



CONSULTATION ON PUBLIC ELECTRICITY SUPPLY LICENSEES
REPORTING OBLIGATIONS PROCEDURES AND GUIDELINES

Consultation Document

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Abbreviations

CAIDI	Customer Average Interruption Duration Index
PESL	Public Electricity Suppliers Licence
PES	Public Electricity Supplier
GoB	Government of The Bahamas
KPA	Key Performance Area
KPI	Key Performance Indicator
kWh	Kilowatt-hour
MW	Megawatt
RAB	Regulatory Asset Base
URCA	Utilities Regulation and Competition Authority
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
EA	Electricity Act, 2015
NEP	National Energy Policy

1 INTRODUCTION

The Utilities Regulation and Competition Authority (“URCA”) in addition to reviewing and setting tariffs, is required to continuously monitor the operational performance and results of the regulated Licensees. URCA is therefore required to assess, monitor and evaluate the performance of the Public Electricity Suppliers (PES) towards achieving the overall energy policy goals of the Government of The Bahamas (GoB). The purpose of this consultation document is to develop the framework and define the parameters which can be used by URCA to assess, monitor and evaluate the operational performance of the PES, towards achieving the overall energy sector policy goals and electricity sector policy and objectives.

URCA is issuing this consultation pursuant to section 38(1)(k) of the Electricity Act, 2015 (“EA”); Part C – Reporting Obligations, Condition 24 of the Public Electricity Suppliers Licence (PESL) and Condition 23 of the Authorized Public Electricity Suppliers Licence (APESL). The procedures and guidelines seeks to establish the scope, format and the frequency in which specified licensees in the electricity sector are obligated to submit information requirements to URCA. The term “specified licensees” refers to holders of either a Public Electricity Supply Licence (PESL) or an Authorised Public Electricity Licence (APESL.).

In issuing this consultation document URCA is:

- outlining the new procedures and guidelines it proposes to implement for the collection and reporting of operational data by specified licensees in the electricity sector;
- giving reasons for its proposals; and
- inviting written comments from affected licensees and other interested persons on URCA’s proposals.

1.1 PURPOSE OF THESE PROCEDURES AND GUIDELINES

The specified licensees Reporting Obligations Procedures and Guidelines (“the Procedures and Guidelines”) set out the manner and form in which licensees must submit information and data to URCA relating to their performance under the Electricity Act, 2015 (“EA”) and their respective licenses, including the dates by which it must be submitted¹.

Licensees are required to submit information and data to URCA in the manner proposed by these Procedures and Guidelines².

1.2 APPLICATION OF THESE PROCEDURES AND GUIDELINES

These Procedures and Guidelines apply to licensed entities in the Commonwealth of The Bahamas from the Commencement Date stipulated in their licence. URCA will monitor and subsequently report on licenced entities’ performance under their licence conditions from that date.

The compliance requirements set out in these Procedures and Guidelines are scaled in accordance with the size and accordance with the size and complexity of a licensee’s operations. Licensees are encouraged to identify the compliance requirements that apply to their licence type and circumstances.

¹ Requirements in accordance with Condition 24 of the PESL or Condition 23 of the APESL

² section 38(1)(k) of the EA, states that the function and powers of URCA are to – “require public electricity suppliers and other licensees to submit periodic reports, as determined by URCA, on their operations.....”

1.3 CONFIDENTIALITY AND USE OF INFORMATION

URCA's obligations regarding confidentiality and disclosure of information provided to it by licensees are governed by section 75(1) of the EA which states that "*URCA shall not be required to publish or otherwise divulge information that in the view of URCA is commercially confidential*"

1.4 PROCESS FOR GUIDELINES REVISION

URCA may amend, replace, or supplement the information requirements in these Procedures and Guidelines from time to time in accordance with section 74 of the EA, and Condition 24 of the PESL or Condition 23 of the APESL.

Notwithstanding, while URCA has taken care to compile the data requirements for each type of licence, the omission of a data requirement in these Procedures and Guidelines does not imply a licensee is exempt from fulfilling that requirement. Notwithstanding the information presented in these Procedures and Guidelines, licensees are required to ensure they are aware of the statutory obligations relevant to their licence and take measures to comply with these obligations.

1.5 HOW TO RESPOND TO THIS CONSULTATION DOCUMENT

URCA invites comments on this document from all interested parties. Responses to this document should be submitted to URCA by 5:00 p.m. on **30 March 2020**. Written responses or comments on this document should be sent to URCA's Chief Executive Officer, either:

- By hand, to URCA's office at Frederick House, Frederick Street, Nassau;
- By mail to P.O. Box N-4860, Nassau, Bahamas;
- By fax, to (242) 393-0153; or
- By email, to info@urcabahamas.bs.

URCA reserves the right to make all responses available to the public by posting responses on its website at www.urbahamas.bs. If a response is marked confidential, reasons should be given to facilitate evaluation by URCA of the request for confidentiality. URCA may publish or refrain from publishing any document or submission, at its sole discretion.

URCA will review all responses and comments received from this consultation document before publishing its Statement of Results and the Final Decision.

1.6 STRUCTURE OF THE REMAINDER OF THIS DOCUMENT

The remainder of the document is structured the following way:

- Section 2 - Legal Framework for public electricity suppliers and other licensees reporting obligations
- Section 3 - Rationale for Collecting and Reporting of Licensees Operational Data
- Section 4 - Identification of Key Performance Indicators (KPI)
- Section 5 - Guidelines for Collection and Reporting Performance and Operational Data
- Section 6 - Next Steps
- Annex 1 - Proforma – Monthly, Quarterly, Bi-annual, and Annual reporting
- Annex 2 - Proposed KPI data requirement
- Annex 3 - Proposed Quality of Service KPI data requirement
- Annex 4 - Proposed Commercial KPI data requirement

2 LEGAL FRAMEWORK

The following section sets out the legal and regulatory remit of URCA as encapsulated by the EA and the licences of the Public Electricity Suppliers (PES)

URCA is tasked under the EA to carry out various duties and functions as the regulator of the electricity sector in The Bahamas. Pursuant to section 74 of the EA and Condition 24 of the PESL, URCA may specify the framework as it relates to the procedures and guidelines for a PES to furnish such information and to submit such returns in relations to their operations and at such intervals as URCA may require.

2.1 GOVERNMENT POLICY

The Government of The Bahamas (GoB) National Energy Policy (NEP) sets out the strategic aims for meeting the electricity sector policy objectives. The strategic aim include but not limited to:

- The priorities for diversification, competition and sector regulation

Consistent with the aims and goals of the NEP, shall be, among others, the;

- a) Provision of safe, least cost electricity supplies to all consumers;
- b) Advancement to the Bahamian economic growth and development and international competitiveness;
- c) Enhancement of the energy security of the Bahamas;
- d) Encouragement of competition in the generation of renewable electricity;
- e) Introduction of a structure for the sector that is overseen by an independent regulator.

2.2 THE ELECTRICITY ACT, 2015 (“EA”)

2.2.1 ROLE OF URCA

Section 37 of the EA states:-

“The primary role of URCA is the regulation of the electricity sector in accordance with the goals, objectives and principles underpinning the national energy and electricity sector policies.”

2.2.2 FUNCTIONS AND POWERS OF URCA

Section 38 of the EA states that the functions and powers of URCA are to, inter alia;-

Sub-section (1)(k) “require public electricity suppliers and other licensees to submit periodic reports, as determined by URCA, on their operations.”

Subsection (3) states that URCA may issue regulatory and other measures, including without limitations, as follows: –

“

- (i) requiring any licensee to furnish such information and submit such returns in relations to the operations at such intervals as it may require;
- (j) conducting market investigations and market reviews and publishing regular information and reports.”

2.2.3 CONSUMER PROTECTION

Section 40 (9) states that a licensee shall –

“

- (a) Monitor its performance against such key performance indicators as may be set out in its licence or in any regulatory measures issued by URCA; and
- (b) Pursuant to a written request made by URCA, publish and provide in a manner required by URCA its performance results against the relevant key performance indicators.”

2.2.4 DETERMINATION BY URCA

Section 64 of the EA gives URCA the remit to make determinations where URCA sees it necessary relating to the terms and conditions of a licence, including obligations in licence conditions, regulatory and other measures, standards or technical rules;

2.2.5 POWER TO REQUEST INFORMATION

Section 74 of the EA gives URCA the power to request information. Subsection (2) states that when requesting information URCA shall inter alia –

- (a) state the legal basis and purpose of the request;
- (b) specify what information is required;
- (c) fix the time limit within which information is to be provided; and
- (d) state that a person who fails to provide information as and when lawfully requested to do so, or supplies incorrect or misleading information, commits an offence.

2.3 LICENCE CONDITIONS

2.3.1 GENERAL CONDITIONS

The general conditions of the Public Electricity Suppliers Licence (PESL)³ states that the licensee shall comply with the EA and any other Act of the Commonwealth of The Bahamas that has application to it in the discharge of its performance under their Licence.

The general conditions further states that *“the Licensees shall comply with regulatory and other measures including any directive, order, rule, decision or approval issued, made or granted by URCA in accordance with their duties and functions under the Act or their Licence”*.

