

Additional employee benefit liability provided during the year, net

Carrying Amount as at 31 December

Employee numbers

Number of full-time equivalent employees as at 31st December

	2016 \$'000	2015 \$'000
Annual leave	1,135	899
Performance pay	1,514	1,566
Total employee benefit liability	2,649	2,465
Balance as at 1 January	2,465	2,328
Additional employee benefit liability provided during the year, net	184	137
Carrying Amount as at 31 December	2,649	2,465
Employee numbers		
Number of full-time equivalent employees as at 31st December	756	725
16. INTEREST BEARING BORROWINGS		
Current		
Term Loans - ANZ Bank (b)	19,852	20,176
Term Loan - Suva City Council (c)	47	46
Term Loans - FNPF (d)	4,641	3,753
Total current interest bearing borrowings	24,540	23,975
Non-Current		
Bonds (a)	37,250	37,250
Term Loans - ANZ Bank (b)	192,603	212,845
Term Loan - Suva City Council (c)	5,053	5,100
Term Loans - FNPF (d)	60,013	61,459
Total non-current interest bearing borrowings	294,919	316,654
Total interest bearing borrowings	319,459	340,629

(a) Bonds

The Reserve Bank of Fiji offers, manages and carries out registry services on behalf of the Authority. The Authority's bonds are issued in competitive tenders. The bonds are recorded at cost which reflects the face value of the bonds.

The maturing terms of the bonds range from 4 to 7 years, whilst the interest rates vary from 6.80% to 7.19% per annum. The bonds are guaranteed by the Government of Fiji.

(b) Term loans - ANZ Bank

The interest bearing borrowings from ANZ Bank are at an agreed interest rate ranging from 2.70% to 3.50% and are repayable on monthly instalments. The term loans from ANZ Bank are secured by the guarantee given by the Government of Fiji.

(c) Term loan - Suva City Council

The term loan from Suva City Council (SCC) is subject to interest at the rate of 3% per annum and is unsecured. The loan is repayable over a period of 86 years in equal instalments of \$200,000 on 25th July each year until July 2065.

(d) Term loan - FNPF

The interest bearing borrowings from FNPF are at an agreed interest rate ranging from 3.25% to 3.85% and are repayable on monthly instalments. The term loans from FNPF are secured by the guarantee given by the Government of Fiji.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

17. DEFERRED INCOME

EEC Grant In Aid

EEC Grant in Aid
Less: accumulated amortisation
Closing balance - 31 December

Government Grant For Rural Electrification

Government Grant for Rural Electrification (a)
Less: accumulated amortisation
Closing balance - 31 December

Australian Grant Cyclone Winston – Vehicle

Australian Grant Cyclone Winston – Vehicle
Less: accumulated amortisation
Closing balance - 31 December
Total deferred income (net)

2016 \$'000	2015 \$'000
12,330	12,330
(8,709)	(8,226)
3,621	4,104
27,666	9,342
(6,540)	(6,166)
21,126	3,176
140	-
(17)	-
123	-
24,870	7,280

(a) In 2016, the Authority received \$18.3M in the form of capital grant (as part of non refundable contribution) from the Government of Fiji to assist in rural electrification scheme including the establishment of Somosomo Electrification. In respect to this funding from the Government of Fiji, majority of the capital works are in progress.

18. CONTINGENT LIABILITIES

(a) Miscellaneous claims

No provision has been recorded in the accounts for unsecured contingent liabilities mainly in respect of sundry court actions against the Authority. The Authority estimates such liability, if any, to be immaterial.

(b) Contingent liabilities exist with respect to the following:

Letter of credit
Litigation claims - others

14	1,836
636	419
650	2,255

19. COMMITMENTS

Estimated amounts of lease expenditure committed at balance date but not provided for in the financial statements:

(a) Operating lease expenditure commitments

Native and Crown leasehold land and other premises

Later than one year
Later than one year but not later than five years
Later than five years

1,730	1,800
6,458	6,740
123,432	128,862
131,620	137,402

Total operating lease expenditure commitments

The Native and Crown leasehold land includes the lease obtained for the Monasavu land. The settlement signed with Monasavu land owners and the iTaukei Land Trust Board commits FEA to the following future payments:

Later than one year
Later than one year but not later than five years
Later than five years

840	840
3,360	3,360
66,360	67,200

(b) Operating lease revenue commitments

Operating leases contracted for the rental of fibre optic and power poles by the Authority with the lessees are receivable as follows:

Later than one year
Later than one year but not later than five years
Total operating lease revenue commitments

973	967
973	1,261
1,946	2,228

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

20. CAPITAL EXPENDITURE COMMITMENTS

Capital expenditure contracted for at balance date but not otherwise provided for in the financial statements.

