# GOING GREEN

energising, nation

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# Annual Report 2019





## **MISSION**

To provide a safe, reliable, affordable and accessible supply of electricity to the Solomon Islands.



energising our nation

## VALUES

Respect for our Customers and our People.

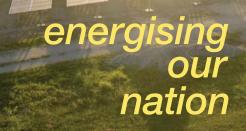
Improvement through Change and Innovation.

Meeting our Service Quality Commitments.

Care for the Environment.

Individual Responsibility for our Actions.

Honesty and Trust. Teamwork.



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## Letter to the Ministers

27th March 2020

#### The Honourable Bradley Tovosia MP

Minister of Mines, Energy and Rural Electrification P O Box G37, Honiara, Solomon Islands.

&

#### **The Honourable Harry D. Kuma MP** Minister of Finance and Treasury PO Box G26, Honiara, Solomon Islands.

Dear Honourable Ministers,

#### SOLOMON ISLANDS ELECTRICITY AUTHORITY (Trading as Solomon Power) ANNUAL REPORT 2019

On behalf of the Board of Directors of Solomon Power, I have the honour to submit to you both the Authority's Annual Report, in accordance with section 25 (I) of the Electricity Act, Cap 128, and section 14 (1) (a) (b) of the State Owned Enterprises Act 2007.

The report incorporates audited Statement of Accounts and the major developments, activities and achievements of the Authority for the financial period.

On behalf of Solomon Power, I thank you both for your on-going understanding and cooperation and look forward to your continuing support.

Yours faithfully,

David K.C. Quan MBE Chairman



#### **2019 HIGHLIGHTS**

- Celebrated our 50th anniversary
- For Tina River Hydropower Project
  - Achieved the conditions precedent under the Power Purchase Agreement
  - Achieved financial close for Tina River Hydropower project
  - Procured right of way for the planned 66 kV transmission lines from Tina River Hydropower site to Lungga Power Station
- Remarkable success on Solomon Islands Sustainable Energy Project- closed after ten years of operation
- No rotational load shedding in Honiara and at the 11 Outstations
- Improvement achieved on all reliability indices (SAIDI, SAIFI and CAIDI) in Honiara
- Reduction in Customer Minutes Lost in Honiara in comparison with 2016, 2017 and 2018
- G-1 operation in Honiara and at the Outstations sustained
- The works for the upgrade of Ranadi Substation substantially complete
- The project for the new substation at Kola'a Ridge completed
- Livened up connection to 2345 customers under the Output Based Aid programme
- Commissioned 11 kV and 415 V network extensions at 11 locations in Honiara and at the Outstations
- Capital upgrade works at Honiara Power Station substantially complete
- The design and construction of the 1 MW solar farm at Munda and associated battery storage system at Noro substantially progressed
- The design and construction of the mini hybrid systems at Tulagi and Kirakira have progressed
- The contract for the new hybrid generation systems at Hauhui, Namugha, Sasamunga and Vonunu was signed and the works have progressed

- Evaluation of tenders for the 1 MW grid connect solar farm at Tanagai progressed
- Evaluation of tenders for the 220 kW solar installation on the roof top of our Ranadi office progressed
- Evaluation of tenders for the new hybrid generation systems at Tingoa and Visale progressed
- Procured land at Ambu, Auki, Malaita Province for a 1.4MW solar farm
- Contract for the design of Green Village and the Control Centre and protection upgrade at East Honiara executed
- The Board approved signing of the following contracts:
   Honiara Area Master Station and Control Centre Project
  - Honiara Area SCADA and Protection Works Project
  - 2 MW grid connect solar farm at Henderson
- Old Lungga Power Station Electrical Upgrade Project
- Contract for the cost of service and tariff review signed
- 12 personnel from various organisations acquired the grade A licensed electrician certification, of which 8 are from Solomon Power
- Sustainability report completed
- Implemented an operations and maintenance plan for all our network and generation assets
- All the pending log of claims have been negotiated successfully with the Staff Association and approved. Their implementation is ongoing
- Continued our focus on safety, nurturing and mentoring of staff
- Continued internal safety, lineman, operator, meter technician training programmes
- Line Mechanic training programme commenced
- Continued the apprenticeship and graduate programmes
- Winner under Innovation & Technology category- SICCI
  Business Excellence award 2019
- An employee survey was carried out with excellent results (Overhaul health index of 4.4 out of 5)



- Further improvement in the reliability of electricity supply in Honiara and at the Outstations
- Sustain G-1 operation in Honiara and at the Outstations
- Continue the implementation of the Output Based Aid
   (OBA) programme
- Complete and commission the hybrid systems at Lata, Kirakira, Malu'u, Munda and Tulagi
- Implement the design and construct contract for the hybrid generation systems at Hauhui, Namugha, Sasamunga and Vonunu
- Complete the planned network extensions in Honiara and at the Outstations
- Progress works to upgrade the 33kV and 11 kV switchboards at Lungga Power Station
- Implement the design and construct contract for solar hybrid system at Afio
- Progress the following under SIEAREEP
  - Extension to the 1 MW solar farm at Henderson by another 2 MW
  - Installation of a 220 kW solar system on the roof of our building at Ranadi
  - Solar Hybrid systems at Tingoa and Visale
- Progress with stage 1 of the Supervisory Control and Data Acquisition (SCADA) project
- Execute a design and construct contract for the hybrid

generation system at Ambu, Auki

- Sign and implement a design and construct contract for the 1 MW grid connect solar farm at Tanagai
- Progress the design of "Green Village" and Control Centre project
- Implement the 24/7 Customer Call Centre project
- Develop more new network extensions in Honiara and at the Outstations
- Further develop the project for the installation of more Hybrid Generation Systems
- Sign and implement a consultancy contract for battery energy storage systems (BESSs) in Honiara
- Carry out the cost of service and review of the Electricity
  Tariff Regulations 2016
- Continue implementation of the vegetation
  management plan
- Continue our focus on safety, training, nurturing and mentoring
- Continue with the Apprenticeship programme
- Continue with the Line Mechanic Training programme
  Conduct campus interviews in universities in Honiara,
- Fiji and PNG to recruit graduates
- Continue with the Talent Development programme and succession planning
- Enhance the sustainability reporting regime



SOLOMON POWER CELEBRATING 50 YEARS OF SERVICE IN OUR BEAUTIFUL SOLOMON ISLANDS 21ST - 26TH JULY, 2019



## About Solomon Islands Electricity Authority (trading as Solomon Power)

#### Who we are

Solomon Islands Electricity Authority (SIEA) trading as Solomon Power (SP) is a State Owned Enterprise.

#### **Our objectives**

Under Section 4 of the State Owned Enterprises Act, the principal objective of the Company is 'operate as a successful business', and to this end, be:

- As profitable and efficient as comparable businesses that are not owned by the Crown.
- · A good employer.
- An organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates.

To meet these objectives, SP strives to

## Be as profitable and efficient as comparable businesses by

- Within the Electricity and State Owned Enterprises Acts, installing operating and maintaining electricity supply.
- installing, operating and maintaining electricity supply systems that meet the needs of connected customers.Developing and implementing capital investment plans, to
- Developing and implementing capital investment plans, to improve electricity system performance and increase the network coverage of agreed areas.
- Seeking to recover efficient costs of the service provision.
- Improving the efficiency of services, whilst improving asset reliability and availability.

#### Be a good employer by

- Maintaining a well-qualified and motivated staff.
- Adopting HR policies that treat employees fairly and properly in all aspects of recruitment, retention and employment.
- Promoting a high level of safety throughout the organisation.

#### Act in a socially responsible manner by

- Building effective relationships with landowners, customer groups and interest groups that are affected by our activities.
- Improving environmental reporting and performance on issues that are caused by our electricity supply activities.
- Incorporating sustainability into our business activities, and working to improve sustainable outcomes in terms of resource management.

#### Nature and scope of our activities

SP's principal commercial activities, as defined under the Electricity Act, are the

- Generation and distribution of electrical supply to connected customers in approved areas.
- Operation, maintenance and development of assets that are necessary to achieve these outcomes on a long term, sustainable basis.
- Approved expansion of services to increased areas of operation.

#### **Other regulatory functions**

The Company is also mandated by the Electricity Act to perform the following regulatory functions:

- Be responsible for the registration of Electrical Contractors.
- Ensure that industries and contractors comply with the Electricity Act and the AS/NZS Wiring Standards, by inspecting all electrical installations before connecting to SP mains.
- Be responsible for the licensing of standby generators, Independent Power Producers (IPPs) and Cogeneration of power.

## Members of the Board



David K.C. Quan Chairman



James Apaniai Director



John Bosco Houanihau Director



Rovaly Sike Director



Muriel Ha'apue-Dakamae Director

## Senior Management



Pradip Verma Chief Executive Officer



Martin Sam Chief Engineer



Jose Poothokaren Chief Financial Officer



Hemant Kumar General Manager Capital Works



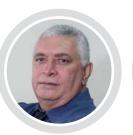
Jan Sanga General Manager Customer Services



Kaitu Aisake General Manager Corporate Services



Mathew Korinihona Manager Distribution



Robin Simpson Manager Health & Safety, Security and Environment



Geoffery Ossie Manager Internal Audit



Apollos Inasimae Manager Finance



Gavin Gorazu Manager IT



Droumand Rupert Manager Human Resources and Learning

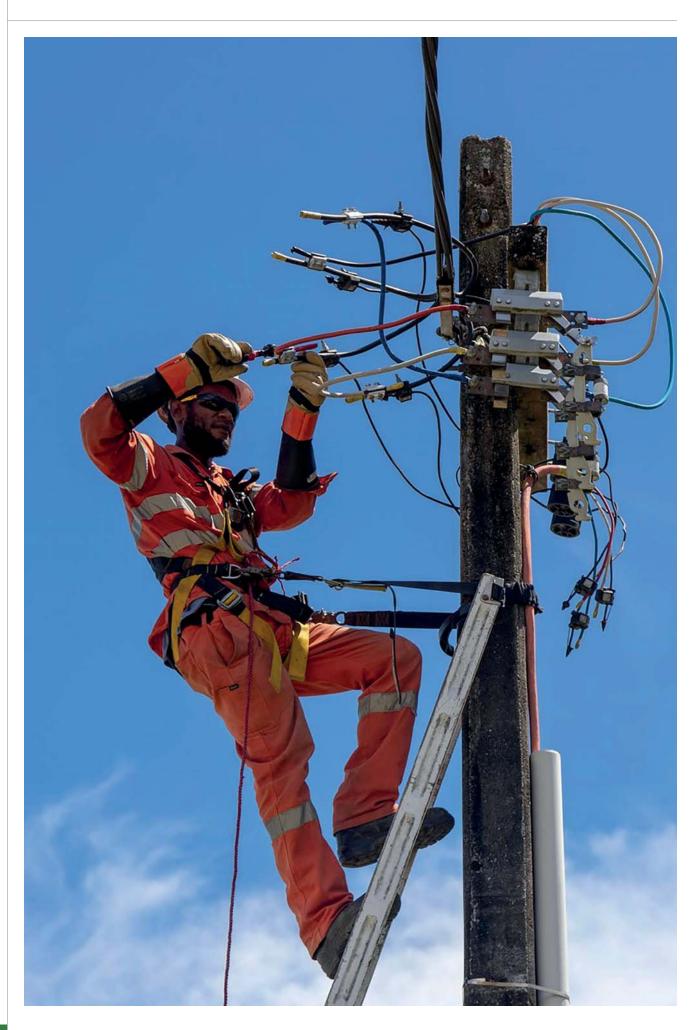


Levan Respioh Manager Business Administration



Grace Kikiribatu Manager Regulatory

SOLOMON ISLANDS ELECTRICITY AUTHORITY | ANNUAL REPORT 2019



## Chairman's letter



2019 has been a continuation of the strong performance that Solomon Power has demonstrated during the previous eight years. It is nine years in a row that Solomon Power has made a profit. Furthermore, the last eight years' statutory accounts have all been unqualified, and signed off by the Auditor General before the mandated date of 31st March each year.

In June, the Board travelled to Malaita to visit the Outstations at Auki and Malu'u and also visited the network extension sites and the sites for the proposed solar farms at Auki and Malu'u. We also had a Board meeting in Auki on 5 June 2019 and meetings with the local population and the Provincial Government. I am very pleased to note that despite lack of proper infrastructure and lack of logistics, the Solomon Power Team is doing an excellent job managing the Outstations and the capital works. Auki has seen an increase of about 500 customers in 2019.

It is pleasing to note that Solomon Power has made steady strides in going "Green". On the Power Purchase Agreement for the Tina River Hydropower Project, financial close was achieved on 12 December 2019. Furthermore, we successfully acquired right of way for the planned 66 kV transmission lines from the hydropower site to our Lungga Power Station.

On behalf of the Board of Solomon Power, I would like to thank our Shareholding Ministers for the guidance and support they provided to the Board and Management in the negotiations with Tina Hydropower Limited on the Tina River Hydropower Project. We anticipate seeing construction commence for the access roads in February 2020.

The total generation experienced a very modest increase of 2.9% in comparison with 2018.

I am elated to note that in the renewable energy space, in addition to the Tina River Hydropower project, we have 21 solar projects in different stages of development. We are quite upbeat about the progress made during the year on the Output Based Aid programme with the support of the World Bank. By year end we had livened up connection to 2,345 customers.

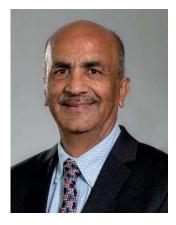
It gives me great pleasure to acknowledge the hard work and dedication by our Team in 2019 to increase, for the first time in our history, our customer base by more than 2,000 annually. For the first time a staff survey was conducted in 2019 in which we achieved an excellent overall outcome of 4.4 out of 5. Also in 2019, we received the Solomon Islands Chamber of Commerce and Industry Business Excellence award in the Innovation and Technology category.

The continued support of the World Bank, the Asian Development Bank, Japan International Cooperation Agency, New Zealand Government, United Arab Emirates Government, the Italian Government and other donors to explore opportunities in renewable energy and to drive commercialisation in our operations, is very much appreciated.

I also take this opportunity to thank the Shareholders and my colleagues on the Board and the Management Team for the continued support rendered throughout 2019.

David K.C. Quan MBE Chairman

## Chief Executive Officer's letter



The year in perspective has been another successful one for Solomon Power (SP) financially and operationally. The year was marked with a number of achievements and new challenges- all part of our charted journey to realise our vision of "energising our nation".

The reliability in Honiara and at the Outstations has been good with no rotational shedding in Honiara and at the Outstations during the year. On all reliability indices we have achieved substantial improvement. Additionally, the Customer Minutes Lost in 2019 has shown a substantial reduction in comparison with 2016, 2017 and 2018.

During 2019, we have sustained our focus on infrastructure investments with an annual injection of \$187million.

We completed 50 years of operations in 2019. The 50th anniversary celebrations during 21-26 July were very well received by our customers and the general public. The programme included a radio talk back show; presentations to stakeholders on SP's history; the present and future plans; the Electricity Tariff and Solomon Power's Green initiatives including Tina River Hydropower Project; visits for Form 6/7 students to our Lungga Power Station and Henderson solar farm and two open days for the general public.

The programme to extend the 11kV and 415V networks in Honiara and at the Outstations made very good progress during the year. The Board further approved funding for extensions at 9 more locations which brings the total to 43 locations with total approved funding of \$97million.