Condition 5.1 of the PESL and APESL outline the role and duties of URCA. It states that the Licensee shall be subjected to the regulatory supervision of URCA. URCA shall perform its functions and carry out its duties pursuant to the URCA Act, the EA and any other relevant laws, the licence and have regard to relevant Government policy.

Condition 24 of the PESL and Condition 23 of the APESL outlines their respective reporting obligations.

³ Includes Authorised Public Electricity Suppliers Licence

3 RATIONALE FOR COLLECTION AND REPORTING OF OPERATIONAL DATA

This section sets out the rationale and the framework for reporting obligations procedures and identifies and discusses Key Performance Indicators (KPIs) against which the specified licensees performance may be assessed.

This Reporting Procedures and Guidelines sets out the manner and form in which Licensees must submit information and data to URCA relating to their compliance with the EA, and their respective licences.

3.1 OBLIGATION OF LICENSEES TO ESTABLISH ARRANGEMENTS TO MONITOR COMPLIANCE

Licensees are required to submit information and data to URCA in the manner prescribed by these Procedures and Guidelines.

In order to inform its preliminary view on this matter, URCA has given utmost consideration to:

- the statutory framework for regulation of the electricity sector in The Bahamas as prescribed by the Electricity Act, 2015 (“EA”);
- Government Electricity Sector Policy;
- Relevant conditions of the PESL and APESL licences; and
- International best practices.

The EA requires licensees to establish and observe policies, systems and procedures in accordance with licences. These policies, systems and procedures must enable a regulated entity to efficiently and effectively monitor and report accurately on its compliance and in the manner and form required by their respective licences⁴.

3.2 OBLIGATION TO SUBMIT INFORMATION AND DATA ON COMPLIANCE TO URCA⁵

Each Licenced entity must submit information and data relating to its individual compliance with the EA, and individual licences to URCA in the manner and form (including by the date or dates) proposed by these Procedures and Guidelines

In general, the proposed/recommended indicators will serve as a tool for:

- establishing baseline indicators of specified licensees’ performance;
- monitoring specified licensees’ performance over time;
- assessing specified licensees’ performance against other electric utilities in The Bahamas and overseas; and
- provides the framework for specified licensees to report to URCA in respect of its performance.

The baseline indicators will be informed by a benchmarking exercise to ensure that they are fit for purpose, reflective of industry best practice and not out of step with mainstream thinking. Furthermore, it is intended that

⁴ Section 48 of EA: Conditions of licences

⁵ Condition 24 of the Public Electricity Suppliers Licence (PESL) and Condition 24 of the Authorised Public Electricity Suppliers Licence (APESL) outline the licensees reporting obligations

URCA engages specified licensees on the proposed KPIs and baseline indicators and their related obligations before these reporting requirements are finally adopted.

From a regulatory standpoint, URCA's goal is to incentivize each licensee to improve its performance relative to the following⁶:

- Operational Efficiency – where specified licensees deliver the quantity of the service that consumers wish them to produce at the lowest reasonable cost while providing acceptable reliability and other aspect of performance.
- Dynamic Efficiency – where specified licensees make efficient investment in innovation so that they are able to meet future demands at the lowest reasonable cost
- Consumption Efficiency – where customers bear the incremental cost that their decisions impose and be given appropriate incentives to consume the service only when its value to them at least great as the incremental cost of producing and delivering it. Prices should be set at the lowest level consistent with system cost recovery and investment incentives with “cost” understood to include a fair rate of return on capital to investors or compensation for public capital for public sector utilities.
- Other Policy Objectives – where specified licensees are expected to support other policy goals, they should do so in a cost-reflective, minimally distortive manner.

Accordingly, it is important that URCA effectively monitor and evaluate Licensee's performance. Additionally, it is also important that URCA is able to effectively monitor and evaluate its own performance and the performance of the regulatory system generally. This will also have a significant impact on the electricity sector outcomes and the achievement of objectives.

3.3 PERFORMANCE MONITORING INDICATORS

Performance indicators are measures of the licensees operations' impacts, outcomes, output and inputs that are monitored during URCA's oversights to assess progress towards the National Energy Policy objectives, the EA and the licensees' obligation to provide electricity to the customers.

In this consultation document URCA identifies a number of possible indicators for electricity which are useful to URCA in pursuing its monitoring of licensees' performance and reporting requirements. URCA believes that the package of indicators identified for specified licensees should fall broadly in line with good practice and equally important be in line with the principles for regulation as per the EA and the reporting obligations mandated by the licence of the specified licensees.

URCA believes that if the package of indicators proposed is generally in line with good practice, then the information flowing from the results reported should reflect best international practice. If the indicators used are not in line, then the information flowing from the results reported is less effective, and this will constitute divergence from what would be best international practice. Currently, URCA is receiving little or minimal level of raw data from specified licensees.

URCA believes that the approach it should take as its standard regulatory practice is to ensure that licensees themselves perform data assessment and measure their performance against those indicators proposed herein

⁶ Based on http://mitei.mit.edu/system/files/Electric_Grid_8_UTILITY_Regulation.pdf

by URCA. URCA recognizes that for licensees to report on these data will require manipulation and calculation of the raw data. However, this approach will require validation on the accuracy of the data.

Since validity of data should be a primary concern from the URCA perspective, the regulatory remedy for validation is for URCA to conduct audits periodically to ensure that data is being correctly measured, calculated and/or estimated. URCA believes that this is in line with best international practice.

3.4 REPORTING AND MONITORING FRAMEWORK

In developing the performance monitoring framework, the first task is to identify and define the Key Performance Areas (KPA), for which Key Performance Indicators (KPI) need to be developed to monitor the licensees' performance. Based on the National Energy Policy and Electricity Sector Policy objectives, the following KPAs related to licensees' operations are highlighted:

- Achieve an efficient sector through least cost approach;
- Encourage investment, growth and financial sustainability of resources;
- Ensure sustainable use of resources; and
- Ensure safe, reliable and security of supply

A monitoring framework will provide the overall context in which URCA reporting obligations procedures and guidelines activities can take place. The URCA Act prescribes the functions of URCA but does not set any requirements for the manner in which those functions are carried out. The Electricity Act ("EA"), in particular sections 37 and 38, prescribes the role, functions and powers of URCA. Additionally, the power of URCA to request information is set out in section 74. The principles for effective regulation is set out in section 37 (1) and (2). These principles can be summarised as follows:

- Transparency
- Independence
- Consistency
- Accountability
- Proportionality

The strategic objective for implementing data requirements, reporting obligations procedures and guidelines for licensees, therefore, is largely prescribed in the EA⁷.

The strategic objectives as enunciated in the EA are as follows:

- Operate in an independent and transparent manner so as to give the members of the public and regulated entities confidence in the regulatory process;
- Demonstrate reasoned consistency and stability in its decision making;
- Promote good utility practice and continuous improvement in all regulated activities;
- Monitor the operations of Licensees;
- Tailor regulatory and other measures so that regulatory burden are proportional to the nature of the issues they are designed to address; and
- Hold regulated entities accountable for operating in an environmentally responsible manner.

URCA believes that these objectives can be achieved by:

⁷ Parts VII, VIII, and IX of the Electricity Act, 2015, give URCA the remit

- using the full force of enforcement tools that are available and as provided for in section 74, subsection 3 (a) and (b) of the EA;
- identifying poor behaviour early and taking action;
- being transparent and fair in the enforcement process; and
- learning from what is done.

International best practice suggests four key elements of a good regulatory monitoring and enforcement framework:

1. Defining the desired outcome or regulatory objective for the sector.
2. Identification of key performance indicators that will help measure progress towards this outcome together with the reporting requirements.
3. Monitoring of progress over time and ensuring transparency through reporting to all stakeholders including the public.
4. Enforcement of breaches of regulatory obligations arising from the process.

The Electricity Sector Policy and Objectives sets out in section 6 of the EA encapsulates the regulatory objectives for the sector and includes inter alia:

- a) provision of safe, least cost electricity supplies to all consumers;
- b) advancement of the Bahamas' economic growth and development and international competitiveness;
- c) enhancement of energy security of The Bahamas;
- g) promotion of energy efficiency in the generation, distribution and consumption of electricity throughout the Bahamas;
- j) creation of incentives for private sector participants in the electricity sector to continuously improve performance in operations and customer service; and
- l) provision of a regulatory structure that balances the interest of and affords opportunities for input from all stakeholders, honours contractual commitments and encourages investment.

Using the World Bank 2006 Handbook for evaluating infrastructure regulatory systems⁸, URCA has identified a number of broad key performance indicators that meets the Electricity Sector Policy and Objectives.

A "Key Performance Indicator" (KPI) is generally understood to be a ratio or parameter, usually calculated from more than one raw data item. The intention is to identify an indicator that provides a clear insight into a particular element of the electricity provider's, licensee's, performance which is considered to be of essential importance in terms of service delivery, where performance improvement is required, or which is monitored for the purpose of ensuring that regulatory objectives for the licensee are being met.