Projects approved by the Board but not contracted for at balance date.

2016 \$'000	2015 \$'000
22,098	8,573
112,476	112,519

The projected Capital expenditure for 2017 of \$112.5 million comprises of the Distribution System Reinforcement, Urban Reticulation, Rural Electrification, 33kV Line & Substations (Nausori/Korovou, Vuda/Naikabula, Waqadra/Denarau), New 132kV Transmission Line from Rarawai to TavuaVirara Ba to Koronubu Ba, Transformer Upgrade & Replacement - Suva / Kinoya / Sawani / Rarawai / Hibiscus & Vuda, Wainikasou, 132kv Tower Replacement, 33kV Underground Cabling Works - Suva/Vatuwaqa/Hibiscus/Kinoya Cunningham, New Nadarivatu Staff Quarters, Upgrade of 415 volt board at Vuda/ Upgrade of Vuda G1 & G2 MCC panel & Amot control panels, Wainiqueu Hydro Station 11kV Switchgears & Control Upgrade, Design, MIV(Main Inlet Valve, Nozzel & Runners at Wailoa Power Station), Upgrade of 415 volt board, Purchase of generator for Levuka - 2 x 600kw & Head Office 1 x 350kw & 500,000 litres Water Storage Tank at Kinoya Power Station.

21. EVENTS OCCURRING AFTER BALANCE DATE

- FEA has taken over the supply of electricity in the Island of Taveuni. In this regard, the Government of Fiji has transferred Somosomo Hydro Scheme to FEA which was constructed based on grant-in-aid by the Chinese Government. FEA has officially open this Somosomo Hydro Scheme together with the Electrification of Taveuni on the 2nd of March 2017.
- The Electricity Bill, 2017 was tabled in Parliament on 22nd March 2017 and has been passed. The Electricity Act includes the corporatisation of FEA and the establishment of an Independent Regulatory body to regulate the functions of the corporatised FEA.

There were no other matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Authority, the results of those operations, or the state of affairs of the Authority in future financial years.

22. SIGNIFICANT EVENTS DURING THE YEAR

During the year:

- Tropical Cyclone Winston struck Fiji on 20th of February and caused extensive damage to the FEA Power System Infrastructures. The restoration costs charged to the profit and loss for the year amounts to \$30.07M. Assets amounting to \$0.46M have also been capitalised by the Authority.

The restoration costs charged to the profit and loss for the year comprised of the Authority's direct labour cost of \$5.3m, direct material costs of \$10.4m and external contractor and other costs of \$14.3m. Majority of the cyclone restoration cost was incurred for the repairs to the damaged transmission and distribution power network of the Authority which had been severely damaged.

Furthermore, subsequent to TC Winston, the Authority received in kind, support from the New Zealand Government with the engagement of 15 linesmen for a period of sixteen weeks to assist FEA with the power restoration works. The Authority also received in kind support from the Pacific Regional Infrastructure Facility (PRIF) with the engagement of a six member team from the Tonga Power Limited to assist FEA with the power restoration works for a period of sixteen weeks. These in kind contributions are not incorporated in the Authority's Statement of Comprehensive Income for the year.

- The Government of Fiji has commenced with the partial divestment of its investment in FEA and is currently in progress.

23. PRINCIPAL ACTIVITIES AND PRINCIPAL PLACE OF BUSINESS

The principal activities of the Authority are the generation, transmission, distribution and sale of electricity on Viti Levu, Vanua Levu, Ovalau and Taveuni as governed by the Electricity Act and Regulations.

The address of Fiji Electricity Authority's registered office and principal place of business is 2 Marlow Street, Suva, Fiji Islands.