The project to design, construct and commission a new substation at Kola'a Ridge was completed during 2019.

The upgrade works at Ranadi Substation is essentially complete with commissioning of the second power transformer pending, which is expected to go on line in the first quarter of 2020.

The framework for licensing is paying returns. During the year, 12 more Solomon Islanders attained "Grade A Licensed Electricians" certification bringing the total to 53 for the country. Of these 53, 33 are from SP.

It is also pleasing to see the mobile top-ups reach more than 1,140 daily transactions on an average and on certain days they have exceeded 1,500. During 2019, we extended the facility to customers with e-wallet through Solomon Islands Postal Corporation and are now having discussions with other service providers to extend the mobile top-up arrangement and payment of kilowatt bills through their payment platforms.

My thanks to the Board for the guidance, innovative thought and excellent support they have provided to me and the SP Team during 2019.

It has been another fruitful year. The passion of our people to perform and for doing good are what make SP a unique, successful story. Congratulations Team SP and all our stakeholders for everything we achieved together in 2019.

Pradip Verma Chief Executive Officer

## **Engineering Highlights**

#### **Overview**

Overall there was a significant improvement in the reliability of the power supply in Honiara, compared to that in 2018. Outage records for Honiara to the end of December 2019 showed 10.3 million Customer Minutes Lost (CML) compared with 24.8 million CML in 2018. This is an improvement by 41% over the 2018 figure. The Outage figures comprises of both planned and unplanned system outages. The reduction in the unplanned outages is as a result of improved and timely maintenance of both the generation and the network facilities in Honiara. Bulk of the unplanned outages in Honiara have been due to feeder faults and in particular on feeders 11 and 12. Indiscriminate tripping of feeders at the Kola'a Ridge and Honiara East Substations were also being noted and plans are in place to address the protection issues. At the Outstations there was also improvement in the reliability of both the generation and network facilities.

The network performance indicator SAIDI has shown a significant improvement in the network performance in 2019 with 74.20 minutes in comparison with 184.40 minutes in 2018. There was also improvement in SAIFI which was 0.64 times in 2019 compared with 1.45 times in 2018.

The Maximum Demand in Honiara peaked at 16MW during the month of March. At the Outstations Auki, Buala, Gizo, and Noro have also recorded slight increase of power demand. The increase was as a result of an increase in the number of new customers connected and also increase in consumption by large commercial customers. In Honiara, the Bank South Pacific (BSP) building was reconnected to the grid which contributed to the increase in the demand during the year.

Major achievements by the Generation team at Lungga were the successful completion of the scheduled major overhauls of the 4xMAN Diesel, L7 Wartsila and the L10 Niigata generators. At the Outstations, the team completed the scheduled overhauls of Generators BL2 at Buala, K2 at Kirakira, LT4 at Lata and ML3 at Malu'u. With older generators continued to be operated, keeping the lights on has been a challenge at Kirakira, Lata and Malu'u Stations. The situation will drastically improve after we commission the new solar hybrid stations at these locations.

In addition, the team also carried out the planned and unplanned repairs and maintenance of the generation systems in Honiara and at the Outstations.

Generation of power in Honiara was mainly from the four new MAN Diesel generators, which are more fuel efficient, whilst the balance of power requirement was from the old generators at Lungga and Honiara Power Stations. The Honiara grid was also supported by the Henderson 1.0MW and the Ranadi 50kW solar installations during daylight hours.

The Switching Coordinator under the Technical Section of the Transmission and Distribution Department has continued to support the various switching requirements by the Department and the Capital Works team for planned/ urgent maintenance activities and for the Ranadi Substation transformers and switchgear testing and commissioning by the EPC contractor.

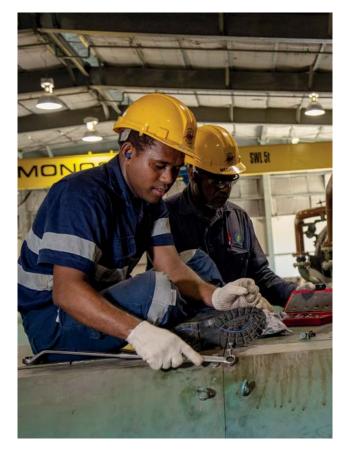
Particular efforts were also made on the improving and maintaining of the reliability of the network by focusing on vegetation management, upgrading of under rated conductors and transformers, replacement of defective equipment in the network and the timely implementation of planned maintenance.





Despite its operational commitments and limited resources, the Distribution team was able to provide both technical and implementation support to the network extension projects, in particular the new lines at Dunde, Noro in Western Province and Kakabona and parts of the Honiara network.

The Regulatory Department has continued to perform its regulatory functions by carrying out inspections of new and upgraded installations both in Honiara and at the Outstations. The department also made very good progress in the area of licensing of electricians and by the year end a total of 53 electricians were awarded with Grade "A" Electrician's license.



#### **Generation and Outstations**

Power generation in Honiara was mainly from the Lungga Power Station and in particular from the new 10MW plant using the 4x2.5 MW MAN Diesel generators. The balance of power requirement was from the old generators at Lungga and Honiara Power Stations. Power generation in Honiara was also supported by the 1MW solar farm at Henderson, east of Honiara and also from the 50kW solar installation at the Head Office at Ranadi.

Scheduled major overhauls on all four MAN Diesel generators was completed during the first half of the year. Other major overhauls were carried out on L7 Wartsila and L10 Niigata 4.2MW generators.

At the Outstations, power generation was predominantly from diesel generators for most sites, whilst at Buala a 150kW hydro supported the system there and at Seghe and Taro, the solar hybrid plants supplied most of the power at the sites.

Other activities carried out by the Generation team included monitoring of the power plants, attending to faults and breakdowns both on the mechanical and electrical systems; and the scheduled 1,000 hours' service for large generators in Honiara and 500 hours service for the small generators at the Outstations.

#### Distribution

The Distribution Department undertook a number of major activities in Honiara and at the Outstations.

In Honiara, the team assisted the Capital Works Division on the rebuilding of the overhead and underground 11kV and 415V line at Kakabona, the diversion of the 11kV lines at the back of the Solomon Water office, and also completed the realignment of Feeder 11 line at the Lungga road. Other major works carried out were the construction of a low voltage line at GPPOL with the expectation of connecting the Ngalimbiu Station on to the grid. A number of transformer upgrades and replacements were also carried out in Honiara which included the installation of a new Ring Main Unit (RMU) and a new 500kVA transformer at the junction into the MID Head Office and the installation of new 300kVA and 500kVA transformers for the ICT centre

at Lengakiki and for SINU complex at Kukum Campus respectively. For public safety, the Distribution team installed warning signs at various substations and on HV equipment at public places.

At the Outstations, the Distribution construction team carried out and completed the network extension projects at Noro and Munda in the Western Province. The projects included the extension of the 11kV overhead lines, installation of underground high voltage (HV) cables and installation of new distribution transformers for the extension at both locations.

Other Low Voltage (LV) line upgrades were also carried out in Honiara, Auki, Gizo and Noro during the year.

Furthermore, the Department maintained its efforts in improving the reliability of the network by continuing on with the vegetation management programme in Honiara and at the Outstations.

Other activities were the construction of minor LV extensions, new service connections, inspection and condition monitoring of the network, implementation of planned maintenance activities and attending to network faults.

#### Outstations

Power generation at the Outstations was reliable throughout the year with no total outages experienced.

Buala, Kirakira, Lata and Malu'u continued to generate power from generators that were installed prior to 2013, except for the hydro plant at Buala, which was re-commissioned in 2016. At Auki, Gizo, Munda, Noro and Tulagi generation was from the new Kohler make generators that were installed under the Outstations Generation Project that was completed in 2017.









Seghe and Taro Outstations have continued to generate power from the hybrid mini-grids that were commissioned in 2017 with Taro operation at about 80% renewable and 20% diesel, whilst the Seghe plant was 100% renewable.

Major overhauls were carried out on generators BL2 at Buala, K1 at Kirakira, LT4 at Lata and ML4 at Malu'u. Malu'u ML3 main alternator was being rewound due to faulty windings.

The existing 11kV underground cable which links Munda to Noro was out of service as a result of faults on two occasions and technicians from Honiara were sent to assist with fault location and repairs. On the second occasion, our Engineer used the new Baur make bridge to pinpoint and locate the fault at an existing straight through joint. The fault was repaired by inserting a piece of 11 kV cable and by making two new joints.

#### Regulatory

The Regulatory Department continued to carry out its role as a Regulator in the Electricity industry by ensuring the electrical installations are in compliance with the AS/NZ 3000 Wiring Standards. The Department also provided support to Licensed Electrical Contractors by providing regular updates on the rules and regulations and also by carrying out progressive and final inspections to wiring installations. license Grade A & Grade B Electricians as provided for under the Electricity Regulation 52 of the Solomon Islands Electricity Act. Based on an interim licensing framework set up in 2018 and following the signing of a memorandum of understanding between SP and Energy Skills Australia, the licensing assessments were carried out for both the theory and practical assessments. By the end of 2019, a total of 53 electricians were granted the Grade A License out of which 33 are staff of SP and the remaining 20 from the private sector and Government departments.

The Department has continued to carry out testing of new and old meters for their accuracies using the new meter test bench which was commissioned early in 2018. The equipment has enabled us to ensure that the accuracies of all new energy meters were tested before their installation in customer premises.

A total of 2,262 installations were energised in 2019 in comparison with 1,591 in 2018. Of the total number energised, 1,077 were normal customers and 1,185 were customers under the Output Based Aid (OBA) programme funded by the World Bank.

#### **Renewable Energy**

The development of the 15MW Tina River Hydropower Project in Guadalcanal Province progressed well with most of Condition Precedents in the Power Purchase Agreement (PPA) being met by the year end. Financial close on the project was achieved on 12 December. The construction phase of the project is scheduled to commence in February 2020. In addition to this, we have acquired the right of way for the selected route for the proposed 66kV transmission lines from the Tina River Hydropower site to our Lungga Power Station.

The works under the design and construct contract with CBS Power Solutions Limited for the hybrid solar farms at Kirakira, Lata, Malu'u, Munda and Tulagi made steady progress during the year. A majority of the equipment has already been delivered to Honiara. Construction in Munda has progressed substantially during the year. At Tulagi, construction for the solar installation was 100% complete with installation of the batteries scheduled for February-March 2020. We anticipate to commission all the 5 hybrids during 2020.

A design and construct contract for the solar hybrid



One of the functions of the Regulatory Department is to



installations at Hauhui, Namugha, Sasamunga and Vonunu was executed with Netcon Clay Energy Joint Venture. The project with a total capacity of about 815kW is jointly funded by the New Zealand Government and SP. Construction is expected to start in the third quarter of 2020.

A contract for the construction of an additional 2.0MW of solar at Henderson, east of Honiara was awarded to East West-Blue Gas Joint Venture. The contract negotiations were in progress during December 2019. The project is jointly funded by SP and the World Bank.

Bid Evaluations for the development of the Ranadi Head Office roof top (220kW), the Tingoa (263kW) and the Visale (109kW) solar installations were completed by the end of the year and reports were submitted to the Tender Evaluation Committee of SP for its review and approval. Contracts are expected to be signed by the first quarter of 2020. These projects are also funded by the World Bank.

A pre-bid meeting and site visit was conducted followed by the opening of the bids in November 2019 for the development of the 1.0MW solar farm at Tanagai, west of Honiara. Evaluation of the bids and award of the contract is expected to be completed by the first quarter of 2020.

Land at Ambu, Auki on Malaita has been purchased for a proposed 1.4MW solar farm development. Tender for the project will be put to the market by mid-2020.

The SP funded solar hybrid plants at Seghe and Taro which were commissioned mid-2017 were both operating well.

#### **Power System Reliability**

SP's System Reliability in Honiara is measured using the internationally accepted performance indicators as follows:

## The System Average Interruption Duration Index (SAIDI)

**SAIDI** defines the average interruption duration per customer served per year.

**SAIDI** = (Sum of Customer Interruption Durations/Total number of customers served).

For Honiara, this was measured to be 74.20 minutes, compared to 184.4 minutes in 2018, a decrease by 110.2 minutes.

#### The System Average Interruption Frequency Index (SAIFI)

**SAIFI** defines the average number of times a customer's service is interrupted during a year for longer than 2 seconds. A customer interruption is defined as one interruption to a customer.

**SAIFI** = (Total number of customer interruptions/Total number of customers served).

For Honiara, this was measured to be 0.64 times compared to 1.45 times in 2018, a decrease by 0.81 times.

## The Customer Average Interruption Duration Index (CAIDI)

This is a measure of the average time (minutes) that a customer is without power per interruption.

For Honiara, this was measured to be 132.57 minutes per interruption compared to 137.45 minutes in 2018, a decrease by 4.88 minutes.

#### **Reliability and Efficiency**

The available generation capacity for Honiara was 29.0MW, against a peak demand of 16.00MW.

The implementation of the G-1 operation criteria, the under frequency load shedding scheme on the 11kV Honiara feeders and the revised delayed time setting on the existing under voltage system protection on the 33kV feeders at Honiara has reduced wider network outage due to faults in the 11kV feeders.

With improved and timely maintenance on both the generation and transmission and distribution network, there have been noted improvements on the reliability of electricity supplies in Honiara and at the Outstations. However, there were outages experienced at the Honiara East and Kola'a Ridge Substations due to protection issues for which plans have been proposed for their review.

#### **Energy Produced**

Energy produced in 2019 compared with 2017 and 2018 is shown on the side. In 2019, Lungga and Honiara operations produced a total of 85.84GWh (86.64%) whilst the Outstations,



and the Henderson solar plant produced 13.24 GWh (13.36%).

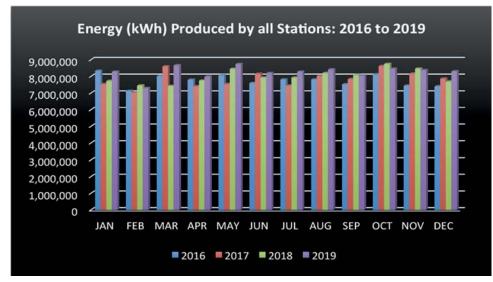
Station	GWh (2017)	GWh (2018)	GWh (2019)
Lungga	80.73	81.75	83.04
Honiara	1.65	2.46	2.80
Outstations	9.73	11.17	11.77
Henderson Solar (1MW)	1.19	0.89	1.47
Ranadi Solar (50kW)	0.042	0.015	Not Available
Independent Power Producer (IPP)	0.94	0	0
Total	94.282	96.285	99.08

#### **Maximum Demand**

The demand for electricity in Honiara in 2019 peaked at 16,000 kilowatts compared with a figure of 15,820 kilowatts in 2018, an increase of 180 kilowatts.



#### **Generation Statistics**

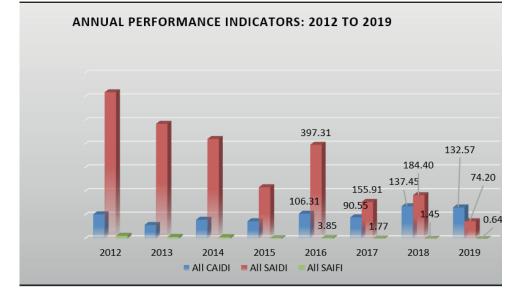


Energy Produced by all Stations for the period 2016 to 2019 is shown in the histogram below:





System Performance Indicators for Honiara from 2012 to 2019 are in the histogram below.