Given the level of maturity of the regulatory environment in The Bahamas as it relates to licensees and the electricity sector as a whole, URCA believes that those reporting obligations outline in the Public Electricity Suppliers' licences and associated legislations can be encapsulated under a number of broad KPI, representing prices, social impact, efficiency, output and consumption, financial status, quality measures such as capacity, investment, maintenance and quality of service. These proposed KPI with their definitions and data requirements are outlined in Annex 2

Consultation Question – RATIONALE FOR COLLECTION AND REPORTING OF OPERATIONAL DATA

⁸<http://siteresources.worldbank.org/EXTENERGY/Resources/336805-1156971270190/HandbookForEvaluatingInfrastructureRegulation062706.pdf>

Question 1: Do you agree with URCA’s rationale for the Reporting and Monitoring Framework? If not, please state why not?

4 IDENTIFICATION OF KEY PERFORMANCE INDICATORS

This section identifies the KPIs and outlines URCA general principles for performance monitoring.

Even though the selection of the KPIs would be based on the four KPAs, the selection would also take cognizance of the following guiding principles and criteria:

- Data reliability;
- Impact of KPI on utility performance;
- Whether KPI is endogenous and can be controlled by the utility company;
- Whether indicator is measurable; and
- Whether indicator is output-based

The selection of KPIs was based on intensive research on the subject, as well as international best practice in the electricity sector. The results of this exercise led to the categorisation of the KPIs into the following operational areas of the licensees’ business:

- Financial;
- Commercial;
- Technical;
- Quality of Service;
- Fuel
- Efficiency; and
- Social Impact

4.1 GENERAL PRINCIPLES FOR SELECTING DATA/INDICATORS

URCA is of the view that the indicators that best guide licensees’ performances are of three general principles;

- Indicator must be meaningful and relevant;
- A reliable system for collecting the requisite data must be developed in a timely fashion; and
- Licensee’s institutional capacity for using a monitoring and evaluation system and its willingness to do so must be taken into account.

In selecting the proposed indicators that the licensees are required to report on, URCA applied three general principles⁹

- *Relevance*

The indicators URCA selected are based on the respective licence obligation and is relevant to the basic electricity sector development objectives and the National Energy Policy as prescribed in Part II of the EA

- *Selectivity*

⁹ This draws heavily on a report of the Performance Monitoring Indicators Handbook, World Bank Technical Paper 334 1996 Roberto; [Sontheimer, Leigh Ellen](#)

The indicators chosen for monitoring purposes should be few and meaningful

- *Practicality of indicators and Data collection*

If performance indicators are to meaningfully reflect electricity sector development objectives, they should be selected by consulting with the licensees during preparation, and the data they measure should be useful to the PES and country. The data required to compile the key indicators must be easily available. If collecting the data will require a special effort, this need should be identified during consultation and included in the Final Statements of Results and Decision.

Consultation Question – IDENTIFICATION OF KEY PERFORMANCE INDICATORS

Question 2: Do you agree with URCA’s justification for the identification of KPIs? If not, please state why not?

5 GUIDELINES FOR COLLECTION AND REPORTING PERFORMANCE AND OPERATIONAL DATA

This section discusses the proposed reporting requirements obligations and the guidelines for submission of information to URCA by the specified licensees.

5.1 REPORTING REQUIREMENTS FOR PUBLIC ELECTRICITY SUPPLIERS

URCA is proposing that Public Electricity Suppliers (PES) must submit information and data relating to their performance to URCA in the manner and form (including by the date or dates) required by these Procedures and Guidelines.

The information and data to be submitted under these Procedures and Guidelines is mandated in Condition 24 of the PESL and Condition 23 in the APESL and relates to the reporting obligations of the individual licensee as follows:

- The Licensee shall submit its audited financial statements, with certificate of the external auditors, for the Licensed Business and the accompanying annual report (which shall provide together with the current year at least ten years of operating and financial statistics) to URCA as required by URCA having regard to the Licensee's requirements for its annual report and audited financial statements.
- URCA may require the Licensee to maintain separate Regulatory Accounts for regulatory reporting and tariff analysis.
- The Licensee shall furnish to URCA without undue delay such information, documents and details related to the Licensed Business, as URCA may reasonably require in order for it to fulfil its functions and discharge its obligations under the Act.
- The Licensee shall furnish to URCA without undue delay such information, documents and details related to the Licensed Business that have or is likely to have a significant impact its functions assigned to it by or under the Licence and the Act.
- The Licensee shall provide a Major Outage report to URCA within 24 hours of a major outage detailing, to the extent possible, the: (i) cause of outage; (ii) geographic area affected by the outage; (iii) number of customers affected by the outage; (iv) steps taken to restore service to the affected area; and (v) time taken for restoration of service.
- The Licensee shall provide such other specified and relevant reports to URCA as may be reasonably required from time to time.
- The Licensee shall annually prepare and submit to URCA a five-year forecast of projected demand and generation requirements.
- The Licensee shall, annually, provide URCA with its capital investment plan and updated five-year capital investment plan.
- The Licensee shall, in accordance with good industry practice, maintain and keep all appropriate books, records and accounts in respect of the activities to which this Licence relates including but is not limited to System Average Interruption Duration (SAIDI), the System Average Interruption Frequency Index (SAIFI) and Customer Average Interruption Duration Index (CAIDI) and such other internationally accepted utility industry performance indicators as URCA may direct.

Each specified licensee must submit information and data relating to its individual performance to URCA in the manner and form (including by the date and dates) as proposed by these Procedures and Guidelines.

Failure to submit information and data referred to in section 74 of the EA in the manner and form proposed by the URCA Performance Procedures and Guidelines is a breach of the EA, and may constitute an offence¹⁰.

URCA has listed the information and data that is proposed to be submitted to URCA under these Reporting Requirements Procedures and Guidelines in the following Annexes:

- (a) Annex 1 – Pro-forma – Monthly, Quarterly and Half-yearly and Yearly reporting;
- (b) Annex 2 – Proposed KPIs reporting format and Reporting Requirements for a PES;
- (c) Annex 3 – Glossary

All specified licensees must submit information and data to the URCA even if a nil figure is recorded in relation to data proposed to be submitted in accordance with these Procedures and Guidelines.

URCA may use any information or data provided to it under section 74 of the EA for the preparation of electricity market performance reports, or publish documents and reports in accordance to section 43 of the EA, and in accordance with the provisions of the licensee's specific licence.

5.2 FREQUENCY OF REPORTING - DATES BY WHICH DATA AND INFORMATION MUST BE SUBMITTED

5.2.1 MONTHLY, QUARTER 1 & 3, AND BIENNIAL REPORTS

Monthly reports on the performance indicators must be submitted to URCA no later than the last day of the month following the month being reported on, in each year. In one case, the report for the period 1 February to 29 February must be submitted to URCA no later than 31 March in each year.

5.2.2 QUARTER 1 & 3 REPORTS

Quarter 1 and 3 reports on the performance indicators must be submitted to URCA by the following dates:

The report for the period 1 January to 31 March (the Q.1 report) must be submitted to URCA no later than 30 April in each year;

The report for the period 1 July to 30 September (the Q.3 report) must be submitted to URCA no later than 31 October in each year.

Quarterly reports also contain monthly performance indicators. Thus for the Q.1 report, the monthly performance indicators will use the period 1 March to 31 March, and for the Q.3 report, the monthly performance indicators will use the period 1 September to 30 September.

5.2.3 BIENNIAL REPORTS

The report for the period 1 January to 30 June (the Biennial report) must be submitted to URCA no later than 31 July in each year.

Biennial reports also contain monthly, and quarterly performance indicators. The monthly performance indicators will use the period 1 June to 30 June, and the quarterly performance indicators will use the period 1 April to 30 June.

¹⁰ Section 74 (3)(a)(b) of the Electricity Act, 2015

5.2.4 ANNUAL REPORTS

The Annual report for the relevant financial year must be submitted by 31 January in each year. The report must contain all information and data required for monthly indicators (the period 1 December to 31 December), quarterly indicators (the period 1 October to 31 December,) biannual indicators (the period 1 July to 31 December) as well as the information and data required for the annual indicators (the period 1 January to 31 December).

Consultation Question – New Reporting Format

Question 3: Do you agree with URCA’s new reporting format for the collection of market data? If not, please state why not?

Consultation Question – Frequency of Reporting

Question 4: Do you agree with URCA’s proposal to submit performance data monthly, quarterly and annually? If not, please state why not?

5.3 MANNER AND FORM IN WHICH INFORMATION AND DATA MUST BE SUBMITTED

Reports by a regulated entity under sections 3.2.1, and 3.2.2 must be:

- (a) prepared using the pro-forma in Annex 1;
- (b) accompanied by a completed URCA Performance Reporting Templates (see Annexes 4-7); and
- (c) submitted electronically. Where a signed report has been submitted electronically it is not necessary to submit an additional copy by post.

URCA is proposing that Information and data must be provided on a monthly, quarterly and/or annual basis as specified in the KPI Template in Annexes 4-7.

Unless otherwise specified in the URCA Performance Reporting Template, data must be reported on a per licence basis.

To ensure robust interpretation of this data, URCA is proposing and encourages specified licensees to provide accompanying commentary. The URCA Performance Reporting Template (see Annexes 4-7) allows regulated entities to provide commentary within the template by adding a comment box. URCA is proposing that regulated entities should provide commentary where they consider it appropriate to highlight and explain key factors relevant to the level of, and trends in, their performance. The URCA may also seek further information from regulated entities to assist in understanding and interpreting any information and data provided.