Notes To And Forming Part Of The Financial Statements For The Year Ended 31 December 2016

24. RELATED PARTY TRANSACTIONS

a) The Authority is a statutory body constituted by an Act of Parliament and the transactions with the Government of Fiji during the year are as follows:

Government guarantee fee capitalized during the year
Government guarantee fee expensed during the year

2016
\$'000

2015
\$'000

-
2,088

150
-

The Government of Fiji also provides guarantees on the bonds issued by RBF for the Authority. As at balance date, the Authority had borrowed funds amounting to \$314.4 million under this guarantee.

b) Directors

The names of persons who were directors of the Authority during the year 2016 are as follows:

Nizam-ud-Dean (Chairman, till May 2016)
Daksesh Patel (Chairman - Appointed, August 2016)
Gardiner Henry Whiteside (Deputy Chairman)
Alipate Naioresui
Paul Bayly (Appointed, January 2016)
Kamal Goundar (Appointed, August 2016)
Hasmukh Patel (Ex-officio Member)
Isikeli Vocedua (Appointed, till May 2016)

The directors fees paid during the year were \$37,625

(c) Key Management Compensation

The aggregate remuneration and compensation paid to key management personnel, for the financial year ended 31 December 2016 and 2015 were:

Salary, performance pay and allowances
Superannuation
Other benefits

1,558
157
16

1,383
138
21

Total

1,731
1,542

(d) During the year, the Authority supplied electricity to the Government of Fiji, other Government owned entities, directors, related entities and executives at normal commercial rates, terms and conditions.

(e) Receivable/payable to related parties have been disclosed in respective notes to the financial statements.

Statistics 2016

TRANSMISSION & SUB-TRANSMISSION CENTRAL										
DISTRICT	132kV O/H Line (km)		33kV O/H Line (km)		33kV U/G Cable (km)		Substations		Transformer MVA	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Wailoa - Cunningham	62	62					1	1	120	120
Cunningham - Kinoya 'A'					3	3	1	1	48	48
Cunningham - Kinoya 'B'					3	3	1	1	54	64
Cunningham - Vatuwaqa					4	4	1	1	19	19
Cunningham - Hibiscus Park 'A'					7	7	1	1	26.6	26.6
Cunningham - Rokobili					4.5	4.5				
Rokobili - Hibiscus Park					0.5	0.5				
Cunningham - Sawani			10	10	1	1	1	1	15	15
Vatuwaqa - Suva					5	5	1	1	69	69
Vatuwaqa - Knolly					4.5	4.5	1	1	30	30
Knolly - Suva					1.3	1.3				
Kinoya - Vatuwaqa					4	4				
Kinoya – Nausori			12	12	2	2	1	1	15	15
Nausori – Sawani			6	6	2	2				
Hibiscus Park - Wailekutu					6	6	1	1	6.25	6.25
Hibiscus Park - Suva					3	3				
Wailekutu - Deuba			38	38			1	1	6.25	6.25
Cunningham - Komo					6	6	1	1	30	30
Komo – Hibiscus Park					3	3				
TOTAL	62	62	66	66	59.8	59.8	12	12	439.1	449.1

TRANSMISSION & SUB-TRANSMISSION NORTHERN										
DISTRICT	132kV O/H Line (km)		33kV O/H Line (km)		33kV U/G Cable (km)		Substations		Transformer MVA	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Labasa							1	1	8.5	8.5
Labasa - Seaqaqa			33.78	33.78			1	1	2.5	2.5
Seaqaqa - Dreketi			34.33	34.33			1	1	6.25	6.25
TOTAL	0	0	68.11	68.11	0	0	3	3	17.25	17.25