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## **Capital Works and Planning Division**

#### **Capital Works**

There were 28 active capital infrastructure projects underway in 2019, with 4 additional projects in the planning phase to the value of \$829million. Of these the following were accomplished during the year:

- Completion and commissioning of 11kV/ 415V line network extensions at Mbaru, Dunde, Buriniasi, Raubabate, Keru, Kunu, Aekafo, Okwala, Sopapera, Kakabona and Feraladoa
- Contracts signed for the following projects:
  - East Honiara Green Village Development Detailed Design.
  - Henderson 2MW Solar Plant.
  - Head-Office Toilet Block.
  - Tariff Review.
  - Old Lungga Electrical Upgrade Project (complete replacement of HV Switchgear and associated systems).
- Projects approved and awaiting contract signing in the first quarter of year 2020:
  - Ranadi Rooftop Solar Project.
  - Visale Solar Hybrid Generation System Project.
  - Tingoa Solar Hybrid Generation System Project.
  - SCADA Implementation Project (stage 1).

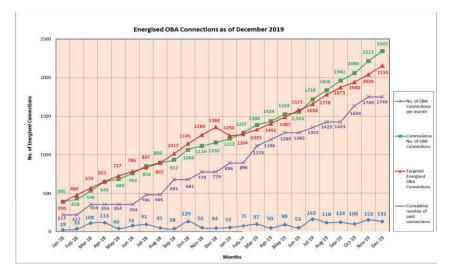
The following key projects were at various stages of progress in 2019 and are targeted for completion in 2020 - 2024:

- Tina River Hydropower Project 66kV transmission lines and termination equipment at Lungga.
- The installation of a second transformer at Lungga Power Station.
- The Honiara Power Station Redevelopment.
- · Housing Upgrade works in Honiara, Gizo and Noro.
- Design and installation of 5 hybrid replacement generation systems for the existing Outstations at Kirakira, Lata, Malu'u, Munda and Tulagi.
- Solar Hybrid Generation System Project at Hauhui, Namugha, Sasamunga and Vonunu.
- Solar Hybrid Generation Systems at Baolo, Bina and Dala.
- Tanagai Solar and Point-of-Supply Project.
- Honiara Grid's Battery Energy Storage Systems (BESSs).
- Buala Hydro Scheme Forebay repairs.
- OBA (Output based Aid) Programme.

The Capital Works and Planning team structures has been fully integrated into one team with excellent improvements in performance in planning and delivery. The recruitment of a Solar Engineer and Manager Construction progressed to identification of probable candidates at the conclusion of the interview process. Four local Acting Managers have been actively managing the respective sections within the Capital Works & Planning Division. These roles are being shadowed by expatriates for the quick development of local resources.

The Output Based Aid (OBA) programme has made very good progress to connect more customers to our grid in 2019. It is

designed to provide a one-off subsidy to eligible low-income households to cover a portion of the upfront cost of electricity service connections in the Honiara grid and the Outstations of Auki, Munda, Noro, Seghe and Taro. The project is aimed to energise 2,488 households both in Honiara and in the Outstations. A total of 2,345 connections were energised as of 31 December 2019. The programme will meet the target of 2,488 customers well before the expiry date of 31 March 2020.



#### Planning

The Planning team has updated all network development plans for the Outstations and for Honiara for the next five (5) year planning period. This included the identification and execution of twenty-five (25) detailed survey works, mapping and engineering reports. Of these five (5) are for potential solar farm sites within the Honiara grid. Another five (5) are for mitigation of network constraints within the Honiara grid and Noro/Munda grid. Seven (7) are for planned network extensions for a total of 2,171 potential customers, one each at areas within the Honiara grid at New Zealand Camp, Henderson Fighter 1, Burns Creek, Milestone, Ferakusia, Tina and Mbokona. Two (2) are for planned network extensions in the Provinces namely Supizai in Taro and Tisi Valley in Gizo. The balance six (6) reports are for the proposed hybrid systems proposed at Baolo, Biluro, Kamaosi, Kia, Kolotubi and Tatamba all located in Isabel Province and these in total have 1,441 potential customers.

The team was also involved in the formulation of a renewable energy roadmap for Honiara, which aims to achieve 100% renewable energy generation by 2030. As an enabling technology to this target and for the stability of the Honiara grid, the team has progressed to tender stage in the development of a detailed design specification for the proposed central Battery Energy Storage Systems.

To encompass and enable a comprehensive outlook of the company's capital budget, a company spend plan was also formulated together with other key divisions for the next five (5) year planning period.

## **Customer Services Division**



With a total number of 55 permanent staff, the Customer Services Division is responsible for all customer issues, being the first point of contact for the customers in terms of enquiries through to connections and management of customer accounts and metering. Customer Services' tasks are performed in Honiara as well as at the eleven outstations namely Auki, Buala, Gizo, Kirakira, Lata, Malu'u, Munda, Noro, Seghe, Taro and Tulagi, all contributing to SP's vision to make electricity affordable and accessible to Solomon Islanders, which is in line with the national objective to energise our nation by year 2050.

One of the 2019 goals for Customer Services Division was to register 21,000 customers by the year end. By 31 December 2019, Solomon Power had 21,043 customers registered and connected to its Honiara and Outstations network, as compared to 18,781 in 2018 and 17,190 in 2017, an excellent outcome.

#### **TOTAL CUSTOMER COUNT BY LOCATION - DECEMBER 2019**

	POSTPAID	PREPAID	TOTAL
Honiara	1,725	14,198	15,923
Auki	169	1,311	1,480
Gizo	111	752	863
Noro	83	552	635
Munda	29	537	566
Tulagi	38	237	275
Kirakira	37	244	281
Buala	40	222	262
Lata	37	233	270
Malu'u	23	132	155
Taro	17	197	214
Seghe	4	115	119
	2,313	18,730	21,043

In terms of customers by tariff category for both post and prepaid, 77% of customers are on the domestic category while 23% are on the commercial rate, which also includes industrial.

CUSTOMERS BY TARIFF CATEGORY			
Domestic	16,283		
Commercial	4,734		
Industrial	26		

For post-paid customers, 70% of customers are commercial and 30% are domestic while in comparison for prepaid customers, 83% are domestic customers and 17% are commercial.

Post-paid customers are registered on the post-pay billing system called Utility Star Platinum (USP), a system put in place in June 2014. Cashpower customers, however, are registered on the upgraded Suprima Version 5.

The electricity tariff applied during 2019 is the gazetted Electricity Tariff (Base Tariff and Tariff Adjustments) Regulations 2016, which repealed The Electricity (Tariff) (Automatic Base Tariff and Fuel Price Adjustment) Regulation 2005. The Electricity Tariff (Base Tariff and Tariff Adjustments) Regulations 2016 is available on our website www.solomonpower.com.sb.

SP has progressed its programme to extend the electricity network in Honiara and at the Outstations in 2019.

Community awareness sessions go hand in hand with network extension plans, customer applications and customer connectivity. 23 community awareness programmes were held at various locations in our nation in 2019. Apart from the normal SP connections and the connection to the approved sites for network extensions, the World Bank assistance through the Output Based Aid (OBA) Programme further progressed new connection undertakings in 2019, resulting in the increase in customer numbers. 2,262 new customers were registered in both pre and post-paid in 2019. Of these 2,165 were prepaid on Cashpower and the balance 97 on post-pay.



To further improve services to our valued customers, an agreement was signed with a 3rd Cashpower mobile top-up service provider, the Ezi Pei Cashpower mobile top-up with the Solomon Islands Postal Corporation. The SI Postal Corporation joins the BSP and Pan Oceanic Banks in providing this valuable service, which is in line with addressing our accessibility and affordability challenges. These services enable our prepay customers on Cashpower to top up on their credits using the mobile phones without having to visit a physical cashier counter. Discussions are ongoing to have this service extended to our post-pay customers.

Extended Cashpower cashier hours from Monday to Friday up to 8.30 pm on the drive through and walk through windows are still a delight for Cashpower customers not signed up to the Cashpower mobile top-up service. A 24/7 hour phone service is also available pending the setup of the Call Centre, which is progressing.

Customer applications for new connections were further enhanced with ongoing training and upgrading of front line skills. Front line staff were trained on the use of the GIS google map to track customer applications from within the current grid. This has assisted in avoiding a backlog of applications. Front line staff as well as other staff received ongoing training in creating Work Orders via the Utility Star billing system. This has enabled tracking of logged and pending tasks.

Telecommunications connectivity to Lata was achieved in June 2019. With this, all our Outstations are now able to

access both billing systems, Suprima and USP, remotely.

The Customer Services Division benefited from the Waka Mere programme by having two senior female officers graduate with their Certificate IV Leadership & Management training, as well as five female officers undergoing the vehicle drivers training.

Apart from training, the Division's policies and processes were continually developed and updated, to ensure that our quality commitments to our valued customers are met.

The Division has managed to secure the revenue protection by ensuring accuracy of revenue meters, reduction of nontechnical losses, inspection of revenue meters throughout the year, with the discrepancies found and the few illegal bypasses encountered actioned.



## **Finance Division**

The fiscal position of SP continues to be strong and has shown growth in Revenue by 6.0% compared to 2018. The strong position is due to good financial management and

governance. During the year:

- SP paid \$4m for 2018 dividend and will also declare and pay dividend of \$5m for 2019 once the accounting books have been audited.
- Net Profit for the year was \$92.7m.
- Return on equity and return on assets has been 7.5% and 6.4% respectively.
- Generation costs per kWh is \$1.98 (US \$0.25 per kWh).
- Fuel cost, being 45.3% of our costs, has increased in comparison with 2018.
- Monthly kWh sales reached their highest ever.
- Capital Infrastructure is being funded using retained earnings (new Solar Hybrid Outstations, Outstations' Generation Upgrade, 11 kV and 415V network extensions, upgrade to properties etc.).
- SP has already commenced its World Bank IDA Loan Repayments to SIG.

## Information, Communications and Technology

SP relies on Information and Communications Technology (ICT) to support its day-to-day business operations and the ICT Group supports the business areas by:

- Supporting the full suite of business applications for: Finance, Corporate Services, Customer Services, Administration, Distribution, Generation, Capital Works and all operational software needs.
- Communications Network connections to offices and power house sites across Honiara;
- Links to the current 11 Outstations in the Provinces at: Auki, Buala, Gizo, Lata, Kirakira, Malu'u, Munda, Noro, Seghe, Taro and Tulagi;
- Connecting over 275 full-time staff and additional contractors and service providers;
- Managing Desktop PCs, Laptops, Printers and Telephones for department operations;
- Running 21 Production and 18 Disaster Recovery (DR) servers across two Data Centre environments; and
- Managing 160 Terabytes of storage space for corporate information.

As part of the development for a growing SP, the ICT Group has been working on upgrading all of SP's IT Platforms.

#### We have:

- In June 2019, successfully completed communication connectivity to all Outstations – now for the first time in SP's history, all Outstations can process automated transactions directly in Cashpower and kW.
- · Installed and commissioned two new Server Hardware

in July 2019 – for supporting more business applications. Migration of all primary virtual server from the old server hardware to the new server hardware was completed. The old server hardware is being repurposed, upgraded and will be redeployed to the disaster recovery site at the Lungga server room.

- Installed and commissioned new digital phones system (IP Phones), replacing the End of Life (EOL) analogue PBX Ranadi only phone systems and for the first time connected Lungga, Hyundai Mall and Honiara power station on the same IP phone IPBX system.
- Completed Timesheet workflow automation for Ranadi users.
- Completed the USP/kW integration thereby avoiding manual entry. Suprima Integration into USP will be implemented in the first quarter of 2020.
- Completed a New Remote Monitoring and Management (RMM) tool clustered to one Dashboard tool – replacing disparate ICT soft tools.
- Designed, installed and commissioned a new telecommunications tower at Ranadi within budget and ahead of schedule. This tower has replaced all communication equipment on the rooftop of Ranadi office and the tower now is providing SP with a strategic home for all current and future communication links across SP network in Honiara and our partner networks to the Outstations.
- Implemented and commissioned a Cashpower vending arrangement with Solomon Post.

#### We will be:

- Introducing 100 new desktop and laptop machines running Windows 10 to replace EOL support for Windows 7 in the first Quarter of 2020.
- Upgrading our Microsoft Office licenses to 2016/19 in the first Quarter of 2020.
- Improving the communication links to the Outstations as the undersea fibre gets commissioned in 2020. We will also test IP Phone and Time clock in certain Outstations, however, this will very much depend on the connectivity back to SP central servers.
- Carrying out the planned upgrade of Suprima (Cashpower) to version 6 in March 2020.
- Issuing Payroll payslip on e-copy via email, thereby saving costs on paper, toner, wear and tear and be environmentally friendly.
- Carrying out the Online billing (CDPRO) for USP by 30th June 2020 – to enable SP customers to pay their kW bills online.
- Evaluating of a second or a replacement of the current Antivirus/anti-malware software in the first quarter of 2020 with the purpose to provide an additional layer of security to the existing SP IT Infrastructure.



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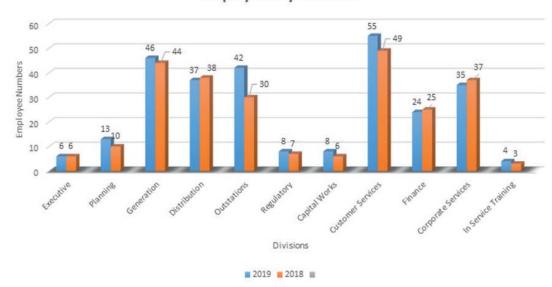
## **Corporate Services Division**

The Corporate Services Division provides support services to other Divisions through its human resources, business administration, training and development, occupational health and safety, security and compliance, business performance, recruitment services, legal and contract management, fleet management and lands and buildings teams.

#### **Human Resources**

At the end of 2019, SP had a total number of 278 permanent employees, compared to 255 at the end of 2018. This is an increase of 9.0%.

The graph below (Figure 1) shows the number of permanent employees by divisions at the end of 2019, compared to the end of 2018.



Employees by divisions

Figure 1: Employee Numbers by divisions

The graph below (Figure 2) shows the number of permanent employees by location at the end of 2019, compared to the end of 2018.

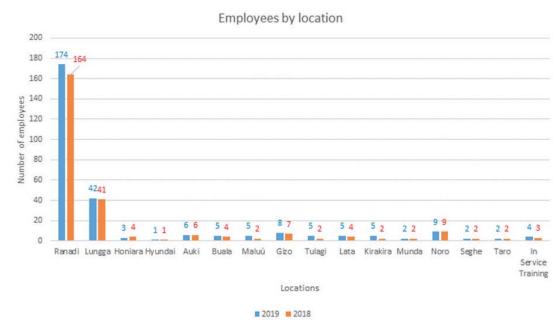


Figure 2: Employee numbers by location

## Highlights in 2019 included:

- Successful completion of a Staff Climate Survey in 2019. The purpose of the survey is to ensure that the views of the employees about the organisation are heard and that improvements to services and business processes can be addressed, which will eventually improve productivity.
- The overall Organisational Health Index (OHI) was 4.4 out of 5. The rating of the OHI is: 1 least satisfied and 5 highest satisfaction;
  - The overall OHI of 4.4
     is considered quite an
     achievement for Solomon
     Power, since this is the first time
     for such a survey to be undertaken.
  - The lowest OHI was 3.3, which is for Training and Progression. To address this, a training schedule has been developed for 2020, which will ensure that all learning and development related activities are properly managed and administered. The training policy will be reviewed in 2020.
  - This provides a high benchmark for SP to maintain into the future with the current OHI providing the future benchmark that SP will be targeting to at least maintain into 2020 and the future.
- Recruitment for key roles, such as that of the Manager Legal and Contracts and Manager Occupational Health and Safety.
- Recruitment of the 10 Line Mechanic Trainees, who commenced on their programme effective from September 2019.
- Conclusion of the 2017 Graduate Trainee Programme, with all participants been given permanent roles within SP, and
- Implementation of one (1) key recommendation of the Job Evaluation Exercise undertaken in November 2019, which is the upgrading of the levels of all the Power Station Operators, from Level 7 to 6.