These performance indicators under section 2.2.1, and 2.2.2 must be signed by the Chief Executive Officer (CEO) of the regulated entity or a delegate appointed by the CEO for this purpose.

Consultation Question – Manner and form in which information and data must be submitted

Question 5: Do you agree with URCA's proposal on the manner and form in which information and data must be submitted? If not, please state why not?

5.4 PROCESS FOR SUBMISSION OF REPORTS

URCA is proposing that reports must be submitted by email to the Utility Regulation & Competition Authority at info@urcabahamas.bs, with subject heading as described in the template or as advised in writing by URCA.

5.5 PUBLICATION OF LICENSEES OPERATIONAL REPORTING INFORMATION/DATA

KPIs are useful tools in tracking performance over time because they provide a concise account of pertinent data in a format that is easy to absorb and remember. However, care should be taken when interpreting ratios to ensure that the message derived is consistent with impact of the contributing data. Ratios are useful for providing snapshots and/or headlines and hence are more easily digestible for Government and the public; however, to enhance deeper regulatory insights and decisions, they should be accompanied by analysis and reporting to explain what is driving them. URCA should be in a position to understand the implications behind those changes by having access to higher levels of data and explanation of the reported figures. It is URCA's remit to ensure that reporting to Government and other stakeholders is balanced by giving appropriate explanations of the significance of each ratio, and providing explanations for any discernible trends.

6 CONCLUSION AND NEXT STEP

The anticipated outcomes from establishing a performance monitoring and reporting regime are as follows:

- to **Inform** consumers about the level of service they receive and identify the reasons for performance;
- to **Identify** baseline performance of individual index and provide incentives for improvement overtime;
- to **Provide** information and data for developing regulatory standards and targets where required and for on-going assessment of compliance with such standard;
- to **Compare** electricity providers by gauging relative performance within the industry as well as with other utilities performing comparable operations in other industries; and
- to **Inform** the decision making process of URCA, Licensees and the Government.

This consultation paper sets out the PESs' Reporting Obligations Procedures and Guidelines which URCA proposes to implement for the collection of operational data and from licensees in the electricity sector (i.e., PESL and APESL). URCA will carefully consider all comments and submissions received on the document within the prescribed timeline for responding to this consultation paper. URCA will issue a Statement of Results and Final Decision, including giving full reasons for its decisions. Written responses to the consultation are due on or before 5 p.m. on **30 March 2020**.

Annex 1: PRO-FORMA – MONTHLY, QUARTERLY AND HALF-YEARLY AND YEARLY REPORTING

To be submitted on company letterhead

[Date]

From: [Name]
[Position title]
[Regulated entity]

To: Chief Executive Officer
Utilities Regulation and Competition Authority (URCA)
Info@urcabahamas.bs

URCA Compliance Procedures and Guidelines - Reporting Obligations

This report documents the reporting requirements of URCA’s reporting obligations under the URCA Reporting Obligations Procedures and Guidelines (Reportable Obligations) during the following reporting period(s).

[Check the following box to specify the current reporting period or periods]

M1 [1 Jan – 31 Jan]	[Due 28 Feb]	M7 [1 Jul – 31 Jul]	[Due 31 Aug]
M2 [1 Feb – 28/29 Feb]	[Due 31 Mar]	M8 [1 Aug – 31 Aug]	[Due 30 Sep]
Q1 [1 Jan – 31 Mar]	[Due 30 Apr]	Q3 [1 Jul – 30 Sep]	[Due 31 Oct]
M4 [1 Apr – 30 Apr]	[Due 31 May]	M10 [1 Oct – 31 Oct]	[Due 30 Nov]
M5 [1 May – 31 May]	[Due 30 Jun]	M11 [1 Nov – 30 Nov]	[Due 31 Dec]
H1 [1 Jan – 30 Jun]	[Due 31 Jul]	A1 [1 Jan – 31 Dec]	[Dec 31 Jan]

This report has been prepared with all due care and skill and in accordance with URCA’s Compliance Procedures and Guidelines. Throughout the period covered by this report the regulated entity had effective policies, systems and procedures in place to monitor compliance with procedures and guidelines, established and observed in accordance with the URCA Reporting Obligations Procedures and Guidelines.

Signature

Print name

[CEO / MD or acting CEO / MD]

Failure to comply with the URCA Reporting Requirements Procedures and Guidelines is a breach of the Licence condition and may attract regulatory fines and penalties. If a licensee contravenes this obligation to comply, the licensee is liable to a regulatory fine or other penalty determined by URCA, and not exceeding ten percent of the licensee’s relevant turnover.

Annex 2: PROPOSED KPIS DATA REPORTING REQUIREMENTS FOR PES¹¹

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Proposed Technical Data				
Capacity Factor	% Ratio	<p>Capacity Factor is a ratio of actual generation of power to maximum capacity to generate. This indicator measures percentage of installed capacity that is utilized. Capacity Factor provides information on how close the power supply system is to being overloaded or, in other words, is being operated relative to its limit defined by the level of installed capacity.</p> <p>Capacity Factor is calculated as ratio of average hourly generation to maximum possible generation at the installed capacity level (before losses). It is usually expressed in percentage terms.</p> <p><i>Capacity Factor = (Net electricity generated (MWh) / (24hours*number of days in reporting month)) / Installed capacity (MW)</i></p>	Monthly	
Availability	% Ratio	<p>Availability (Operating Ratio) is the ratio of operating to installed capacity. It measures actual capacity of the power system as compared with nominal capacity and usually is expressed in percentage terms. The formula for calculating operating ratio is:</p> <p><i>Operating Ratio = Operating capacity (MW) / Installed capacity (MW)</i></p>	Monthly	
Cost of Electricity Generation	\$/MWh	Measures the cost of producing 1 MWh of electricity. Should include the cost of power generated internally and procured externally by the utility. The total cost is divided by the total number of energy units sold.	Annual	
Generation	ratio	Measures to what extent installed capacity meets demand. Demand equals actual demand plus demand from connected customers who cannot be served ¹² .	Monthly	

¹¹ For BPL, where applicable a separate set of KPis is required for each island or distinct network

¹² URCA believes that it is prudent on the part of relevant licensees to calculate this ratio as it provides valuable information and data to inform the decision making process of all stakeholders.

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Capacity/Demand				
Heat Rate	KiloJoules per Kilowatt hours (kJ/kWh)	Heat rate is the common measure of the technical efficiency of a thermal power plant or generating unit. It is defined as the amount of fuel energy input used by a generating unit or power plant to generate one kWh of electricity. This is mathematically represented as Equation Heat Rate (kJ/kWh) = Energy Input to the system (BTU/hr) × (1.055 kJ/BTU) ÷ Power Output (kW)	Monthly	
Customers per km	customers/km	Measures electrification density of the utility. When both transmission and distribution length are included in the denominator, the measure is less clear, as it is affected by the “profile” of the utility of being transmission or distribution oriented. Therefore, it is best to have separate measures for transmission and distribution.	Annual	
System Losses	% of supply	This indicator is the most significant for measuring all losses that occur during the transmission and distribution of electricity from generation stations to end-use customers. Total system losses equal (Electricity supplied to grid (MWh) – Total electricity billed (MWh))/ Electricity supplied to grid (MWh). Reflects utility’s effort in measuring theft/illegal connections, possibly augmented with overloaded system parts. Total losses combine technical and “non-technical” losses.	Annual	
Load Factor	Ratio	Load factor = (Annual electricity supplied (MWh) / (24hours*365days)) / Peak annual demand (MW) Load factor is a ratio of average annual load to maximum annual load. This indicator measures how much power is supplied on the average per unit of peak demand. Load factor provides information on how efficiently the power system equipment is used and, to a certain extent, helps understand how close the power supply system is to being overloaded.	Annual	

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Major Outage report	#/24 hours As per Licence Condition 24	The Licensee shall provide a Major Outage report to URCA within 24 hours of a major outage detailing, to the extent possible, the: (i) cause of outage; (ii) geographic area affected by the outage; (iii) number of customers affected by the outage; (iv) steps taken to restore service to the affected area; and (v) time taken for restoration of service.	Major Outage report within 24 hours	
Number of Outages per Year	#/yr	Measures quality of power supply. Consumer dissatisfaction with service is often related to high level of outages. Outages can be caused by generation or network failures.	Annual	
Number of Transformer Failures per Year	#/yr	Reflects one of the most common reasons for outages and high O&M costs.	Annual	
5-year forecast of projected Demand and Generation requirements		The Licensee shall annually prepare and submit to URCA a five-year forecast of projected demand and generation requirements.	Annual	

Proposed Quality of Service data requirements

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
SAIDI	Hours/year	Number of hours-consumer on the system was without power in a year, divided by the total number of subscribers. The equivalent is SAIDI, System Average Interruption Duration Index calculated by dividing the sum of all customer interruption durations, in minutes, by the total number of customers served	Annual	
SAIFI	Interruptions /year	Average number of interruptions experienced by a consumer unit during one year. The equivalent is SAIFI, System Average Interruption Frequency Index calculated by dividing the total number of sustained customer interruptions by the total number of customers served	Annual	