TRANSMISSION & SUB-TRANSMISSION WESTERN										
DISTRICT	132kV O/H Line (km)		33kV O/H Line (km)		33kV U/G Cable (km)		Substations		Transformer MVA	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Wailoa							3	3	108	108
Wailoa - Nadarivatu	23.4	23.4					1	1	56	56
Nadarivatu - Vuda	56.6	56.6					2	2	97.5	97.5
Nadarivatu SS to PS	5.2	5.2								
Vuda - Pineapple Corner A			8	8	1	1	1	1	30	30
Vuda - Rarawai			32	32			1	1	12.5	12.5
Vuda - Rarawai Tee-off to Pineapple Corner			2	2	1	1				
Rarawai - Vatukoula			19	19			1	1	10	10
Vatukoula - Tavua			4	4	2	2	1	1	6.25	6.25
Tavua - Volivoli				48.7		0.05		1		5
Vuda - Waqadra A			16				1	0	40	0
Vuda - Sabeto				8				1		5
Nagado - Sabeto			10	10			1	1	3	3
Sabeto - Qeleloa (tee-off to Waqadra)				13.5						
Vuda - Waqadra B			11	11	2	2				
Vuda - Waqadra C			10.1	10.1	4.15	4.15	0	1	0	40
Vuda - Waqadra D			10.1	10.1	4.15	4.15				
Waqadra - Momi				32.6		0.1		1		5
Waqadra - Sigatoka			59				1		5	
Qeleloa - Sigatoka				53.5				1		5
Qeleloa					1	1	1	1	15	15
Maro							1	1	2	2
Maro-Natadola					5	5	1	1	10	10
Sigatoka - Nococolevu			29	29			1	1		
Nococolevu-Korolevu							1	1	6.25	6.25
Wailoa - Wainikasou			29	29			1	1	10	10
TOTAL	85.2	85.2	239.2	320.5	20.3	20.45	19	22	411.5	426.5

Statistics 2016

DISTRIBUTION NETWORK CENTRAL												
DISTRICT	OVERHEAD LINES (km)				UNDERGROUND CABLES (km)				SUBSTATIONS		INSTALLED KVA	
	High Voltage		Low Voltage		High Voltage		Low Voltage					
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Deuba	174.397	179.614	130.486	131.642	18.125	19.085	41.309	41.309	226	233	24653	26222
Lami	79.0789	79.0789	70.3277	70.3727	45.607	45.607	4.003	4.003	179	179	49915	49915
Suva	17.005	17.005	147.1	147.441	219.565	220.388	43.11	43.309	206	211	115832	118932
Kinoya	136.543	138.14	202.688	205.844	64.453	64.518	33.485	33.615	315	321	90736	92376
Nausori	292.709	292.709	340.657	341.93	22.35	22.43	2.722	2.722	502	505	47971	47997
Korovou	324.135	325.635	272.004	274.784	2.758	2.758	0.08	0.08	331	333	5919	5940
Levuka	60.2	60.28	44.522	44.522	1.18	1.18	0	0	61	62	5777	5807
Wailoa	11	11.075	6	6	0	0	0	0	12	13	206	222
TOTAL	1095.0679	1103.5369	1213.7847	1222.5357	374.038	375.966	124.709	125.038	1832	1857	341009	347411
Increase	8.469		8.751		1.928		0.329		25		6402	
% Increase	1%		1%		0.5%		0.26%		1%		2%	

DISTRIBUTION NETWORK - NORTHERN												
DISTRICT	OVERHEAD LINES (km)				UNDERGROUND CABLES (km)				SUBSTATIONS		INSTALLED KVA	
	High Voltage		Low Voltage		High Voltage		Low Voltage					
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Labasa	414.637	419.202	752.575	770.534	12	12	4	4	410	424	23066	23447
Seaqaga	6.667	6.667	6.502	6.502	0.05	0.05	0.025	0.025	6	6	99	99
Dreketi	44.822	44.867	21.449	21.449	0.05	0.05	0.025	0.025	24	24	884	884
Savusavu	119.793	128.88	94.852	96.012	7.416	7.416	1.474	1.474	133	135	8866	8926
Taveuni		15.38		13.546		0		0		11		996
TOTAL	585.919	614.996	875.378	908.043	19.516	19.516	5.524	5.524	573	600	32915	34352
Increase	29.077		32.665		0		0		27		1437	
% Increase	5%		4%		0%		0%		5%		4%	