#### **Training and Development**

To continually develop and update the knowledge, skills and competencies of its employees, SP has invested extensively in training and development.

**Long-term training:** Six (6) employees continued with their long-term study programmes in 2019, in the following areas:

- Bachelor in Accounting, Accounting and Management and Public Administration
- Diploma in Power Engineering
- Master of Engineering Science specialising in Power Engineering
- Bachelor in Electrical Engineering

Three (3) employees commenced on their 2-year Masters of Business Administration course in 2019.

Also, seven (7) female employees graduated with a Certificate IV in Leadership and Management.



**Short-term training:** Some in-house and local training undertaken in 2019 are:

- Line Mechanic and Electric Power Line training
- Defensive Driver and Basic Driver training
- Protection Relay and Data validation
- Homer Pro Software
- International Financial Reporting Standards
- Renewable Energy
- First Aid and CPR
- Leadership and Management

#### **Occupational Health and Safety**

SP is committed to the safe supply of electricity to the nation with its effective and robust OHS management framework, aimed at providing a safe environment for employees, contractors, customers and the community at large.

Two (2) Lost Time Injury incidents were recorded in 2019, which incurred fifteen (15) Lost Days. The Lost Time Injury Frequency rate for 2019 closed at 3.96.

An incident reporting, investigation and action verification framework was developed to manage all SP incidents.

Highlights in the reporting period include:

- Continuation of First Aid Training and Fire Drill Training for emergency wardens and First Aiders and Power Station operators.
- Continued work on corrective action recommendations for serious accident and training on identified areas highlighted in our investigation reports.
- OHS awareness training for staff and electrical safety awareness for schools and communities in SP locations.
- Electrical safety awareness continuously conducted to new extension network sites in Honiara and at the Outstations.
- Defensive Driver and Hands on Wheels training continue with newly authorised drivers as well as refresher training carried out for other drivers.
- Pole Top Rescue and CPR training for new and ongoing Line Mechanics.
- Timely servicing and testing of all fire protection systems in Honiara and at the Outstations.
- Training for operators for both the Honiara and Outstation operations in fire protection systems.
- Job safety Analysis (JSA) training for operational staff.



#### Lands, Buildings & Fleet

#### Land

SP continued with its programme of land acquisitions and proper registration of its properties. Negotiation and Registration for land at Ambu, Tanagai, Kirakira, Malu'u, Tulagi and Hauhui were completed in 2019. Negotiation for land acquisitions in, Lata, Afio, Namugha, Sasamunga, Visale, Vonunu, Santa Anna and Tingoa were carried forward into 2020.

#### **Buildings**

Apart from our commercial properties at Honiara, Lungga, Ranadi and at the Outstations, SP provides housing for employees in Honiara and at the Outstations.

A total of eleven (11) SP houses were earmarked for repair and maintenance in 2019. Work on all these eleven (11) houses commenced in July 2019 and were in progress and expected to be completed in the first quarter of 2020.

Two (2) office buildings were also earmarked under the 2019 SP Property Redevelopment Programme. Work on one (1) office building commenced in November 2019 and is in progress and is expected to be completed by the second quarter of 2020, while the other has been rescheduled to be part of the 2020 programme.

#### **Fleet of vehicles**

Total number of vehicles as of December 2019 was 91. This is an increase from 87 in 2018. Eleven (11) vehicles were decommissioned in November 2019 and publicly tendered for sale in January 2020. This will reduce the Fleet to 80 by the end of February 2020.

Thirteen (13) vehicle accidents occurred in 2019 at a repair cost of \$102,947.31. The vehicle tracking system continues to be utilised to improve fleet efficiencies and proactively manage speeding and unauthorised use of vehicle.

#### Workmen's Compensation

Three (3) cases of workmen's compensation were reported in 2019. Two (2) of these were settled and one (1) is currently pending.

#### **Trade Dispute Panel**

There were three (3) cases in 2019, with two (2) settled and one (1) remains on-going into 2020.









## **Corporate Governance Practices**

#### **Role of the Board**

As required by Section 6 (4) of the State-Owned Enterprises Action 2007, the Board is responsible for charting the Company's strategic direction, for the setting of objectives, policy guidelines, goals management, and for monitoring the achievement of these matters.

The Board is also responsible for reviewing the Business Plan, Corporate Plan and Statement of Corporate Objectives, and approves the Operating and Capital Budgets each year. The Board also reviews matters of a major or unusual nature, which are not in the ordinary course of business.

#### Composition of the Board as at 31st December 2019

The Board of Directors, appointed under the State-Owned Enterprises Regulation 2010, (Part 2, Prescribed Process of Appointment of Directors) are as follows:

Name	Position	Appointment	Term
Mr David K.C. Quan, M.B.E	Chairman	19 February 2019	3 years
Ms Muriel Ha'apue-Dakamae	Director	17 December 2018	3 years
Mr James Apaniai	Director	17 December 2018	3 years
Mr Rovaly Sike	Director	17 December 2018	2 years
Mr John Bosco Houanihau	Director	17 December 2018	2 years

#### **Directors' Duties**

The role and duties of the Directors are defined in regulations 17 to 27 of the State-Owned Enterprise Regulations, 2010. A key responsibility of the Directors is to achieve the principal objective of the Authority as stated in Section 5 of the SOE Act.

The principal objective of every State-Owned Enterprise shall be to operate as a successful business and, to this end, to be:

- a. As profitable and efficient as comparable businesses that are not owned by the Crown or established as statutory bodies by an Act of Parliament;
- b. A good employer; and,
- c. An organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates.

#### **Statutory Duties of the Board**

In addition to the above duties, the Board of Directors of SP collectively and individually have agreed on the fulfilment of the following duties toward the company:

- When exercising powers or performing duties, Directors must act in good faith and in what the Director believes to the best interests of the State-Owned Enterprise.
- A Director of a State-Owned Enterprise, when exercising a power as Director, must exercise that power for a proper purpose.
- A Director of a State-Owned Enterprise must not:
  - Agree to the business of the State-Owned Enterprise being carried out on or in a manner likely to create a substantial risk of serious loss to the State-Owned Enterprises creditors or, and

- Cause or allow the business of a State-Owned Enterprise to be carried out on or in a manner likely to create substantial risk of loss to the State-Owned Enterprise creditors.
- A Director must not agree to the State-Owned Enterprise incurring an obligation unless the Director believes at the time, on reasonable grounds, that the State-Owned Enterprise will be able to perform the obligation when it is required to do so.
- A Director of a State-Owned Enterprise, when exercising powers or performing duties, must exercise the care, diligence, and skills that a reasonable Director would exercise in the same circumstances.
- Another controlling measure imposed on Directors is the requirement to enter any conflict of interest in an interests register.

#### **Fiduciary Duties of Directors**

The Directors of SP also owe the following duties to the company. These fiduciary duties form the code of ethics of SP. A fiduciary relation imposes an obligation of utmost good faith on Directors by putting the interests of the Company first, and the SP Directors have pledged to uphold this principle at all times. The fiduciary Duties of the Directors include the following:

- To act in good faith in the best interest of the Company.
- To exercise powers for a proper purpose.
- To retain discretion.
- To avoid conflicts of interest.

#### **Board Meetings**

The Board held 9 meetings during the financial year, which ended 31 December 2019. Of these, six were scheduled meetings and the rest extra-ordinary meetings. The regular business of the Board covers corporate governance, financial performances and risk management, business investment and strategic matters.

#### **Board Committees**

There are three Board Sub-committees, Audit Finance Governance and Risk, Technical, and Human Resources, that are responsible for deliberating detailed issues and making suitable recommendations to the Board. The Sub-committees meet as and when required.

#### **Board Secretary**

Mrs Natalie Kairi

## Audit, Finance, Governance & Risk Sub-committee

#### **Membership:**

- 1. Muriel Ha'apue-Dakamae Chairwoman
- 2. David K.C. Quan, M.B.E. Member
- 3. James Apaniai Member
- 4. John Bosco Houanihau Member
- 5. Rovaly Sike Member

Number of meetings: 3

#### **HR Sub-Committee**

#### **Membership:**

- 1. John Bosco Houanihau Chairman
- 2. David K.C. Quan, M.B.E. Member
- 3. Muriel Ha'apue-Dakamae Member
- 4. James Apaniai Member
- 5. Rovaly Sike Member

Number of meetings: 2

#### **Technical Sub-Committee**

#### Membership:

- 1. Rovaly Sike Chairman
- 2. David K.C. Quan, M.B.E. Member
- 3. Muriel Ha'apue-Dakamae Member
- 4. James Apaniai Member
- 5. John Bosco Houanihau Member

Number of meetings: 2

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#### **Directors' Report**

In accordance with a resolution of the Board of Directors, the Directors herewith submit the statement of financial position of Solomon Islands Electricity Authority ("SIEA" or "the Authority"), trading as Solomon Power, as at 31 of December 2019 and the related statement of comprehensive income, statement of changes in equity and statement of cash flows for the year ended on that date and report as follows:

#### Directors

The Directors who were in office at the date of this report and at any time during the financial year and up until the date the financial statements were authorised for issue were as follows:

#### Name

David K.C. Quan -chairman (reappointed on 19 February 2019) James Apaniai John B Houanihau Muriel Ha'apue-Dakamae Rovaly Sike

#### **State of Affairs**

In complying with the Electricity Act (Cap 128) and the State Owned Enterprises Act of 2007, the Directors hereby submit the financial statements of SIEA consisting of the statement of financial position as at 31 December 2019, statement of comprehensive income, statement of changes in equity and statement of cash flows of SIEA for the year then ended.

#### **Principal activity**

The principal activity of SIEA during the year was the generation, distribution and sale of electricity in the Solomon Islands as governed by the Electricity Act (Cap 128).

#### Results

The total comprehensive income for the year was \$92,690,491 (2018: \$80,080,065).

#### Dividends

The Directors have not declared dividend for the financial year ended 2019 (2018: \$4,000,000).

#### **Going concern**

The Directors believe that the Authority will be able to continue to operate for at least 12 months from the date of this report.

#### Assets

The Directors took reasonable steps before the Authority's financial statements were made out to ascertain that the assets of the Authority were shown in the accounting records at a value equal to or below the value that would be expected to be realised in the ordinary course of business.

At the date of this report, the Directors were not aware of any circumstances which would render the values attributable to the assets in the financial statements misleading.

#### Transfer from asset revaluation reserves to retained earnings

The Directors resolved to transfer \$8,268,335 from asset revaluation reserves to retained earnings as a result of derecognition of assets during the financial year.

#### **Bad and doubtful debts**

The Directors took reasonable steps before the Authority's financial statements were made out to ascertain that all known bad debts were written off and adequate provision was made for doubtful debts.

At the date of this report, the Board members are not aware of any circumstances which would render the amount written off for bad debts, or the amount of the provision for doubtful debts, inadequate to any substantial extent.

#### Directors' Report continued

#### **Directors' benefits**

No director of the Authority has, since the last financial year, received or become entitled to receive any benefit (other than benefits included in the amount of consultancy fees and directors fees and expenses or shown in the financial statements under related party note) by reason of a contract made with the Authority or a related corporation with the director or with a firm of which he/she is a member or with a company in which a director has a substantial financial interest.

#### **Unusual transactions**

The results of the Authority's operations during the financial year have not, in the opinion of the directors been substantially affected by any item, transaction or event of a material and unusual nature other than those disclosed in the financial statements.

#### **Other circumstances**

At the date of this report, the Directors are not aware of any circumstances not otherwise dealt with in this report or financial statements, which render amounts stated in the financial statements misleading.

#### **Significant events**

There has not arisen in the interval between the end of the year and the date of this report any other item, transaction or event of a material and unusual nature that is likely, in the opinion of the Directors, to significantly affect the operations of SIEA, the results of those operations or the state of affairs of SIEA in subsequent financial years.

Honiara this 23 day of March 2020, Dated at

Signed in accordance with a resolution of the Directors.

Director

Director

# Solomon Islands Office of the Auditor-General



## INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF SOLOMON ISLANDS ELECTRICITY AUTHORITY TRADING AS SOLOMON POWER

#### **Report on the Audit of the Financial Statements**

#### Opinion

I have in joint consultation with the Board of the Solomon Islands Electricity Authority ("the Authority") pursuant to Electricity Act [Cap.128] contracted KPMG Fiji which is part of the KPMG International network to assist me to audit the accompanying financial statements of the Solomon Islands Electricity Authority, which comprise the statement of financial position as at 31 December 2019, and the statements of profit or loss and other comprehensive income, changes in equity and cash flow statements for the year then ended, and notes 1 to 29 comprising of a summary of significant accounting policies and information.

In my opinion, the accompanying financial statements give a true and fair view of the financial position of the Authority as at 31 December 2019, and of its financial performance, its changes in equity 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 of Supreme Audit Institutions (ISSAI). 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 International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants (IESBA Code) and the ethical requirements that are relevant to my audit of the financial statements and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### **Other information**

Management is responsible for the other information. The other information comprises the information included in the Directors' report, but does not include the financial statements and my auditors' report thereon. My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

#### **Responsibilities of Management and Directors for the Financial Statement**

Management are responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards 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, the management are 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 directors and management either intend to liquidate the Authority or to cease operations, or has 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 objective is 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 auditors' 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 International Standards of Supreme Audit Institutions (ISSAIs) 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 these financial statements.

As part of an audit in accordance with ISSAIs, 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 the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the 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 auditors' 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 auditors' 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 those charged with governance 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 identified during my audit.

#### **Report on Other Legal and Regulatory Requirements**

I have obtained all the information and explanations which to the best of my knowledge and belief, are necessary for the purposes of my audit.

In my opinion:

- i. Proper books of account have been kept by the Authority, sufficient to enable financial statements to be prepared, so far as it appears from my examination of those books; and
- ii. To the best of my knowledge and according to the information and explanations given to us the financial statements give the information required by Electricity Act (Cap. 128), State Owned Enterprises Act 2007 and Public Finance and Audit Act (Cap.120), in the manner so required.