Proposed Commercial data requirements

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Commercial Indices				
Tariff Settings and Adjustments	Times/year	Measures utility's ability to revise tariffs and adjust tariff schemes in order to cover costs with revenues. For many utilities, tariff decisions are made politically and not on the cost basis. Often utilities are not compensated for resulting losses.	Annual	
Profit/Loss	BSD	Indicates to what extent the utility can have cost reflecting tariffs and keep control of investments, costs and bill payment.	Annual	

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Bad Debts	BSD	This KPI gives an indication of receivables which have been written off. The indicator is therefore crucial in the company's management of outstanding accounts. It therefore measures the commercial effectiveness of the utility company	Annual	
Customer Bill Collection Rate	%	Revenues collected / Total electricity billed. Shows effectiveness of the utility in bill collection.	Monthly	
Total O&M Cost/Revenue	%	Operation and maintenance cost as a percentage of utility total revenue. Too low O&M cost may result in a need in very high investment and O&M cost in the future. Too high O&M cost indicate generic problems for the utility.	Quarterly	
Bad Debt on Collections (% of billed)		The ratio of the debt written off by the Financial Department to the total amount of money billed to customers for the sale of electricity.	Monthly	

Proposed Financial data Requirements

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Financial KPI				
Cost Recovery Ratio	%	Cost recovery ratio can be measured as ratio of effective tariff to cost per kWh, expressed as percentage.	Semi-annual	

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
		Effective tariffs measure electricity price per kWh at different monthly consumption levels. The formula for effective tariff calculation is: $t=a*x+b$, where: a is volume-based charge per kWh, x is volume consumed, and b is fixed charge.		
Operating Expenses Covered by Revenues	%	The indicator of operating expenses covered by revenues is a ratio of operating costs to revenues billed, expressed as percentage. As opposed to Days of accounts receivable, it does not take into account utility collection efficiency, but rather reflects whether the utility is capable of recovering its current expenditures at the existing consumption level and tariffs. Operating Expenses Covered by Revenue = (Utility Operating Cost/Billed Revenue) * 100%	Annual	
Accounts Receivables	Days	Accounts receivable is cash that customers owe to the utility for power supplied to them. The indicator of days of accounts receivable shows how fast the utility collects payments from customers. The lower this indicator, the more financially efficient the utility is. This indicator is calculated as: Accounts Receivable (Days) = Year-end Accounts Receivable / (Annual Operating Revenues/365 Days)	Annual	
Audited Financial Statements	As per Licence	The Licensee shall submit its audited financial statements, with certificate of the external auditors, for the Licensed Business and the accompanying annual report (which shall provide together with the current year at least ten years of operating and financial statistics) to URCA as required by URCA having regard to the Licensee's requirements for its annual report and audited financial statements.	Annual	
CAPEX	As per Licence	The Licensee shall, annually, provide URCA with its capital investment plan and updated five-year capital investment plan.	Annual	

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Average Industrial Tariff	(\$/kWh)	Average price per kWh of electricity sold to industrial consumers, including both fixed (\$/kVA) and variable components (\$/kWh), in local nominal currency	Quarterly	
Average Residential Tariff	(\$/kWh)	Average price per kWh of electricity sold to residential consumers, including both fixed and variable components, in local nominal currency.	Quarterly	

Proposed Fuel Data Requirement

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
Fuel KPI				
Fuel Charge by type of fuel (eg HFO, Diesel, Other fuel) - Heavy Fuel Oil (HFO) contribution to Fuel Charge - ADO Contribution to Fuel Charge	\$/kWh	Total Cost of Fuel Purchase (\$) divided by the gross generation minus station use (kWh) Provide a monthly matrix of data with appropriate units of measurements on types of fuel consumed by station, volume, costs and electricity generated from type of fuels. <ul style="list-style-type: none"> • Cost of Heavy Fuel Oil (HFO), • Cost of Automotive Diesel Oil (ADO) • Cost of other fuels • Electricity generated from HFO, ADO and other Fuels • Volumes of HFO, ADO and other fuels purchased and refined 	Monthly	

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	Licensee Comments
- Other Fuel Contribution to Fuel Charge				

Proposed Efficiency and Social data requirements

Reporting Indicator	Unit	Broad Definition and data required	Reporting Frequency	PES Comments
Efficiency KPIs				
Operating cost per employee	BSD/employee	$\frac{\text{Total Operating Cost}^*}{\text{Total Number of employees at end of period}} \times 100\%$ <p>*(Excl. power purchases, depreciation & Interest Payment)</p>	Quarterly	
Customer/Employee	Ratio	<p>Measures labor efficiency of utility. The ratio tends to be higher in well-managed, efficient utilities.</p> $\frac{\text{Total Number of customers at end of period}}{\text{Total Number of employees at end of period}}$	Bi-annual	
Staff cost/Total cost	Ratio	Measures the weight of staff costs in the cost structure of the utility. Staff costs are a major factor of utility profitability.	Annual	
Social Impact KPIs				
Number of households electrified annually	%	$\frac{\text{Number of new domestic connections at end of year}}{\text{Total number of domestic connections for entire system}} \times 100\%$	Annual	
Number of applications for new connections	Number Index	Total number of applications: Domestic and non-domestic	Annual	
Number of Applications approved	Number	<p>Total number of applications approved: Domestic and non-domestic defined by:</p> $\text{Acceptance Index} = \frac{\text{Number of Applications Approved}}{\text{Number of Applications Submitted}}$	Annual	

Annex 3: DEFINITION, ANALYSIS, RECOMMENDATIONS FOR PERFORMANCE MONITORING INDICATORS¹³

This section outlines URCA's:-

- Definition of each indicator with formula and sufficient details for users and Licensees to know unequivocally what data are to be included in the indicator.
- Analysis of the importance of the KPI in measuring utility performance and operations.
- Recommendations of methods and strategies to improve licensees' performance in some indicators.

Indicator Total System Losses

Full Name:	Total system losses
Short Name:	System losses
Formula:	(Electricity supplied to national grid - Total electricity billed) x 100/Electricity supplied to national grid
Units:	%
Key Importance to KPI:	Operationalizes overall distribution performance of utility (including technical and non-technical aspects).
Customer service contribution:	Availability, reliability, cost, customer relations.

Definition and analysis

Total system losses is a popular indicator for measuring all losses that occur during the transmission and distribution of electricity from generating stations or points of purchase to end-use customers. Total system losses equal the difference between the power (MWh) supplied for consumption within the country and the power (MWh) billed to end users.

$$\text{System losses} = \frac{(\text{In-country generation, net of plant own use (MWh)} - \text{Export (MWh)} + \text{Import (MWh)}) - \text{Electricity billed to customers}}{(\text{In-country generation, net of plant own use (MWh)} - \text{Export (MWh)} + \text{Import (MWh)})}$$

The main components of system losses are technical losses (e.g. heat or copper losses, magnetic losses, or transformation losses) and non-technical losses (e.g. meter failure, meter tampering or fraud, un-metered or illegal connections, or data encryption losses in billing, in other words, commercial losses, metering failures and theft). It provides more reliable and thus better comparable performance information than Technical and Non-technical losses, which are very difficult to separate. Total system losses, as referred here, do not include collection losses that occur due to customer unwillingness or inability to pay, failures in billing and collecting.

¹³Monitoring Performance of Electric Utilities, Indicators and Benchmarking in Sub-Saharan Africa by: Prasad Tallapragada V.S.N., Maria Shkaratan, Ada Karina Izaguirre, Jaakko Helleranta, Saifur Rahman

For a vertically integrated utility total system losses equal combined Transmission and Distribution (T&D) losses. However, the indicator can be broken into two parts: System losses of electricity transmission and System losses of electricity distribution. Each of them will comprise technical and non-technical losses.

System losses are most often indicated as a percentage of total electricity supplied to the network, even though it can also be indicated in terms of an amount of energy (MWh).

System losses is one of the most essential power sector indicators, especially for developing countries, as it provides information about power system efficiency and overall performance of a power utility in terms of energy that it procures, sells and bills to customers.

Monitoring total system losses closely is crucial because of the multiple financial and commercial areas of performance it captures. Reducing system losses often provides one of the fastest ways to improve a utility's financial performance. Regulators, governments and public interest groups are also interested in monitoring this indicator, as it has important implications for tariff calculations and required fiscal support to electricity companies.

Limitations of the indicator

System losses provide a good overview of a utility's performance but the indicator is limited to be used on the system level: while providing an overall estimate of sector efficiency, the indicator of system losses does not help understand the sources of inefficiency. This happens due to the fact that system losses combine technical and all types of non-technical losses. Therefore, while estimating the overall level of inefficiency, it does not define where the problems are – in the condition of the equipment, in sector management or in theft. Other loss measures are needed to better understand the sources of losses.

Operational dimensions of the indicator

Technical efficiency: The system loss indicator is a direct measure of the technical efficiency of a utility. Although not perfect, this indicator provides more reliable information on technical efficiency than other measures of losses (e.g. technical and non-technical) because the input data of the indicator is more verifiable than those of other indicators.

Commercial efficiency: This dimension has two components: (a) non-technical losses due to billing and metering errors, theft of electricity among other causes and (b) collection efficiency that compares revenues collected against the bills issued. Given that the system losses indicator only addresses the first component of the commercial efficiency, this indicator cannot be used to assess the commercial efficiency of a utility.