DISTRIBUTION NETWORK - WESTERN												
DISTRICT	OVERHEAD LINES (km)				UNDERGROUND CABLES (km)				SUBSTATIONS		INSTALLED KVA	
	High Voltage		Low Voltage		High Voltage		Low Voltage					
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Sigatoka	368.157	373.496	530.515	536.436	6.41	6.41	10.113	10.113	457	474	29663	33421
Nadi - Tavua	1358.631	1364.794	1857.583	1867.971	172.328	179.559	76.855	78.005	1988	2013	177239	182213
Rakiraki	229.171	229.171	220.238	220.238	4	4	1	1	205	205	8248	8248
TOTAL	1955.959	1967.461	2608.336	2624.645	182.738	189.969	87.968	89.118	2650	2692	215150	223882
Increase	11.502		16.309		7.231		1.15		42		8732	
% Increase	0.6%		0.6%		4.0%		1.3%		1.6%		4.1%	

GENERATION STATISTICS											
Years	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Units Generated Wailoa Hydro Mwh	481,098	462,986	436,081	382,963	424,818	466,765	420,195	314,341	320,875	384,451	
Units Generated Wainiqueu Hydro Mwh	1,387	688	63	898	1,968	1,027	2,056	983	834	718	
Units Generated Wainikasou Hydro Mwh	21,079	18,420	16,058	19,238	19,404	18,721	5,935	15,027	19,895	21,258	
Units Generated Nagado Hydro Mwh	4,922	12,996	7,990	10,520	10,279	8,856	611	3,080	11,357	3,296	
Estimated Generation Nadarivatu Hydro Mwh						29,892	98,600	67,537	52,988	85,765	
Total Generated Hydro MWh	508,486	495,090	460,192	413,619	456,469	525,261	527,397	400,968	405,949	495,488	
Units Generated in VLIS Diesels MWh	183,329	162,760	153,990	236,356	211,767	94,215	94,425	230,957	227,042	83,283	
Units Generated Diesel Others MWh	41,740	46,178	43,670	52,537	44,453	48,187	46,971	49,605	47,258	49,615	
Units Generated HFO Kinoya & Vuda	30,920	60,807	112,264	126,237	83,540	128,881	183,359	173,477	206,122	291,609	
Total Generated Thermal MWh	255,989	269,745	309,924	415,130	339,760	271,283	324,755	454,039	480,422	424,507	
Unit Generated from Butoni Wind Farm	3,351	4,604	7,211	6,420	4,977	6,809	5,348	4,269	5,674	3,632	
Units Generated from Solar panel Mwh	1										
Total Generated Wind & Solar MWh	3,352	4,604	7,211	6,420	4,977	6,809	5,348	4,269	5,674	3,632	
Total FEA Generation (MWh)	767,827	769,439	777,327	835,169	801,206	803,353	857,500	859,276	892,045	923,628	
Units Supplied - Independent Power Producers									22,350	10,580	
Made up of									914,395	934,208	
Total VLIS Generation (MWh)	724,700	722,573	733,594	781,734	754,785	754,139	808,473	808,688	843,953	873,294	
Total Other Generation (MWh)	43,127	46,866	43,733	53,435	46,421	49,214	49,027	50,588	48,092	50,334	
Station Auxilliary usage MWh	7,865	9,139	9,050	9,268	8,952	8,343	9,196	10,130	8,106	11,281	
Auxiliaries as % of Generation	1.02%	1.19%	1.16%	1.11%	1.12%	1.04%	1.07%	1.18%	0.91%	1.22%	
% contribution from Hydro	66.22%	64.34%	59.20%	49.53%	56.97%	65.38%	61.50%	46.66%	45.51%	53.65%	
% contribution from Thermal	33.34%	35.06%	39.87%	49.71%	42.41%	33.77%	37.87%	52.84%	53.86%	45.96%	
% contribution from Wind & Solar	0.44%	0.60%	0.93%	0.77%	0.62%	0.85%	0.62%	0.50%	0.64%	0.39%	
% increase / (decrease) in Hydro Generation	49%	-3%	-7%	-10%	10%	15%	0.4%	-23.97%	1.24%	22.1%	
% increase / (decrease) in Thermal VLIS Generation	-40%	4%	19%	36%	-19%	-24%	24.5%	45.59%	7.10%	-13.5%	
% increase / (decrease) in Total Thermal Generation	-35%	5%	15%	34%	-18%	-20%	20%	39.81%	5.81%	-12%	
% increase / (decrease) in Total Generation	4%	0%	1%	7%	-4%	0%	7%	0.21%	3.81%	4%	
Maximum Dam Level (AMSL)	746	746	742	739	743	747	743	736	742	747	
Minimum Dam level (AMSL)	728	728	723	727	735	731	730	724	734	739	