Peter Lokay Auditor-General 24 March 2020 Office of the Auditor-General Honiara, Solomon Islands

### Statement of Comprehensive Income For the year ended 31 December 2019

	Notes	2019	2018
Operating income		\$	\$
Electricity sales	7 (a)	480,466,462	457,156,336
Amortisation of deferred income	20	7,715,936	6,395,050
Other operating income	9	8,933,899	5,486,818
Reversal of credit impairment	17 _	2,743,565	-
Total operating income		499,859,862	469,038,204
Expenses			
Generation and distribution	10	225,341,290	224,175,081
Administration	11	68,582,240	81,605,507
Operating	12	23,761,916	22,830,031
Depreciation and amortisation	14	64,259,234	56,672,749
Depreciation of right-of-use assets	24	3,664,350	-
Allowance for credit impairment	17	-	3,714,358
Interest expense		2,505,667	30,434
Inventory and asset write-off	14	18,773,115	92,140
Total expenses	_	406,887,811	389,120,299
Gain from operations		92,972,051	79,917,905
Foreign exchange (loss)/gain		(281,559)	162,160
Net profit for the year	_	92,690,491	80,080,065
Other comprehensive income		-	-
Total comprehensive income for the year	_	92,690,491	80,080,065

The notes disclosed on pages 38 to 67 are an integral part of the financial statements.

# Statement of Financial Position As at 31 December 2019

Assets	Notes	2019 \$	2018 \$
	Notes	Ş	Ş
Current assets	15	210 620 227	
Cash and cash equivalents Inventories	15 16	310,620,237	303,524, 441
Receivables	10	51,531,308 61,305,594	22,451,241 61,766,690
Prepayments	17	7,305,488	13,755,419
Total current assets	-	430,762,626	401,497,791
Non-current assets	-		
Property, plant and equipment	14	968,691,156	859,782,324
Right-of-use assets	24	7,984,758	-
Receivables	17	-	798,672
Government bonds	18	30,000,000	30,000,000
Total non-current assets	-	1,006,675,914	890,580,996
Total assets	-	1,437,438,540	1,292,078,787
Liabilities	-		
Current liabilities			
Deferred income	20	7715026	6 202 061
Trade and other payables	20	7,715,936 35,379,621	6,392,961 40,844,195
Lease liabilities	21	2,036,765	40,044,195
Borrowings from SIG	24	3,599,000	3,599,000
Employee benefits	23	4,244,522	6,778,721
Total current liabilities		52,975,844	57,614,877
Non-current liabilities	-		
Deferred income	20	122,181,545	74,065,116
Lease liabilities	24	2,191,164	-
Borrowings from SIG	22	19,495,564	10,928,257
Employee benefits	23	12,834,555	10,401,161
Total non-current liabilities		156,702,828	95,394,534
Total liabilities	-	209,678,672	153,009,411
Equity			
Contributed capital	19	246,933,170	246,933,170
Asset revaluation reserve	14	376,621,369	384,889,703
Accumulated profit	_	604,205,329	507,246,503
Total equity		1,227,759,868	1,139,069,376
Total equity and liabilities	=	1,437,438,540	1,292,078,787

Signed for and on behalf of the Board of Directors

Director

Director

The notes disclosed on pages 38 to 67 are an intergral part of the financial statements.

# Statement of Changes in Equity For the year ended 31 December 2019

	Contributed capital \$	Asset revaluation Reserves \$	Accumulated retained earnings \$	Total \$
Balance at 1 January 2018	246,933,170	384,889,703	412,160,294	1,043,983,168
Impact of change in accounting policy	-	-	15,006,144	15,006,144
Adjusted balance at 1 January 2018	246,933,170	384,889,703	427,166,438	1,058,989,312
Total comprehensive income for the year				
Net profit for the year	-	-	80,080,065	80,080,065
Balance at 31 December 2018	246,933,170	384,889,703	507,246,503	1,139,069,376
Balance at 1 January 2019	246,933,170	384,889,703	507,246,503	1,139,069,376
Total comprehensive income for the year				
Net Profit for the year	-	-	92,690,491	92,690,491
Disposal of revalued property, plant and equipment	-	(8,268,335)	8,268,335	-
Transactions with owners of SIEA directly recognised in equity				
Dividend declared and paid during the year	-	-	(4,000,000)	(4,000,000)
Balance at 31 December 2019	246,933,170	376,621,369	604,205,329	1,227,759,868

The notes disclosed on pages 38 to 67 are an integral part of the financial statements.

# Statement of Cash Flows For the year ended 31 December 2019

	Notes	2019 \$	2018 \$
Operating Activities			
Cash receipts from customers		493,403,694	463,137,780
Cash payments to suppliers and employees		(356,158,194)	(311,164,705)
Net cash provided by Operating Activities		137,245,500	151,973,075
Investing Activities			
Net redemption of debt securities		-	15,542,195
Net payments for property, plant and equipment		(191,872,350)	(123,060,103)
Net cash used in Investing Activities		(191,872,351)	(107,517,908)
Financing Activities			
Dividend paid		(4,000,000)	(4,000,000)
Net movement in SIG Borrowing		8,567,308	11,602,259
Cash receipts from donor grants	20	57,155,340	29,659,008
Net cash provided by Financing Activities		61,722,648	37,261,267
Net increase in cash and cash equivalents		7,095,796	81,716,434
Cash and cash equivalents at 1 January		303,524,441	221,808,007
Cash and cash equivalents at 31 December	15	310,620,237	303,524,441

The notes disclosed on pages 38 to 67 are an integral part of the financial statements.

## 1. Reporting entity

Solomon Islands Electricity Authority (SIEA or Authority) is a state owned enterprise established under the Electricity Act (Cap 128) 1969. SIEA's registered office and principal place of business is at the Ranadi Complex, Solomon Islands. There are no subsidiary companies.

#### 2. Nature of operations

The principal activity of SIEA is the generation, distribution and sale of electricity in the Solomon Islands. SIEA is the owner and operator of the Solomon Islands Government's owned electricity supply systems.

#### 3. Basis of preparation

The financial statements have been presented in accordance with the State-Owned Enterprise Act 2007, and in accordance with accepted reporting principles. The financial statements comply with International Financial Reporting Standards (IFRS) and other applicable Financial Reporting Standards.

This is the first set of the Authority's annual financial statements in which IFRS 16 Leases has been applied. Changes to significant accounting policies are described in Note 6.

#### a) Presentation of currency

The financial statements are presented in Solomon Islands Dollars ("SBD"), which is SIEA's functional and presentation currency. All financial information is presented in Solomon Islands Dollars and has been rounded to the nearest dollar, except when otherwise indicated.

#### 4. Measurement basis

The measurement basis adopted in the preparation of these financial statements is historical cost unless stated otherwise.

#### 5. Use of estimates and judgements

The preparation of the financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revision to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements is included in the following notes:

- Note 7 (c) Impairment of financial assets
- Note 7 (e) (iii) Revaluation of property, plant and equipment
- Note 7 (e) (iv) Impairment of non-financial assets
- Note 7 (g) Employee benefits

# 6. New Standards, amendments, annual improvements and interpretations which have been issued but not adopted as at 31 December 2019

Apart from the adoption of IFRS 16 Leases, a number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after 1 January 2019, and have not been applied in preparing these financial statements. None of the new standards is expected to have a significant effect on the financial statements of SIEA except for IFRS 16 "Leases".

IFRS 16 'Leases', removes the classification of leases as either operating leases or finance leases - for the lessee - effectively treating all leases as finance leases. Short-term leases (less than 12 months) and leases of low-value assets (such as personal computers) are exempt from the lease accounting requirements. There are also changes in accounting over the life of the lease. In particular, companies will now recognise a front-loaded pattern of expense for most leases, even when they pay constant annual rentals. Lessor accounting remains similar to current practice - i.e. lessors continue to classify leases as finance and operating leases. The standard is effective for annual reporting periods beginning on or after 1 January 2019, with early adoption permitted.

#### Change in accounting policies

Except for the change below, the Authority has consistently applied the accounting policies to all periods presented in these financial statements.

#### **IFRS 16 Leases**

SIEA has applied IFRS 16 with a date of initial application of 1 January 2019. As a result, SIEA has changed its accounting policy for lease contracts as detailed below.

SIEA has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised in retained earnings at 1 January 2019. The details of the changes in accounting policies are disclosed below.

i. Definition of a lease

Previously, SIEA determined at contract inception whether an arrangement is or contains a lease under IFRIC 4. Under IFRS 16, SIEA assesses whether a contract is or contains a lease based on the definition of a lease.

On transition to IFRS 16, SIEA elected to apply the practical expedient to grandfather the assessment of which transactions are leases. It applied IFRS 16 only to contracts that were previously identified as leases. Contracts that were not identified as leases under IAS 17 and IFRC 4 were not reassessed for whether there is a lease. Therefore, the definition of a lease under IFRS 16 was applied only to contracts entered into or changed on or after 1 January 2019.

ii. As a lessee

As a lessee, SIEA previously classified leases as operating or finance leases based on its assessment of whether the lease transferred significantly all of the risks and rewards incidental to ownership of the underlying asset to SIEA. Under IFRS 16, SIEA recognises right-of-use assets and lease liabilities for most leases – i.e. these leases are on-balance sheet.

SIEA decided to apply recognition exemptions to short-term leases of machinery and leases of IT equipment . For leases of other assets which, were classified as operating under IAS 17, SIEA recognised right-of-use assets and lease liabilities.

iii. As a lessor

SIEA is not required to make any adjustments on transition to IFRS 16 for leases in which it acts as a lessor, except for a sub-lease. SIEA accounted for its leases in accordance with IFRS 16 from the date of initial application.

Under IFRS 16, SIEA is required to assess the classification of a sub-lease with reference to the right-of-use asset, not the underlying asset. On transition, SIEA reassessed the classification of a sub-lease contract previously classified as an operating lease under IAS 17. SIEA concluded that the sub-lease is a finance lease under IFRS 16. SIEA applied IFRS 15 Revenue from Contracts with Customers to allocate consideration in the contract to each lease and non-lease component.

New Standards, amendments, annual improvements and interpretation which have been issued but not adopted as at 31 December 2019 *continued* 

# iv. Impacts on Financial Statements

On transition to IFRS 16, SIEA recognised an additional \$5,711,989 right-of-use asset and \$5,711,989 of lease liabilities, recognising the difference in retained earnings. The impact on transition is summarised below:

When measuring lease liabilities, SIEA discounted lease payments using its incremental borrowing rate at 1 January 2019. The weighted-average rate applied is 12%.

	1 January 2019 \$
Operating lease commitments at 31 December 2018 as disclosed under IAS 17	8,567,550
Discounted using the incremental borrowing rate at 1 January 2019	(486,558)
Recognition exemption for leases of low value	(1,556,780)
Recognition exemption for leases with 12 months of lease term at transition	(812,223)
Lease liabilities recognised at 1 January 2019	5,711,989

# 7. Summary of significant accounting policies

#### a) Revenue

Under IFRS 15, revenue is recognised by the Authority when or as it satisfies a performance obligation by transferring a service to a customer, either at a point in time (when) or over time (as). For the generation, distribution and sales of electricity, the customer simultaneously receives and consumes the benefits provided as the Authority renders the service. This has resulted in revenue from sale of electricity being recognised over time which was previously recognised at a point in time under IAS 18.

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. SIEA recognises revenue when it transfers control over a product or service to a customer.

Nature and timing of satisfaction of performance obligations and significant payment terms

There is an implied contract between a customer and the Authority for the purchase, delivery, and sale of electricity. This represents a promise to transfer a series of distinct goods that are substantially the same and that have the same pattern of transfer to the customer. The customer obtains control of the good (electricity) when delivered and consumed by them over time.

Invoices are issued monthly and are usually payable within 30 days thus there is no significant financing component.

Contract with customers permit quantities of electricity consumed to be estimated based on previous months' average consumption in the event the Authority could not conduct the monthly meter readings.

	2019 \$	2018 \$
Revenue from contracts with customers	480,466,462	457,156,336
Other revenue		
Amortisation of deferred income	7,715,936	6,395,050
Interest received	2,600,551	1,165,681
Income from asset relocation	2,494,784	-
Tina Hydro refunds	789,647	-
Stale cheques	972,915	-
Other income	2,076,001	4,321,137
Reversal of credit impairment	2,743,565	
Total revenue	499,859,862	469,038,204

# 7. Summary of significant accounting policies continued

#### b) Financial instruments

i. Recognition and initial measurement

Trade receivables and debt securities issued are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Authority becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at Fair Value Through Profit and Loss (FVTPL), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

## ii. Classification and subsequent measurement

#### **Financial assets**

On initial recognition, a financial asset is classified as measured at: amortised cost; Fair Value through Other Comprehensive Income (FVOCI) - debt investment; FVOCI - equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Authority changes its business model for managing financial assets in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Authority may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income (OCI). This election is made on an investment by investment basis.

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. On initial recognition, the Authority may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

## 7. Summary of significant accounting policies continued

## Financial assets: Business model assessment

The Authority makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realising cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Authority's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how managers of the business are compensated e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and,
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Authority's recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

#### Financial assets: Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Authority considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Authority considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and,
- terms that limit the Authority's claim to cash flows from specified assets (e.g. non recourse features).

A prepayment feature is consistent with solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally for a financial asset acquired at a significant discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

#### Financial assets: Subsequent measurement and gains and losses

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.
Financial assets at amortised cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

## 7. Summary of significant accounting policies continued

Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss. These include short term investments (term deposits).
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss. The Authority's equity investments (if any) would relate to investments in listed securities.

#### Financial liabilities - Classification, subsequent measurement and gains and losses

Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. Any gain or loss on derecognition is also recognised in profit or loss.

#### Derecognition

#### Financial assets

SIEA derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which SIEA neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

SIEA enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognised.

#### **Financial liabilities**

SIEA derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. SIEA also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

#### Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, SIEA currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

#### 7. Summary of significant accounting policies continued

## c) Impairment of non-derivative financial assets

#### Financial instruments:

SIEA recognises loss allowances for expected credit losses (ECL) on financial assets measured at amortised cost.

SIEA measures loss allowances at an amount equal to lifetime ECL, except for the following, which are measured as 12 month ECL

- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and cash at bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowances for trade receivables is always measured at an amount equal to lifetime ECL as it does not include significant financing component.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Authority considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Authority's historical experience and informed credit assessment and including forward-looking information.

SIEA assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due. SIEA considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to SIEA in full, without recourse by the Authority to actions such as realising security (if any is held); or
- the financial asset is more than 90 days past due.

SIEA considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade'. The Authority considers this to be Baa3 or higher per rating agency Moody's or BBB- or higher per rating agency Standards & Poor's.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which SIEA is exposed to credit risk.

## 7. Summary of significant accounting policies continued

Measurement of ECLs:

ECLs are a probability-weighted estimate of credit losses. They are measured as follows: the present value of all cash shortfalls (i.e. the difference between the cash flows owed to the Authority in accordance with the contract and the cash flows that SIEA expects to receive).

ECLs are discounted at the effective interest rate of the financial asset.

## Credit-impaired financial assets:

At each reporting date, the Authority assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- Significant financial difficulty of the borrower or issuer;
- A breach of contract such as a default or being more than 90 days past due;
- It is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- The disappearance of an active market for a security because of financial difficulties.

#### Presentation of allowance for ECL in the statement of financial position:

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets.

## Write-off:

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when SIEA determines that the debtor does not have assets or sources of income or adequate customer deposits that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Authority's procedures for recovery of amounts due.

#### d) Inventories

Inventory is recorded at the lower of cost and net realisable value after due consideration for excess and obsolete items. The cost of inventories is based on a weighted average basis and includes expenditure incurred in acquiring the inventories and other costs incurred in bringing them to their existing location and condition.