Capacity Factor

Capacity factor is a ratio of actual generation of power to maximum capacity to generate. This indicator measures percentage of installed capacity that is utilized. Capacity factor provides information on how close the power supply system is to being overloaded or, in other words, to its limit defined by the level of installed capacity. When capacity factor is high (i.e., actual supply is approaching its capacity limit), there is a risk of system overload and power blackout. At the same time, high capacity factor reflects that power equipment usage is efficient. Low capacity factor indicates inefficiency in equipment usage. Capacity factor is calculated as ratio of average hourly generation to maximum possible generation at the installed capacity level (before losses). It is usually expressed in percentage terms.

Capacity factor = (Net electricity generated (MWh) / (24hours × # of day in month)) ÷ Installed capacity (MW)

Load Factor

Load factor is a ratio of average annual load to maximum annual load. This indicator measures how much power is supplied on the average per unit of peak demand. Load factor provides information on how efficiently the power system equipment is used and, to a certain extent, helps understand how close the power supply system is to being overloaded. When load factor is high (i.e., average supply is only marginally below peak demand), equipment usage efficiency is high and vice versa. At the same time, when load factor is close to 100%, the system might be at its capacity limit and could collapse with potential increase in peak demand. Load factor is calculated as ratio of average hourly supply (before losses) to peak annual demand of power. It is usually expressed in percentage terms.

Load factor = (Annual electricity supplied (MWh) / (24hours*365days)) / Peak annual demand (MW)

Availability (Operating Ratio)

Operating ratio is the ratio of operating to installed capacity. It measures actual capacity of the power system as compared with nominal capacity and usually is expressed in percentage terms. The formula for calculating operating ratio is:

$$\text{Availability (Operating ratio)} = \text{Operating capacity (MW)} / \text{Installed capacity (MW)}$$

Operating ratio provides information about the condition of the power sector assets. This information is important by itself, as it reflects the burden of unutilized assets for both the power sector and the fiscal system. In addition, it provides context to the analysis of other efficiency indicators, such as load factor and capacity factor.

This indicator is quite important for The Bahamas, where quantity and quality of power supply are major problems, both of which are directly related to the poor condition of the sector assets. It also points to cases, in which non-operational assets might create serious fiscal problems.

There is a relationship among the three indicators described here – load factor, capacity factor and operating ratio. Operating ratio can be used to check if the low level of capacity factor can be explained by condition of the power system physical assets or by other reasons, most likely managerial inefficiency or theft. When both capacity factor and operating ratio are low, at least one of the explanations for low capacity factor is condition of the assets. When capacity factor is low while operating ratio is high, the low capacity ratio cannot be explained by physical asset condition and other reasons should be assumed.

Accounts Receivable

Accounts receivable is cash that customers owe to the utility for power supplied to them. The indicator of days of accounts receivable shows how fast the utility collects payments from customers. The lower this indicator, the more financially efficient the utility is. This indicator is calculated as:

$$\text{Accounts Receivable (Days)} = 365 \text{ Days} / (\text{Annual Operating Revenues}/\text{Year-end Accounts Receivable})^{14}$$

Another way to present the same formula is:

$$\text{Accounts Receivable (Days)} = \text{Year-end Accounts Receivable} / (\text{Annual Operating Revenues}/365 \text{ Days})^{15}$$

In either case, the outcome of the calculations gives the number of days it will take to collect outstanding accounts receivable considering a past year's experience with the average time gap between the day the service was provided and the day the payment was received.

¹⁴ The denominator of the equation is called turnover ratio=net sales / end-year receivables. Turnover ratio shows how many times the company turned over its receivables in a year. It is preferable to use average of end-year receivables for the current year and the previous year.

¹⁵ The denominator of the equation shows average daily revenue. Dividing accounts receivable by average daily revenue gives number of days daily average is called turnover ratio=net sales / end-year receivables. It is preferable to use average of end-year receivables for two years: the current one and the previous one.

Cost Recovery Ratio

Cost recovery ratio can be measured¹⁶ as ratio of effective tariff¹⁷ to cost per kWh, expressed as percentage. It makes sense to use two such ratios: operational and total, the former based on operational cost and the latter on total cost, which has both operational and capital components. Together with the indicator of operating expenses covered by revenues, cost recovery ratio reflects utility ability to cover its expenditures with revenues. However, they differ: ratio of operating expenses to revenues takes into account actual consumption level, while cost recovery ratio ignores current consumption level and can be calculated for any theoretical level of consumption.

Operating Expenses Covered by Revenues

The indicator of operating expenses covered by revenues is a ratio of operating costs to revenues billed, expressed as percentage. As opposed to Days of accounts receivable, it does not take into account utility collection efficiency, but rather reflects whether the utility is capable of recovering its current expenditures at the existing consumption level and tariffs. This indicator is below 100% if operational cost is covered by revenues. To be able to recover costs that include capital expenses (in addition to operating expenses) and to account for non-collection, this indicator should be noticeably below 100%.

It is important to mention that some of the factors of performance according to this indicator are outside of utility decision making power. This includes tariffs and certain elements of operating costs.. Also, operating cost largely depends on source of generation and, with thermal generation, on oil prices. These examples show that the word “performance” used in the paragraph above does not necessarily mean “utility efficiency”. However, many components of the costs and collection level can certainly be optimized by utilities – therefore, the indicator of operating expenses covered by revenues can be improved with increased utility efficiency.

Heat Rate

Heat rate is the common measure of the technical efficiency of a thermal power plant or generating unit. It is defined as the amount of fuel energy input used by a generating unit or power plant to generate one kWh of electricity. This is mathematically represented as Equation 9.2.

$$\text{Heat Rate (kJ/kWh)} = \text{Energy Input to the system (BTU/hr)} \times (1.055 \text{ kJ/BTU}) \div \text{Power Output (kW)}$$

Heat rate represents the technical efficiency of generating plant in converting fuel into electricity. A lower heat rate means that less fuel is used per kWh of electricity and this corresponds to greater efficiency and to reduced fuel expenses. Heat rates are not the same for all generating plants. Generating units used for peaking purposes, such as gas turbines, generally have higher heat rates than baseload units, which are more efficient. The existence of these differences in heat rates underscores the importance of the generation supply mix.

¹⁶ Cost recovery can be measured in a different way, for example, as ratio of unit revenue to cost. In this case it would reflect the price-cost-revenue collection relationship, while the proposed in this section tariff-to-cost ratio reflects the price-cost relationship, separated from the collection rate.

¹⁷ Effective tariffs measure electricity price per kWh at different monthly consumption levels. The formula for effective tariff calculation is: $t=a*x+b$, where: a is volume-based charge per kWh, x is volume consumed, and b is fixed charge.

System Heat Rate

The average System heat rate is dependent on the average heat rate and Net Energy Output (NEO) of each generating unit dispatched.

Principles for Establishing the System Heat Rate Target

URCA proposed that the heat rate target for the PES generation systems is a prudent and appropriate measure which can be adopted to permit the efficient pass-through of fuel costs incurred by PES to its customers. The target is proposed to be set on a periodic basis by URCA to ensure that electricity ratepayers are provided with fair and reasonable fuel rates. The target is also aimed at providing the PES with an incentive to improve the fuel conversion efficiency of their thermal generating system and receive the resultant monetary benefits.

The heat rate target further seeks to ensure that PES operates the system to minimize the total cost of electricity generation by adhering to the economic dispatch of all available generating units subject to system constraints as required by the Licence and the Generation Code.

Annex 4: GLOSSARY OF INDICATORS KEY TERMS

1. Power system indicators and terms

Installed capacity, Conventional thermal (MW)

The combined installed capacity of all conventional thermal generation units (oil, gas, coal).
See "Installed capacity, Total (MW)" for definition of installed capacity.

Installed capacity, Gas-fired (MW)

Total installed capacity of all gas-fired generation units.
See "Installed capacity, Total (MW)" for definition of installed capacity.

Installed capacity, Off-grid (MW)

Total installed capacity of all of the isolated power plants or local grids that are not part of an interconnected network. Off-grid generation capacity does not include captive generation (industrial or commercial "inside the fence" capacity, e.g. mines, factories, etc.).

Installed capacity, Other renewables (MW)

Total installed capacity of all non-hydro renewable generation units.
See "Installed capacity, Total (MW)" for definition of installed capacity.

Installed capacity, Total (MW)

The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator. The series include installed IPP generation capacity but excludes captive generation and self-generation capacities

2. Operational indicators and terms

Capacity factor, Annual (%)

Electricity generation, Net (MWh) divided by Installed Capacity (MW) times 8760 hours, expressed as a percentage. The ratio of a power plant's actual generation to its maximum potential generation over a certain time period. The "maximum potential" generation is determined by assuming continuous output at the power plant's rated capacity. For example, a 10 MW plant operating for 10 hours would have maximum potential generation of 100 MWh; if it instead generated 50 MWh, it would have a capacity factor of 50 percent.
NOTE: Available operating capacity may be significantly lower than installed capacity.

Operating capacity, Total (MW)

The average amount of generation capacity in functional condition, available for production. Operating generation capacity includes capacity under planned maintenance. The IEA defines operating capacity as "the sum of all individual plants' maximum capacities available during a period of at least 15 hours per day."