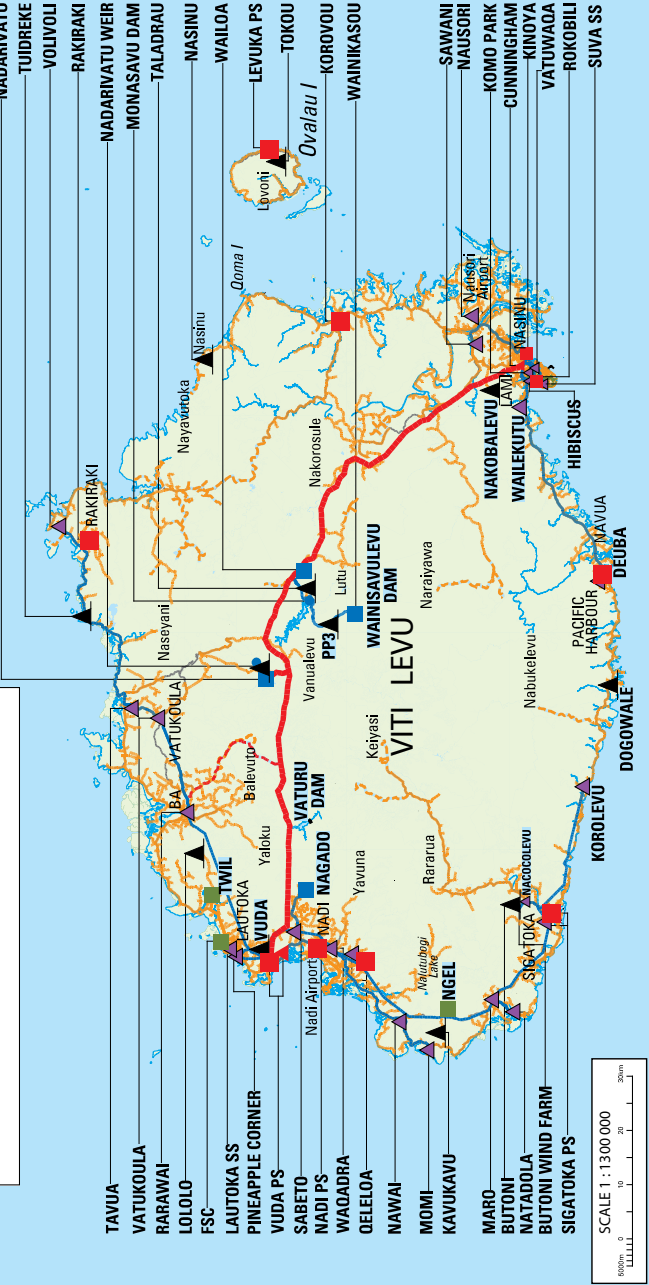
FIJI ISLANDS
POWER INFRASTRUCTURE

VISION
'Energising our Nation'

MISSION
'We aim to provide clean and affordable energy solutions to Fiji with at least 90% of the energy requirements through renewable sources by 2025'

Power Lines	Total (km)	Overhead (km)	Underground (km)
Distribution - 11kV & 415/240V	9,246.35	8,441.22	805.13
Sub-transmission - 33kV	534.86	454.61	80.25
Transmission - 132kV	147.200	147.200	
Total (km)	9,928.41	9,043.03	885.38

FEA POWER SYSTEM LEGEND									
132kV Line	Diesel Power Station	Proposed 132kV Line	Hydro Power Station	132kV Substation	33kV Substation	11kV Line Coverage	Proposed 11kV Line	Biomass / IPP Power Station	FEA Repeater Station
Proposed 33kV Line									
Proposed 11kV Line									
6.6kV Line Coverage									





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