#### e) Property, plant and equipment

Property, plant and equipment are initially recognised at cost less accumulated depreciation and impairment losses. Cost is determined by including all costs directly associated with bringing the assets to their location and condition for their intended use. The recognition threshold is \$5,000.

Purchased items including software that is integral to the functionality of the related equipment is capitalised as part of that equipment. When parts of an item of property, plant and equipment have materially different useful lives they are accounted for as separate items (major components) of property, plant and equipment.

#### 7. Summary of significant accounting policies continued

The gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and is recognised net within other income/other expenses in statement of comprehensive income. When revalued assets are sold, any related amount included in the asset revaluation reserve is transferred to retained earnings.

#### i. Subsequent expenditure

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the component will flow to SIEA and its cost can be measured reliably. The costs of the day-to-day servicing and maintenance of property, plant and equipment are recognised in profit or loss as incurred.

#### ii. Depreciation

Depreciation is based on either the cost or revalued amount of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation of property, plant and equipment is calculated using the straight line method to write down the cost or revalued amount of property, plant and equipment to its estimated residual value over its estimated useful life.

The standard estimated useful lives and depreciation rates for SIEA asset classes are as follows:

Land - Freehold - unlimited Land - Leasehold - 50 or 75 years as per the lease agreements Buildings - Operational including power stations - 20 to 30 years Buildings - Non-operational - 15 to 50 years Generators - 10 to 40 years Plant & equipment - 10 to 25 years Distribution network - 20 to 60 years Furniture & equipment - 5 years Furniture & equipment - 5 years Furniture & equipment - Information technology - 3 to 5 years Motor vehicles - 5 years Tools - 3 to 5 years

The useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

## iii. Revaluation of property, plant and equipment

Land, buildings, generators and plants are shown at fair value, based on valuations by external independent valuers, less subsequent depreciation of assets. The fair values are recognised in the financial statements of SIEA, and are reviewed at the end of each reporting period to ensure that the carrying value of assets is not materially different to their fair values.

The primary valuation methodologies used in valuing land and buildings are the direct comparison and income capitalisation approaches cross checked with cost approach. These methodologies use market derived assumptions including rents, capitalisation and terminal rates, and discount rates obtained from analysed transactions. The adopted methodologies are considered to provide the best estimate of value.

The Directors propose to have such asset revaluations every three or five years.

Electricity infrastructure assets are valued on an optimised depreciated replacement cost (ODRC) approach. The ODRC valuation of electricity assets is generally considered to represent the minimum cost of replacing or replicating the service potential embodied in the network with modern equivalent assets in the most efficient way possible from an engineering perspective, given the service requirements, the age and condition of the existing assets and replacement in the normal course of business.

# 7. Summary of significant accounting polices continued

Any revaluation increase arising on the revaluation of assets is credited to the asset revaluation reserve, except to the extent that it reverses a revaluation decrease for the same asset previously recognised as an expense in profit or loss, in which case the increase is credited to the profit or loss to the extent of the decrease previously charged. A decrease in carrying amount arising on the revaluation of assets is charged as an expense in statement of comprehensive income to the extent that it exceeds the balance, if any, held in the asset revaluation reserve relating to a previous revaluation of that asset.

Depreciation on revalued assets is charged to profit or loss. On the subsequent sale or retirement of a revalued asset, the attributable revaluation surplus remaining in the asset revaluation reserve, is transferred directly to retained earnings.

#### iv. Impairment of non-financial assets

At each reporting date, SIEA reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are largely independent from other assets, the company estimates the recoverable amount of the cash generating unit to which the asset belongs.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. 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 for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash generating unit) is reduced to its recoverable amount. An impairment loss is recognised in profit or loss immediately, unless the relevant asset is carried at fair value, in which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash generating unit) is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash generating unit) in prior years. A reversal of an impairment loss is recognised in profit or loss immediately, unless the relevant asset is carried at fair value, in which case the reversal of the impairment loss is treated as a revaluation increase through OCI.

#### v. Intangible assets

The cost of acquiring an intangible asset is amortised from the date the underlying asset is held ready for use on a straight line basis over the period of its expected benefit, which is as follows:

Software - 3 to 7 years Easements - indefinite

Easements are deemed to have an indefinite useful life, as the contracts do not have a maturity date and SIEA expects to use the easements indefinitely. Therefore, easements are not amortised. Their value is assessed annually for impairment, and their carrying value is written down if found impaired. SIEA capitalises the direct costs associated with putting the easements in place. These costs include registration and associated legal costs and also any injurious affection payments. Where SIEA buys land and then establishes an easement, a valuation is obtained for the easement. This valuation is used as deemed easement cost and capitalised, with a corresponding reduction in the land valuation.

Certain easements may have been donated by the Crown. These are recognised at cost (\$nil) plus any direct cost associated with putting the easement in place.

For intangibles with a finite life, where the periods of expected benefit or recoverable values have diminished due to technological change or market conditions, amortisation is accelerated or the carrying value is written down.

# 7. Summary of significant accounting policies continued

## f) Capital work in progress

Capital work in progress is recorded at cost. Cost is determined by including all costs directly associated with bringing the assets to their location and condition. Finance costs incurred during the period of time that is required to complete and prepare the asset for its intended use are capitalised as part of the total cost for capital work in progress. The finance costs capitalised are based on the company's weighted average cost of borrowing. Assets are transferred from capital work in progress to property, plant and equipment as they become operational and available for its intended use.

#### g) Employee benefits

Provision is made for benefits accruing to employees when it is probable that settlement will be required and they are capable of being measured reliably.

#### Short-term benefits

Short-term benefits comprises of accrued salaries and wages, bonus, annual leave, and entitlement to Solomon Islands National Provident Fund are expenses as the related service is provided.

Provisions made in respect of employee benefits expected to be settled within 12 months, are measured at their nominal values using the rate expected to apply at the time of settlement.

#### Long-term benefits

A early retirement scheme is a long-term benefit provided by SIEA to its employees.

Provisions made in respect of employee benefits that are not expected to be settled within 12 months are measured at the present value of the estimated cash flows to be made by SIEA in respect of future benefits that employees have earned in return for their services in the current and prior periods.

#### h) Taxation

Under the Electricity Act, SIEA is exempt from income tax.

#### i) Foreign currency transactions

Transactions denominated in a foreign currency that are not hedged are converted at the prevalent exchange rate at the date of the transaction. Foreign currency receivables and payables at balance sheet date are translated at exchange rates prevailing at balance sheet date. Exchange differences arising on the translation or settlement of accounts payable and receivable in foreign currencies are recognised in the statement of comprehensive income.

#### j) Cash flow statement

For the purposes of the cash flow statement, cash is considered to be cash held in bank accounts (net of bank overdrafts) plus highly liquid investments that are readily convertible to known amounts of cash, which are subject to an insignificant risk of changes in value. Cash flows from certain items are disclosed net, due to the short term maturities and volume of transactions involved.

## 7. Summary of significant accounting policies continued

## k) Grants

An unconditional grant related to an asset is recognised in statement of comprehensive income as other income when the grant becomes receivable.

Other grants are recognised initially as deferred income at fair value when there is reasonable assurance that they will be received and SIEA will comply with the conditions associated with the grant and are then recognised in statement of comprehensive income as other income on a systematic basis over the useful life of the asset. Grants that compensate SIEA for expenses incurred are recognised in statement of comprehensive income as other operating income in the same periods in which the expenses are recognised.

#### I) Provisions

SIEA recognises provisions when there is a present obligation, the future sacrifice of economic benefits is probable, and the amount of the provision can be measured reliably. The amount recognised is the best estimate of the consideration required to settle the present obligation at reporting date, taking into account the risks and uncertainties surrounding the obligation at reporting date. Where a provision is measuring the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows.

#### m) Leases

SIEA has applied IFRS 16 using the modified retrospective approach and therefore the comparative information has not been restated and continues to be reported under IAS 17 and IFRIC 4. The details of accounting policies under IAS 17 and IFRIC 4 are disclosed separately if they are different from those under IFRS 16 and the impact of changes is disclosed in Note 6.

#### Policy applicable before 1 January 2019

For contracts entered into before 1 January 2019, SIEA determined whether the arrangement was or contained a lease based on the assessment of whether:

- Fulfillment of the arrangement was dependent on the use of a specified asset or assets; and
- The arrangement had conveyed a right to use the asset. An arrangement conveyed the right to use the asset if one of the following was met:
  - The purchaser had the ability or right to operate the asset while obtaining or controlling more than an insignificant amount of the output;
  - The purchaser had the ability or right to control physical access to the asset while obtaining or controlling more than an insignificant amount of the output; or
  - Facts and circumstances indicated that it was remote that other parties would take more than an insignificant amount of the output, and the price per unit was neither fixed per unit of output nor equal to the current market price per unit of output.

#### Policy applicable from 1 January 2019

At inception of contract, SIEA assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, SIEA assesses whether:

- The contract involves the use of an identified asset this may be specified explicitly or implicitly and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, the asset is not identified;
- SIEA has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and
- SIEA has the right to direct the use of the asset. SIEA has this right when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used. In rare cases where the decision about how and for what purpose the asset is used is predetermined, SIEA has the right to direct the use of the asset if either:
  - SIEA has the right to operate the asset : or
  - SIEA designed the asset in a way that predetermines how and for what purpose it will be used.

This policy is applied to contracts entered into, or changed, on or after 1 January 2019.

At inception or on reassessment of a contract that contains a lease component, SIEA allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, SIEA has elected not to separate non-lease components and account for the leases and non-lease components as a single lease.

#### 7. Summary of significant accounting policies continued

#### As a lessee

SIEA recognises a right-of-use asset and a lease liability at the lease commencement date. The right -of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, SIEA's incremental borrowing rate. Generally, SIEA uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

- Fixed payments, including in-substance fixed payments;
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- Amounts expected to be payable under a residual value guarantee; and
- The exercise price under a purchase option that SIEA is reasonably certain to exercise, lease payments in an optional renewal period if SIEA is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless SIEA is reasonably certain not to terminate early.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured where there is a change in future lease payments arising from a change in an index or rate, if there is a change in SIEA's estimate of the amount expected to be payable under a residual value guarantee, or if SIEA changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

#### Short-term leases and leases of low-value assets

SIEA has elected not to recognise right-of-use assets and lease liabilities for short-term leases of machinery that have a lease term of 12 months or less and leases of low-value assets, including IT equipment. SIEA recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

#### 7. Summary of significant accounting policies continued

#### Under IAS 17

In the comparative period, as a lessee SIEA classified leases that transfer substantially all of the risks and rewards of ownership as finance leases. When this was the case, the leased assets were measured initially at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Minimum lease payments were the payments over the lease term that the lessee was required to make, excluding any contingent rent.

Subsequently, the assets were accounted for in accordance with the accounting policy applicable to that asset.

Asset held under other leases were classified as operating leases and were not recognised in SIEA's statement of financial position. Payments made under operating leases were recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received were recognised as an integral part of the total expense, over the term of the lease.

#### i. As a lessor

When SIEA acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, SIEA makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, SIEA considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When SIEA is an intermediate lessor, it accounts for its interest in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which SIEA applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, SIEA applies IFRS 15 to allocate the consideration in the contract.

#### 8. Financial risk management

#### Overview

SIEA has exposure to the following risks from its use of financial instruments:

- i) Credit risk
- ii) Liquidity risk
- iii) Market risk
- iv) Interest rate risk

This note presents information about SIEA's exposure to each of the above risks and SIEA's objectives, policies and processes for measuring and managing risk. Further quantitative disclosures are included throughout these financial statements.

## **Risk management framework**

The Board of Directors has overall responsibility for the establishment and oversight of SIEA's risk management framework. SIEA's risk management policies are established to identify and analyse the risks faced by SIEA, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and SIEA's activities. SIEA, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

SIEA's Board oversees how management monitors compliance with SIEA's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by SIEA. The Board is assisted in their oversight role by Internal Audit. Internal Audit undertakes both regular and ad-hoc reviews of risk management controls and processes, the result of which is reported to the Board.

The above risks are limited by SIEA's financial management policies and procedures as described on the next page.

# 8. Financial risk management continued

## i. Credit Risk

Credit risk is the risk of financial loss to SIEA if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from SIEA's receivables from customers, investment in debt securities, and cash and call deposits.

SIEA's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of SIEA's customer base, including the default risk of the industry as these factors may have an influence on credit risk.

The carrying amount of financial assets represents the maximum credit exposure.

#### Expected credit loss assessment for trade receivables Trade receivables

SIEA uses a provision matrix to determine the lifetime expected credit losses. It is based on the SIEA's historical observed default rates, and adjusted by a forward-looking estimate that includes the probability of a worsening economic environment within the next year. At each reporting date, the Authority updates the observed default history and forward-looking estimates. SIEA uses an allowance matrix to measure the ECLs of Trade receivables from individual customers, which comprise a large number of balances.

Loss rates are calculated using a 'roll rate' method based on the probability of a receivable progressing through successive stages of delinquency to write-off.

The following table provides information about the exposure to credit risk and ECLs for trade receivables and contract assets from individual customers categorised into kilowatt debtors and cash power debtors as at:

## kilowatt debtors:

	Weighted average loss	Gross carrying amount	Loss allowance	Credit impaired
2019	rates	\$	\$	
Current - 30 days past due	11.79%	21,650,569	2,552,403	No
30 - 59 days past due	22.00%	10,104,633	2,223,082	No
60 - 89 days past due	46.03%	4,086,015	1,880,793	No
90 or more days in past due	62.58%	10,452,861	6,541,400	Yes
		46,294,077	13,197,677	
2018				
Current - 30 days past due	12.19%	25,748,106	3,138,423	No
30 - 59 days past due	23.99%	12,297,105	2,949,588	No
60 - 89 days past due	46.03%	7,665,957	3,528,433	No
90 or more days in past due	62.58%	11,477,661	7,182,651	Yes
		57,188,829	16,799,096	

# 8. Financial risk management continued

Credit risk continued

Cash power debtors:

2019	Weighted average loss rates	Gross carrying amount \$	Loss allowance \$	Credit Impaired
Current - 30 days past due	9.70%	59,132	5,736	No
30 - 59 days past due	11.81%	102,124	12,061	No
60 - 89 days past due	12.36%	153,173	18,932	No
90 or more days in past due	17.70%	9,334,730	1,652,366	Yes
		9,649,159	1,689,094	
2018				
Current - 30 days past due	9.70%	111,682	10,832	No
30 - 59 days past due	11.81%	51,469	6,081	No
60 - 89 days past due	12.36%	65,630	8,109	No
90 or more days in past due	13.10%	10,280,322	1,346,999	Yes
		10,509,105	1,372,022	

Loss rates are based on actual credit loss experienced over the past two years. These rates are multiplied by scalar factors to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Authority's view of economic conditions over the expected lives of the receivables. Scalar factors are based on actual and forecast GDP growth rates or inflation rates.

The movement in the allowance for impairment in respect of trade receivables and other receivables during the year is disclosed in note 17.

Impairment on other receivables from Solomon Islands Government and state-owned entities has been measured on the 12 month expected loss basis, and the resulted impairment losses was and is not considered material by management on reporting date.

#### Cash and cash equivalents

SIEA held cash and cash equivalents of \$310,620,435 at 31 December 2019 (2018: \$303,524,441). The cash is held with different banks, whose ratings ranged from Aa3 to Caa1 based on Moody's credit ratings.

Impairment on cash and cash equivalents has been measured on the 12 month expected loss basis and reflects the short maturities of the exposures.

SIEA uses a similar approach for assessment of ECLs for cash and cash equivalents to those used for debt securities.

Accordingly, due to short maturities, the Authority did not recognise an impairment allowance against cash and cash equivalents as at 31 December 2019 (2018: \$nil)

## 8. Financial risk management continued

## **Debt investment securities**

SIEA held debt investment securities of \$91,337,727 at 31 December 2019 (2018: \$75,749,190). The debt investment securities are held with institutions which are rated Aa3 to B3 based on Moody's credit ratings. In relation to debt investment securities held with these institutions, the Authority monitors changes in credit risk by tracking published external credit ratings but when external credit ratings are not available or published, SIEA monitors changes in credit risk by reviewing available press and regulatory information.

Impairment on debt investment securities held with banks and Solomon Islands Government has been measured on the 12 month expected loss basis.

The Authority did not recognise an impairment allowance against debt securities as at 31 December 2019 (2018: \$nil)

#### ii) Liquidity risk

Liquidity risk is the risk that SIEA will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. SIEA's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to SIEA's reputation.

SIEA ensures that it has sufficient cash on hand to meet operational expenses including the servicing of financial obligations but this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters.

## 8. Financial risk management continued

The following are the contractual maturities of financial liabilities:

# 31 December 2019

	Carrying amount	6 months or less	6-12 months	Greater than 1 year	Total
Financial liabilities	\$	\$	\$	\$	\$
Trade and other payables	33,154,153	33,154,153	-	-	33,154,153
Solomon Islands Government loan	23,094,564	2,261,391	2,225,401	21,805,139	26,291,932
	56,248,717	35,415,544	2,225,401	21,805,139	59,446,084
				<b>a</b>	
31 December 2018	Carrying amount	6 months or less	6-12 months	Greater than 1 year	Total
31 December 2018			•		Total \$
31 December 2018 Financial Liabilities	amount	or less	months	1 year	
	amount	or less	months	1 year	
Financial Liabilities	amount \$	or less \$	months	1 year	\$

#### iii. Market risk

Market risk is the risk that changes in market prices, such as fuel prices, foreign exchange rates and interest rates will affect SIEA's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

## Fuel price risk

SIEA is subject to a monthly tariff review. The tariff is based on The Electricity Tariff (Base Tariff and Tariff Adjustments) Regulations 2016 which is adjusted every month for the Honiara Consumer Price Index (CPI), the Producers Price Index (PPI, USA), the exchange rate between the US\$ and SBD and the fuel price movements. Fuel costs of \$177 million (2018: \$181 million) comprises 43% (2018: 47%) of the expenditure of SIEA, so movements in fuel prices are critical to the profitability of SIEA. The monthly tariff review however considers the fuel price movements, the CPI, PPI and exchange rate changes, therefore there is a natural hedge against market movements.

A change of 100 basis points (bp) in fuel pricing at the reporting date would have increased/ (decreased) profit or loss by amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant.

# **Profit or loss**

	100bp decrease	100bp increase
	\$000	\$000
Revenue	478,900	520,800
Expenditure	389,469	424,869
Net Profit	89,431	95,931

## 8. Financial risk management continued

## iv) Interest rate risk

Interest rate risk is the risk that a change in interest rates will impact net interest costs and borrowings.

SIEA has invested in debt securities and has interest-bearing borrowing from the Solomon Islands Government. These are at a fixed interest rate during the term of the instruments.

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 and interest expenses. Accordingly, SIEA does not require simulations to be performed over impact on net profits arising from changes in interest rates.

Furthermore, for those financial assets and financial liabilities which are not carried at fair value, their carrying amount is considered a reasonable approximation of fair value.

## v) Currency risk

The Authority is exposed to currency risk to the extent that there is a mismatch between the currencies in which purchases, and borrowings are denominated and the respective functional currencies. The Authority does not have significant exposure to currency risk.

9.	Other operating income	Note	2019 \$	2018 \$
	Community service obligation		-	1,500,000
	Other		1,904,950	760,549
	Income from asset relocation		2,494,784	-
	Tina Hydro refunds		789,647	-
	Stale cheques		972,915	-
	Reconnections		1,500	3,200
	Gain on disposal of fixed assets		-	196,773
	interest received		2,600,551	1,165,681
	Unconditional grant income		169,551	1,860,615
			8,933,899	5,486,818
10.	Generation and distribution			
	Fuel		177,077,975	180,667,381
	Lubricating oil		3,255,571	3,888,180
	Other		2,820,000	4,010,500
	Personnel	13	26,212,457	23,828,353
	Repairs and maintenance		15,975,286	11,780,667
			225,341,290	224,175,081

11.	Administration	Note	2019	2018
			\$	\$
	Advertising		1,440,630	1,682,314
	Bank fees		243,767	257,000
	Computer bureau charges		1,785,710	1,659,243
	Consultancy fees		4,376,917	11,273,094
	Directors fees and expenses		454,377	451,588
	Electricity		3,187,531	2,969,773
	Electricity rebate		4,952,714	5,080,129
	Freight		1,339,369	505,717
	Insurance		2,504,500	2,558,392
	Personnel	13	32,772,778	39,187,093
	Printing and stationery		2,218,161	1,829,337
	Professional fees		2,569,010	1,504,846
	Property expenses		3,821,232	4,895,004
	Telecommunication		3,387,565	3,631,425
	Travel and accommodation		3,527,978	4,120,552
			68,582,240	81,605,507
12.	Operating expenses			
	Customs handling charges		4,083,563	4,948,308
	Personnel	13	11,861,047	12,030,377
	Repairs and maintenance		3,580,032	1,909,207
	Vehicle costs		4,237,273	3,942,139
			23,761,916	22,830,031
13.	Personnel expenses			
	Salaries and wages		49,716,519	45,429,198
	NPF		3,033,529	3,046,477
	Retirement benefit expense		3,644,767	15,833,287
	Others		14,451,467	10,736,861
			70,846,282	75,045,823
	Personnel expenses classed by function is as follows:			
	Generation and distribution		26,212,457	23,828,353
	Administration		32,772,778	39,187,093
	Operating expenses		11,861,047	12,030,377
			70,846,282	75,045,823

Solomon Islands Electricity Authority trading as SOLOMON POWER

# Notes to the Financial Statements For the year ended 31 December 2019

14. Property, plant and equipment

	Land	Buildings	Generators	Plant and equipment	Distribution network	Furniture & equipment	Motor vehicles	Tools	Work in progress	Total
Cost/Revaluation	Ş	Ş	ŝ	ŝ	ŝ	ŝ	ŝ	Ş	Ş	ŝ
Balance as 1 January 2018	55,131,363	167,339,922	241,104,490	60,005,380	223,763,048	24,580,090	25,118,275	7,972,881	106,464,573	911,480,021
Additions									123,570,342	123,570,342
Disposals	(4,112)	·			(227,976)	I	(958,867)	(53,449)		(1,244,404)
Work in progress capitalised	1,039,783	16,812,269	23,720,404	15,426,561	70,118,198	7,054,773	3,307,460	2,835,278	(140,314,726)	
Balance at 31 December 2018	56,167,034	184,152,191	264,824,894	75,431,941	293,653,269	31,634,863	27,466,868	10,754,710	89,720,189	1,033,805,959 101 872 351
Disposals	(000'62)	(3,364,001)	(2,133,322)	(3,436,715)	(15,996,261)	(768,922)	(104,251)	(25,752)	-	(25,908,223)
Work in progress capitalised	7,681,046	8,876,777	14,135,829	33,636,926	43,390,519	3,466,605	2,195,639	1,658,495	(115,041,836)	ı
Balance at 31 December 2019	63,769,080	189,664,967	276,827,401	105,632,152	321,047,528	34,332,545	29,558,256	12,387,453	166,550,704 1,199,770,087	,199,770,087
Breakdown of cost/revaluation										
Revaluations	34,688,634	47,110,945	47,010,361	69,099,607 36 533 545	178,711,822 14255265	-	-	- -		376,621,369
	29,000,440	142,004,022	229,017,041	C+C,2CC,0C	00//000/741	C+C,2CC,+C	007'000'67	CC4, /OC,21	+0//0cc/001	01/140/10
Balance at 31 December 2019 Acrimulated deriveriation and imnairment loce	63,769,080	189,664,967	276,827,401	105,632,152	321,047,528	34,332,545	29,558,256	12,387,453	166,550,704 1,199,770,086	,199,770,086
Balance as 1 January 2018	7,170,064	9,206,154	36,830,493	7,090,782	17,379,977	14,917,362	19,860,583	5,826,804		118,282,220
Depreciation	I	8,954,942	20,280,128	5,327,358	10,542,195	3,410,849	3,096,065	1,564,988	I	53,176,524
Amortisation of leasehold land - restated	3,496,225	1	'		ı	ı	'	I	1	3,496,225
Depreciation on disposed assets			-	-	(2,850)		(927,320)	(1,164)	-	(931,334)
Balance at 31 December 2018	10,666,289	18,161,096	57,110,621	12,418,140	27,919,322	18,328,211	22,029,328	7,390,629	•	174,023,635
Depreciation	ı	9,189,636	25,312,296	5,387,539	13,337,005	4,313,600	2,291,368	1,845,685	1	61,677,131
Amortisation of leasehold land	2,582,103	I	I	I	I	I	'	ı	I	2,582,103
Depreciation on disposed assets		(887,482)	(1,974,455)	(1,546,217)	(1,921,818)	(749,185)	(104,251)	(20,531)		(7,203,938)
Balance at 31 December 2019	13,248,392	26,463,250	80,448,462	16,259,462	39,334,510	21,892,626	24,216,446	9,215,782	1	231,078,930
Carrying amounts										
At 31 December 2017 - restated	47,961,298	158,133,768	204,273,996	52,914,598	206,383,071	9,662,728	5,257,691	2,146,077	106,464,573	793,197,801
At 31 December 2018	45,500,745	165,991,095	207,714,273	63,013,802	265,733,947	13,306,652	5,437,540	3,364,082	89,720,189	859,782,324
At 31 December 2019	50,520,688	163,201,716	196,378,939	89,372,690	281,713,018	12,439,920	5,341,811	3,171,670	166,550,704	968,691,157

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## 14. Property, plant and equipment continued

SIEA has a policy to revalue infrastructure and property assets every 3 or 5 years. The last such revaluation was completed in 2016. SIEA is of the opinion that there has been no material change in the carrying value of these assets since that revaluation. In 2016 SIEA engaged Sinclair Knights Merz (SKM) to carry out an independent valuation of the following classes of assets:

Generators Distribution network Plant and equipment

The valuation methodology utilised by SKM was the optimised depreciated replacement cost (ODRC) approach which is generally considered to represent the minimum cost of replacing the service potential embodied in the network with modem equivalent assets in the most efficient manner from an engineering perspective given the service requirements, the age and condition of the existing assets.

In 2016 SIEA also engaged Value Solutions Appraisal (VSA) to carry out an independent valuation of all land and buildings. They were valued at fair value, based on market based evidence using Discounted Cash Flows upon the appraisal of a professionally qualified valuer.

These valuations were completed in January and December 2016 by SKM and VSA respectively and booked into the accounts from those dates and are accordingly reflected in the financial statements as at 31 December 2016.

In 2016 the combined results of this valuation process was an increase in fixed assets and the asset revaluation reserve of \$85,414,971. However, this increase in value was partially offset by an impairment loss of \$158,334 which was expensed in the statement of comprehensive income.

During the year, management undertook a fixed asset verification of its buildings, plant and equipment to ascertain its existence and value, which resulted in a net write-off of \$18,773,115, which were book value of assets not in existence or no longer operational.

SIEA holds both Perpetual Estate Lands and Fixed Term Estate (FTE) Lands. In 2014, it was agreed with the Auditor General that FTE lands should be treated under IAS 16 Property, Plant and Equipment and depreciated over the term of the FTE. This was owing to the fact that as per the Land and Titles Act (Cap 133), the holder of FTEs in Land has the right to occupy, use and enjoy the Land for a fixed period of time and the holder of the FTE may dispose of it either in whole or in part.

	2019 \$	2018 \$
Perpetual Estate Land	11,427,500	11,506,500
Fixed Term Estate	52,341,580	44,660,534
Depreciation of Fixed Term Estate	(13,248,392)	(10,666,289)
	50,520,688	45,500,745
15. Cash and cash equivalents		
Short-term deposits	61,339,727	45,749,190
Cash on hand	47,000	45,030
Cash at bank	249,233,510	257,730,221
	310,620,237	303,524,441

The short-term (deposits amounting to \$61,339,727 (2018: \$45,749,190) are invested with ANZ Banking Group Ltd -Solomon Islands Branch and Bred Bank Solomon at rates of between 0.5% and 2.0%. The deposits have terms of between on-call and one month. Accordingly, these short-term deposits have been considered as cash and cash equivalents for the purpose of the statement of cash flow.

## 16. Inventories

Electrical and mechanical	51,531,308	22,451,241
	51,531,308	22,451,241

Fuel and lubricants are paid for on consumption from supplies held on site on consignment basis from the supplier, South Pacific Oil Ltd through a contract signed in 2018. Therefore, no fuel and lubricants are recorded in SIEA's inventory.

## 17. Receivables

	2019	2018
Current	\$	\$
Trade receivables - kilowatt	46,294,077	57,188,829
Allowance for impairment - kilowatt	(13,197,677)	(16,799,096)
Trade receivables – CashPower	9,649,159	10,509,105
Allowance for impairment – CashPower	(1,689,094)	(1,372,022)
Related party - Solomon Islands Water Authority	890,436	937,500
Related party - Solomon Islands Broadcasting Corporation	-	353,131
Staff advances	181,696	248,589
Allowance for impairment- staff advances	(18,170)	(25,033)
Unread meters	14,174,933	10,025,866
World Bank	3,736,823	-
Asian Development Bank	244,593	-
Other debtors	1,038,818	699,821
	61,305,594	61,766,690
Non-current		
		007 500

Total receivables	61,305,594	62,565,362
	-	798,672
Deferred income - Solomon Islands Water Authority		(138,828)
Related party - Solomon Islands Water Authority	-	937,500

On 31 May 2012 an agreement was signed between the Solomon Islands Government (SIG), Solomon Islands Water Authority (SIWA) and SIEA whereby the debt owed by SIWA of \$7,500,000 was converted into a loan with a 0% interest rate for a term of 8 years commencing on 1 January 2013. The deferred income relates to the notional interest expense on this debt using the effective interest method and is based upon discounted future cash flows.

On 8 May 2013 an agreement was signed between the Solomon Islands Broadcasting Corporation (SIBC) and SIEA whereby the debt owed by SIBC of \$3,661,381 was converted into a loan with 0% interest rate for a term of 5 years commencing on 31 May 2013. The debt was fully repaid during 2019.

# Allowance for impairment

Balance at the beginning of the year	18,196,151	32,278,526
Transition adjustment on the initial application of IFRS 9	-	(15,006,144)
Balance at 1 January 2019	18,196,151	17,272,382
Impairment recognised	(2,743,565)	3,714,358
Bad debts written off during the year	(547,645)	(2,790,589)
Balance at 31 December	14,904,941	18,196,151

18. Government bonds	2019	2018
	\$	\$
Government bonds	30,000,000	30,000,000

On 1 December 2018 SIEA purchased domestic development bonds with a face value of \$30M from the Solomon Islands Government. The bonds have an interest rate of 5% per annum which is to be paid semi-annually. The bonds have a maturity date of 1 December 2028 and there is a 3 year grace period before principal repayments commence.

## 19. Contributed capital

Contributed capital		246,933,170	246,933,170
	_		

Contributed capital represents the Solomon Islands Government's equity contributions to SIEA. This is not in the form of shares.

#### 20. Deferred income

Balance at 1 January	80,458,077	57,194,119
Additional deferred income	57,155,340	29,659,008
Deferred income recognised during the year	(7,715,936)	(6,395,050)
Balance at 31 December	129,897,481	80,458,077
The deferred income is shown on the statement of financial position as follows:-		
Current	7,715,936	6,392,961
Non-current	122,181,545	74,065,116

In 2007, the Government of Japan entered into an agreement with Solomon Islands Government to fund the construction of Lungga Generator and Power Station on behalf of SIEA. The funding of these capital works is a non-reciprocal grant. The value of the capital works was approximately \$48 million and has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the power station.

In 2014, a grant of approximately \$3.2 million was received from the Japanese international Corporation Agency (JICA) to fund a 50 kW solar grid at the Ranadi Headquarters in Honiara. The value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the solar grid.

In 2013, a grant of approximately \$3.058 million was received from the World Bank through the Solomon Islands Sustainable Energy Project (SISEP) to fund the installation of a 33kV underground power cable from Lungga Power Station to Ranadi Substation. This project was completed in May 2015 and the value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the underground power cable.

In 2013, a grant of approximately \$1.493 million was received from the World Bank through the Solomon Islands Sustainable Energy Project (SISEP) to fund the installation of 11kV switchgear in Honiara Power Station. This project was completed in January 2015 and the value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the equipment.

129,897,481

80,458,077

## 20. Deferred income continued

In 2013, a grant of approximately \$0.839 million was received from the World Bank through the Solomon Islands Sustainable Energy Project (SISEP) to fund the installation of cooling radiators at the Lungga Power Station. This project was completed in June 2015 and the value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the radiators.

In 2015, a grant of approximately \$0.765 million was received from the Asian Development Bank to fund the construction of a Coconut Oil Conditioning Unit in Auki. The value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the unit.

In 2015, a grant of approximately \$1.015 million was received from the Asian Development Bank to fund the procurement of a Generator Set in Auki. The value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the generator.

In 2015, a grant of approximately \$0.867 million was received from the Asian Development Bank to fund the procurement of 11kV and 415V Distribution Equipment for the Auki Power Generation and Distribution Pilot Project. The value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the equipment.

In 2016, a grant of approximately \$32.5 million was received from the United Arab Emirates Pacific Partnership Fund and the Ministry of Finance and Treasury of the Government of New Zealand to fund a 1000 kW grid connect solar farm at Henderson in Honiara. The value of the capital works has been accounted for by SIEA as a non-current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the solar grid.

In 2016, a grant of approximately \$1.627 million was received from the Italian Ministry for the Environment, Land and Sea to fund simulation software to enable SIEA to carry out electricity network planning together with the necessary training and consulting services. The deferred income will be amortised to statement of comprehensive income over the life of the project once the full amount of the grant has been utilised and capitalised to the Fixed Asset register.

In 2017 (\$1.465 million), 2018 (\$3.888 million) and 2019 (\$9.902 million) grants were received from the Global Partnership on Output-Based Aid to subsidise the cost of providing electricity to low income households. The deferred income is being amortised to the statement of comprehensive income over the life of the project.

In 2017 (\$0.306 million), 2018 (\$5.476 million) and 2019 (\$37.731 million) initial grants were received from the Asian Development Bank (ADB) to fund the construction of five grid connected solar power plants in an effort to increase the supply of reliable, clean electricity. The deferred income will be amortised to the statement of comprehensive income over the life of the project once the full amount of the grant (approximately \$67 million) has been utilised and the asset capitalised to the Fixed Asset register.

In 2018 (\$9.778 million) and 2019 (\$9.125 million) was received from the New Zealand Ministry of Foreign Affairs and Trade to expand the access to affordable, reliable and clean energy in rural areas of the Solomon Islands. The deferred income will be amortised to the statement of comprehensive income over the life of the project once the full amount of the grant has been utilised and capitalised to the Fixed Asset register.

In 2018, grants totaling approximately \$10.516 million were received from the World Bank through the Solomon Islands Sustainable Energy Project (SISEP) to fund construction of power substations and the installation of transformers at Ranadi, Kola' a Ridge and for the relocation of the 11kV feeder 12 from Lungga Power Station to East Honiara Substation. The projects have been partially completed and where applicable the value of the capital works has been accounted for by SIEA as a non current asset with a corresponding amount taken to deferred income. The deferred income is being amortised to the statement of comprehensive income over the life of the substations, transformers and the feeder.

In 2019, grants totaling approximately \$0.387 million were received from the World Bank through the Solomon Islands Electricity Access and Renewable Energy Expansion Project (SIEAREEP) to fund construction of renewable energy hybrid mini-grids, electricity connections in low income areas, grid-connected solar power and the enabling of environment and project management. Total expected grant for the project is around \$113.296 million. The deferred income will be amortised to the statement of comprehensive income upon subsequent completion of the specific projects. The capitalisation of the completed project will also be made into the Fixed Asset register.

# 21. Trade and other payables

Current	2019 \$	2018 \$
Trade creditors	2,099,943	1,222,550
Other payables and accruals	26,100,149	32,931,424
Contractual liabilities	2,225,469	2,182,389
Consumer deposits	4,954,061	4,507,832
	35,379,621	40,844,195

#### 22. Solomon Islands Government loan agreement

Under an agreement signed with the Solomon Islands Government in June 2014, SIEA has been granted a loan facility of up to \$81,883,440 to assist in the financing of the Solomon Islands Sustainable Energy Project (SISEP), at an interest rate of 4% per annum. Under the terms of the agreement the funds have been made available by the Government in a timely manner to facilitate the implementation of SISEP and will be repaid by SIEA over 28 semi-annual payments of principal and interest which commenced from December 2015. SISEP facility closed on 31st March 2019. To date the following principal amounts have been borrowed and repaid under this loan agreement.

Balance at 1 January	14,527,257	2,924,998
Borrowings	12,225,280	15,201,259
Principal Repayments	(3,657,972)	(3,599,000)
Balance at 31 December	23,094,564	14,527,257

#### Analysis of borrowings expected to be settled within one year and more than one year:

3,599,000 19,495,564 23,094,564 4,244,522 12,834,555 17,079,076	3,599,000 10,928,257 14,527,257 6,778,721 10,401,161
23,094,564 4,244,522 12,834,555	6,778,721
4,244,522 12,834,555	6,778,721
12,834,555	
12,834,555	
	10,401,161
17 070 076	
17,079,070	17,179,881
17,179,881	193,818
6,671,198	18,493,772
(6,772,003)	(1,507,709)
17,070,076	17,179,881
	6,671,198

#### 24. Leases

23.

i. As a lessee

Property, plant and equipment comprise owned and leased assets that do not meet the definition of investment property.

	2019
	\$
Property, plant and equipment owned	968,691,156
Right-of-use assets	7,984,757
Total assets	976,675,913

# 24. Leases continued

SIEA leases various assets including land and buildings. Information about leases for which SIEA is a lessee is presented below:

	Balance at 1 January			
		-	5,711,989	5,711,989
	Additions	3,943,825	2,237,712	6,181,537
	Leases cancelled	-	(244,419)	(244,419)
	Depreciation charge	-	(3,664,350)	(3,664,350)
	Balance at 31 December	3,943,825	4,040,932	7,984,757
	Lease liabilities included in the statement of financial position at 31 De	cember 2019		2019
	Current			<b>\$</b> 2,036,765
	Non-current			2,191,164
	Balance at 31 December			4,227,929
	Amounts recognised in profit or loss			
	Interest on lease liabilities			498,750
	Variable lease payments not included in the measurement of lease liabilities	5		-
	Income from sub-leasing right-of-use assets			-
	Expenses relating to short-term leases			987,722
	Expenses relating to leases of low-value assets			-
			_	1,486,472
	Amounts recognised in statement of cash flows		_	
	Total cash outflow for leases		_	1,486,472
	ii. As a lessor			
	Lease income from lease contracts in which SIEA acts as a lessor is as below:			
	Operating Lease		_	
	Lease income		_	37,620
25.	Related parties			
a)	<b>Directors</b> The Directors in office during the financial year were as follows:			
	<b>Name</b> David K.C. Quan - chairman (reappointed on 19 February 2019) James Apaniai John B Houanihau Muriel Ha'apue-Dakamae Rovaly Sike			
	Directors' fees and expenses are disclosed in Note 11.			
	SIEA's transactions with Directors were at arms length.			

# 25. Related parties continued

#### b) Identity of related parties

SIEA being a state-owned entity is the sole provider of electricity in Solomon Islands. As a result, Government of Solomon Islands and other government-related entities are its related parties. Other related parties include Directors and key management personnel of SIEA.

c)	Amounts receivable from related parties	2019	2018
		\$	\$
	Included in trade receivables are the following amounts receivable from related entities:		
	Central Bank of Solomon Islands	238,528	350,507
	Central Provincial Government	20,670	47,940
	Choiseul Provincial Government	18,633	43,981
	Commodity Export Marketing Authority	14,693	20,079
	Home Finance Corporation	35,413	38,408
	Honiara City Council	1,176,533	871,766
	Makira /Ulawa Provincial Govenment	17,625	28,439
	Malaita Provincial Government	105,543	134,915
	Provincial Hospital	594,345	1,053,182
	Solomon Airlines Limited	185,651	210,225
	Solomon Islands Broadcasting Corporation	206,191	681,621
	Solomon Islands Government	14,636,081	17,816,845
	Solomon Islands National University	1,362,977	1,190,823
	Solomon Islands Ports Authority	34,216	449,711
	Solomon Islands Postal Corporation	260,823	79,825
	Solomon Islands Tourist Authority	(5,617)	23,968
	Solomon Islands Water Authority	1,077,302	4,816,982
	Temotu Provincial Government	6,719	71,649
	Western Provincial Government	79,016	90,151
	Isabel Provincial Government	53,148	41,365
		20,118,490	28,062,383

Receivables for Solomon Islands Water Authority and Solomon Islands Broadcasting Corporation includes the Trade Receivables - kilowatt that relates to each of these organisations.

#### d) Transaction with key management personnel

Key management personnel comprises of the Chief Executive Officer, Chief Financial Officer, General Manager Capital Works, Chief Engineer, General Manager Corporate Services, General Manager Customer Services, Manager Finance, Manager Regulatory, Manager Land & Buildings, Manager Generation and Outstations, Manager Distribution, Manager Health, Safety, Security and Environment, Manager Business Administration, Power Generation Lead Engineer and the Directors as listed in note 25 (a).

In addition to their salaries, SIEA also provides non-cash benefits to key management personnel and their total compensation comprised of the following:

Short- term employee benefits	12,101,811	15,527,096
	12,101,811	15,527,096

Transactions with key management personnel are no more favourable than those available, or which might be reasonably be expected to be available on similar transactions to third parties at arms length.

# 26. Commitments and contingencies

#### **Capital commitments**

SIEA undertakes capital works and purchases assets according to an approved budget when management considers that sufficient funds are available. Capital commitments as at 31 December 2019 amounted to \$839,000,000 (2018: \$1,137,000,000). These commitments are in relation to property, plant and equipment.

	2019	2018
	\$	\$
Less Than 1 Year	227,000,000	287,000,000
Between 1 year and 5 years	612,000,000	850,000,000
	839,000,000	1,137,000,000

# **Contingent liabilities**

Apart from legal work undertaken in the normal course of business, SIEA was party to two legal claims, both of which have been disclosed and in the opinion of the directors will not have a material effect on SIEA's financial position. These claims are as follows:

- a) A claim by a member of the public arising from an incident whereby a child was electrocuted and got burns. Compensation of \$1.3 million has been demanded, but the legal advice provided to SIEA has estimated that if liability is proven, damages of up to \$190,000 may be awarded. However, negotiations are continuing and a full and final settlement amount has yet to be agreed upon.
- b) SIEA may potentially be subject to claims from three electrocutions in Auki, Buala and Honiara. The potential liability and likely financial impact are yet to be determined.

## 27. World Bank Financing

#### a) Financial Support Received

SIEA has received financial support from the World Bank's international Development Association (IDA) on the Solomon Islands Sustainable Energy Project (SISEP) since July 2008 to improve operational efficiency, system reliability and financial sustainability of SIEA. Further, the World Bank, through a multi donor trust fund, has also extended financial support on the Output-Based Aid (OBA) programme since August 2016, for increasing access to electricity services in low-income areas of Solomon Islands. In addition to the SISEP and OBA programmes, the World Bank through the IDA has provided further support under the Solomon Islands Electricity Access and Renewable Energy Expansion Project (SIEAREEP) since October 2018. SIEAREEP's objective is to increase access to grid supplied electricity and increase renewable energy generation in the Solomon Islands.

#### b) Grants

SIEA has received total I grants of USD 8,284,155 from these programmes since their commencement (2018: USD 6,782,961). The 2019 balance consists of the following funds, IDA H9130 -USD 1,948,784, IDA H4150 - USD 3,834,859 and TF A2923 - USD 1,500,512, IDA D3270 - USD 800,000 and TF A7425 - USD 200,000. In 2018, the balance for fund IDA H4150 was USD 4,146,973, which did not account for refund applications amounting to USD 312,114. This has subsequently been rectified in 2019.

## c) Credit Funds

The credit funds are interest-bearing loans that are required to be repaid and are shown in the current and non-current liabilities as they are drawn down.

# 27. World Bank Financing continued

## d) Use of the Proceeds

The proceeds of the World Bank grants and credits have been utilised in accordance with their intended purpose as specified in their respective agreements.

A summary of the transactions that took place during the year is as follows:

	2019	2018
Designated Account	USD	USD
Balance at 1 January	75,618	43,661
Receipts	1,112,728	279,862
Expenditures	242,153	247,905
Balance at 31 December	946,194	75,618
Grants		
IDA H4150	-	-
IDA H9130	(5,478)	1,403,891
TF A2923	818,786	492,828
TF A7425	200,000	-
IDA D3270	800,000	-
Balance at 31 December	1,813,308	1,896,719
Credit Funds IDA 53790		
Balance at 1 January	2,009,303	366,210
Borrowings	1,547,088	2,078,572
Principal Repayments	431,880	435,479
Balance at 31 December	3,124,511	2,009,303

## 28. Capital management

SIEA's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board seeks to maintain a balance between the higher returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position.

In order to maintain or adjust the capital structure, SIEA may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

#### 29. Subsequent events

There has not arisen in the interval between the end of the year and the date of this report any other item, transaction or event of a material and unusual nature that is likely, in the opinion of the Directors, to significantly affect the operations of SIEA the results of those operations or the state of affairs of SIEA in subsequent financial years.



GLOSSARY	
kV	Kilovolt
HV	High Voltage
kW	Kilowatts
MW	Megawatt (= 1000 kW)
GWh	Gigawatt-hour (= 1 million kWh)