Connections per employee (number)

The number of connections divided by the number of full time equivalent employees.

Demand, Annual on-grid (MWh)

Total load served in the interconnected network(s) during the year in question. It is calculated as: "Electricity generation, net" plus "Electricity imported" and thus includes system losses.

Electricity purchased from IPPs (MWh)

Total amount of electricity purchased by the national generation and distribution companies from independent power producers (IPPs).

Electricity purchased, Total (MWh)

Total amount of electricity purchased by the national generation and distribution companies from independent power producers (IPPs) and foreign countries (net of exports).

Electricity sold, High voltage industrial (MWh)

Volume of electricity sales billed to high voltage (HV) industrial customers. See "Electricity sold, Total (MWh)" for details.

Electricity sold, Medium voltage commercial (MWh)

Volume of electricity sales billed to medium voltage (MV) commercial customers. See "Electricity sold, Total (MWh)" for details.

Electricity sold, Residential and low voltage business (MWh)

Volume of electricity sales billed to residential and low-voltage (LV) commercial customers. See "Electricity sold, Total (MWh)" for details.

Electricity sold, Total (MWh)

The total volume (MWh) of electricity billed to national customers.

NOTE: Might differ from power consumption, as the latter could be calculated to include non-technical losses.

Employees, Total full time equivalent (number)

The number of full time equivalent employees is calculated as number of hours worked by full-time and part time employees divided by the number of hours in a full working day. Thus, employees working half time are to be counted as half an employee and so on.

Load factor, Annual (%)

Electricity generation, Net (MWh) divided by Peak demand (MW) times 8760 hours, expressed as a percentage. The load factor gives an idea of how the operating capacity of the generation companies is used.

Losses, Distribution (%)

Electricity delivered for national distribution minus Electricity billed (expressed as percentage). Thus, it is energy lost in distribution as percentage of energy delivered for distribution.

Losses, Non-technical (%)

Consist mainly of unmetered and unbilled consumption, including consumption through illegal connections and incorrect estimation of legal consumption due to tampering with meters and inadequate fixed billing (expressed as percentage of Net Generation).

NOTE: Non-technical losses can also be referred to as commercial losses.

NOTE: Non-technical losses are difficult to measure separately from technical losses.

Losses, Technical (%)

Technical losses consist of resistance and iron core losses, which occur during the transmission and distribution process.

NOTE: Technical losses are difficult to measure separately from non-technical losses.

Losses, Total system (%)

Total load served (MWh) minus Electricity billed (MWh) divided by Total load served (MWh) (expressed as percentage). Total system losses is total amount of energy lost during transmission and distribution of electricity. System losses can be divided into technical and non-technical losses, the latter including theft, commercial and metering losses. They do not account for non-payment by end users. For technical losses, see "Losses, Technical (%)".

Losses, Transmission (%)

Total load served minus Electricity delivered for distribution divided by Total load served (expressed as percentage). Thus, it is energy lost in transmission as percentage of energy transmitted.

Operating meters rate, Residential and low voltage business (%)

Percentage of residential or low-voltage customers that have an operating meter. In practice, this may be approximated by percentage of customers who are billed based on metering (including prepayment metering) as opposed to consumption estimation.

Operating-to-installed capacity ratio (%)

Operating capacity divided by installed capacity, expressing as a percentage. Indicates the extent to which plant installed capacity is maintained for operation.

Peak load, Annual, On-grid (MW)

The maximum load of the interconnected system(s) during the year question. In case a country has multiple interconnected systems it is the sum of peak demands of each of these systems.

Reserve margin (%)

Installed capacity less peak load, as a percentage of peak load.

Sales per employee (MWh/employee)

Total electricity sold divided by the full-time equivalent number of employees.

3. Financial indicators and terms

Accounts receivable (days)

Average number of days the utility takes to collect outstanding accounts receivable considering a past year's experience with the average number of days between service provision and payment receipt. Calculated as: $[365 \text{ Days} / (\text{Annual Operating Revenues} / \text{Year-end Accounts Receivable})]$.

Average annual revenue per residential or low voltage customer (BSD)

"Revenues from electricity billed" divided by "Customers, Residential or low voltage business (thousands)".

Average connection charge, Residential customers (BSD)

The average connection charge is calculated by dividing total connection charges by the number of new customers. The difference between number of customers in a given year and the year before can be used as the number of new customers if the actual number of new connections is not available.

Average electricity tariff, All customers (BSD/kWh)

Total revenue from electricity billed divided by electricity billed (kWh).

Average electricity tariff, Residential customers and low voltage business (BSD/kWh)

Revenue from residential customers divided by electricity billed to residential customers (kWh).

Average operating expenses per kWh (BSD/kWh)

Operating expenses divided by Total load served.

Capital expenditure, Total (BSD, millions)

Capital expenditure includes all investments made by the company in plant property, equipment, and other infrastructure.

Collection ratio (%)

Revenue as percentage of billings. Calculated as: $[\text{Accounts receivables (year opening)} + \text{Revenue} - \text{Accounts receivables (year closing)}] / \text{Billings}$.

Current ratio (number)

Total current assets divided by total current liabilities.

Debt-equity ratio (number)

Total liabilities divided by total equity.

Debt-service coverage ratio (number)

Cash income divided by debt service liability.

Effective residential tariff at 100 kWh/month consumption level

Price paid for 1 kWh if 100 kWh is consumed per month. The indicator is calculated using tariff schedules and includes fixed and volume-based electricity charges.

Gross fixed assets, Book value (BSD, millions)

Total value of fixed assets as reflected in the balance sheet at the end of the year, Excluding depreciation.

Labor costs, Total (BSD, millions)

Wages, expenses, and benefits of employees.

Operating expenses covered by revenues (%)

Operating expenses divided by revenues billed, expressed as percentage.

Operating expenses, Total (BSD, millions)

Comprises all recurrent costs plus depreciation plus financial costs (such as debt service and interest charges, foreign exchange losses), before taxes.

Operating ratio (%)

Operating expenses as percentage of total revenue.

Return on assets (%)

Annual earnings divided by total assets, expressed as percentage.

Return on equity (%)

Net income divided by total equity, expressed

Revenue per employee (BSD/employee)

Total revenues divided by number of full-time equivalent employees.

Revenue, Annual, Average (BS cents/kWh)

Revenues from electricity billed per unit of electricity (kWh) billed

Revenues from electricity billed (BSD, millions)

Revenue from electricity sales only. Does not include revenue from connection charges or other services fees, or revenues from non-electricity activities.

Revenues from electricity billed, High voltage Commercial (BSD, millions)

Revenue from electricity billed to high voltage customers, the majority of whom are Large Commercial customers.

Revenues from electricity billed, Medium voltage commercial (BSD, millions)

Revenues from electricity billed to medium voltage customers, the majority of whom are commercial customers.

Revenues from electricity billed, Residential and low voltage business (BSD, millions)

Revenues from electricity billed to residential and other low voltage customers (e.g., commercial).



Annex 5: Monthly PES Reporting Template



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION
Monthly Report

This template is to be used by PES to fulfil its reporting obligations to the URCA.

INSTRUCTIONS

Complete the ***Business & other details*** worksheet before entering data or values in any other worksheets.

All units for KPIs and their supporting variables are given. Please give numeric values to 2 decimal points (2 d.p.) where applicable.

Some reporting fields are filled using drop-down selection. Please select the accurate description.

If you believe the data for a KPI should be kept confidential *from the public*, please mark that KPI as confidential and give your supporting reasons as to why URCA should respect your request of confidentiality.

These KPIs in the Monthly Report, are to be reported using data from the last thirty/thirty-one (30/31) days only.

The "Justification of Estimated Values" field is to be used to explain why the value may be abnormal.

The "Methodology for Actual & Estimated Values" field is to be used to explain how the value was ascertained (eg. read from measurement instrument, read from system control panel, etc).

Additional space for further comments has been provided for you to share any additional questions, comments, or concerns you have about that KPI.

When submitting this report, please submit to Utility Regulation & Competition Authority at info@urcabahamas.bs, with subject heading "(Name of Licensee) Performance Report [Monthly. {1,2,4,5,7,8,10 or 11}] 2020".

Please name this report with the same subject heading as the e-mail.

Any KPIs that require accompanying reports are to be attached to the selfsame e-mail.

----- END OF INSTRUCTIONS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION
Monthly Report

Contents

RESPONSE DATE: *31 MARCH, 2020*

1. Business and Other Details
2. Technical Data KPIs
3. Commercial Data KPIs
4. Fuel Data KPIs

----- END OF CONTENTS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Monthly Report

BUSINESS AND OTHER DETAILS

RESPONSE DATE: 31 MARCH, 2020

Instructions

Complete the following business details regulatory template *before* entering data or values in any other worksheet.

Type of Electricity Supplier Licence			
Licence Number			
Name of Electricity Supplier			
Business Address: (use ALT+Enter to enter new line in same cell)			
Contact Persons	Person 1	Person 2	Person 3
Contact Name			
Contact Phone			
Contact email address			
Reporting period			
Submission Date (day month year):			

----- **END OF BUSINESS AND OTHER DETAILS** -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Monthly Report

KPI category: Technical Data
 RESPONSE DATE: 31 MARCH, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Capacity Factor	percentage		
Net electricity generated	MWh		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Availability (Operating Ratio)	percentage		
Operating Capacity	MW		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			

Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Generation Capacity / Demand	ratio		
Generation Capacity	MW		
Demand for this month	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Heat Rate	kJ/kWh		
Energy Input into System	BTU/hr		
Power Output	kW		
Does this KPI require confidentiality ? If yes, why?			

Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

-----END OF TECHNICAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Monthly Report

KPI category: **Commercial Data**
 RESPONSE DATE: 31 MARCH, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Customer Bill Collection Rate	percentage		
Revenues collected	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Bad Debt on Collections (% of billed)	percentage		
Debt Written Off	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			

Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

-----END OF COMMERCIAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Monthly Report

KPI category: Fuel Data
 RESPONSE DATE: 31 MARCH, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Total Cost of Fuel	BSD		
Cost of Heavy Fuel Oil (HFO)	BSD		
Cost of Automotive Diesel Oil (ADO)	BSD		
Cost of other fuels	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Total Electricity Generated	MWh		
Electricity Generated from HFO	MWh		
Electricity Generated from ADO	MWh		
Electricity Generated from other fuels	MWh		
Does this KPI require confidentiality ? If yes, why?			

Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Fuel Charge	BSD/kWh		
HFO Contribution to Fuel Charge	BSD/kWh		
ADO Contribution to Fuel Charge	BSD/kWh		
Other fuel Contribution to Fuel Charge	BSD/KWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Total Volume of Fuel Purchased	bbl		
Volume of HFO Purchased	bbl		

Volume of ADO Purchased	bbl		
Volume of other fuels Purchased	bbl		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Total Volume of Fuel Used in Generation	bbl		
Volume of HFO used in Generation	bbl		
Volume of ADO used in Generation	bbl		
Volume of other fuels used in Generation	bbl		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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----- END OF FUEL DATA KPI REPORTING -----

----- END OF MONTHLY REPORT -----



Annex 6: Quarterly PES Reporting Template



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

This template is to be used by PES to fulfil its reporting obligations to the URCA.

INSTRUCTIONS

Complete the *Business & other details* worksheet before entering data or values in any other worksheets.

All units for KPIs and their supporting variables are given. Please give numeric values to 2 decimal points (2 d.p.) where applicable.

Some reporting fields are filled using drop-down selection. Please select the accurate description.

If you believe the data for a KPI should be kept confidential *from the public*, please mark that KPI as confidential and give your supporting reasons as to why URCA should respect your request of confidentiality.

***** Important*****

Though this is the mid-year report, each KPI has its own reporting frequency, (all of which are due at the end of the annual period).

Those KPIs bordered by:-

purple, are to be reported on monthly (using data from the last thirty/thirty-one (30/31) days (month) only); and

blue, are to be reported on quarterly (using data from the last three (3) months only);

The "Justification of Estimated Values" field is to be used to explain why the value may be abnormal.

The "Methodology for Actual & Estimated Values" field is to be used to explain how the value was ascertained (eg. read from measurement instrument, read from system control panel, etc).

Additional space for further comments has been provided for you to share any additional questions, comments, or concerns you have about that KPI.

When submitting this report, please submit to Utility Regulation & Competition Authority at info@urcabahamas.bs, with subject heading "(Name of Licensee) Performance Report [Quarterly, {1 or 3}] 2020".

Please name this report with the same subject heading as the e-mail.

Any KPIs that require accompanying reports are to be attached to the selfsame e-mail.

----- END OF INSTRUCTIONS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION
Quarterly Report

Contents

RESPONSE DATE: *30 APRIL, 2020*

1. Business and Other Details
2. Technical Data KPIs
3. Commercial Data KPIs
4. Financial Data KPIs
5. Fuel Data KPIs
6. Efficiency KPIs

===== END OF CONTENTS =====



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

BUSINESS AND OTHER DETAILS

RESPONSE DATE: 30 APRIL, 2020

Instructions

Complete the following business details regulatory template *before* entering data or values in any other worksheet.

Type of Electricity Supplier Licence			
Licence Number			
Name of Electricity Supplier			
Business Address: (use ALT+Enter to enter new line in same cell)			
Contact Persons	Person 1	Person 2	Person 3
Contact Name			
Contact Phone			
Contact email address			
Reporting period	Q1: 1 JANUARY - 31 MARCH		
Submission Date (day month year):			

----- END OF BUSINESS AND OTHER DETAILS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

KPI category: Technical Data
 RESPONSE DATE: 30 APRIL, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Capacity Factor	percentage		
Net electricity generated	MWh		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Availability (Operating Ratio)	percentage		
Operating Capacity	MW		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Generation Capacity / Demand	ratio		
Generation Capacity	MW		
Demand for this month	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Heat Rate	kJ/kWh		
Energy Input into System	BTU/hr		
Power Output	kW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF TECHNICAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

KPI category: Commercial Data
 RESPONSE DATE: 30 APRIL, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Customer Bill Collection Rate	percentage		
Revenues collected	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Bad Debt on Collections (% of billed)	percentage		
Debt Written Off	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Total O&M Cost / Revenue	percentage		
Operation Cost	BSD		
Maintenance Cost	BSD		
Total Revenue	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

===== END OF COMMERCIAL DATA KPI REPORTING =====



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

KPI category: Financial Data
 RESPONSE DATE: 30 APRIL, 2020

QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Average Industrial Tariff	BSD/kWh		
Industrial Tariff, fixed component	BSD/kVA		
Industrial Tariff, variable component	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Average Residential Tariff	BSD/kWh		
Residential Tariff, fixed component	BSD/kWh		
Residential Tariff, variable component	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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----- END OF FINANCIAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

KPI category: Fuel Data
 RESPONSE DATE: 30 APRIL, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Total Cost of Fuel	BSD		
Cost of Heavy Fuel Oil (HFO)	BSD		
Cost of Automotive Diesel Oil (ADO)	BSD		
Cost of other fuels	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Total Electricity Generated	MWh		
Electricity Generated from HFO	MWh		
Electricity Generated from ADO	MWh		
Electricity Generated from other fuels	MWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			

Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Fuel Charge	BSD/kWh		
HFO Contribution to Fuel Charge	BSD/kWh		
ADO Contribution to Fuel Charge	BSD/kWh		
Other fuel Contribution to Fuel Charge	BSD/KWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Total Volume of Fuel Purchased	bbl		
Volume of HFO Purchased	bbl		
Volume of ADO Purchased	bbl		
Volume of other fuels Purchased	bbl		
Does this KPI require confidentiality ? If yes, why?			

Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Total Volume of Fuel Used in Generation	bbl		
Volume of HFO used in Generation	bbl		
Volume of ADO used in Generation	bbl		
Volume of other fuels used in Generation	bbl		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF FUEL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Quarterly Report

KPI category: Financial Data
 RESPONSE DATE: 30 APRIL, 2020

QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Operating Cost Per Employee	BSD/employee		
Total Operating Cost* *(Excl. power purchases, depreciation, and interest payment)	BSD		
Number of Employees at end of period	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- **END OF EFFICIENCY DATA KPI REPORTING** -----

----- **END OF QUARTERLY REPORT** -----



Annex 7: Biannual PES Reporting Template



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

This template is to be used by PES to fulfil its reporting obligations to the URCA.

INSTRUCTIONS

Complete the ***Business & other details*** worksheet before entering data or values in any other worksheets.

All units for KPIs and their supporting variables are given. Please give numeric values to 2 decimal points (2 d.p.) where applicable.

Some reporting fields are filled using drop-down selection. Please select the accurate description.

If you believe the data for a KPI should be kept confidential *from the public*, please mark that KPI as confidential and give your supporting reasons as to why URCA should respect your request of confidentiality.

***** Important*****

Though this is the mid-year report, each KPI has its own reporting frequency, (all of which are due at the end of the annual period).

Those KPIs bordered by:-

purple, are to be reported on monthly (using data from the last thirty (30) days (month) only);

blue, are to be reported on quarterly (using data from the last three (3) months only); and

green, are to be reported on biannually (using data from the last six (6) months only);

The "Justification of Estimated Values" field is to be used to explain why the value may be abnormal.

The "Methodology for Actual & Estimated Values" field is to be used to explain how the value was ascertained (eg. read from measurement instrument, read from system control panel, etc).

Additional space for further comments has been provided for you to share any additional questions, comments, or concerns you have about that KPI.

When submitting this report, please submit to Utility Regulation & Competition Authority at info@urcabahamas.bs, with subject heading "(Name of Licensee) Performance Report [Biannual] 2020".

Please name this report with the same subject heading as the e-mail.

Any KPIs that require accompanying reports are to be attached to the selfsame e-mail.

----- END OF INSTRUCTIONS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

Contents

RESPONSE DATE: *31 JULY, 2020*

1. Business and Other Details
2. Technical Data KPIs
3. Commercial Data KPIs
4. Financial Data KPIs
5. Fuel Data KPIs
6. Efficiency KPIs

===== END OF CONTENTS =====



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

BUSINESS AND OTHER DETAILS

RESPONSE DATE: 31 JULY, 2020

Instructions

Complete the following business details regulatory template *before* entering data or values in any other worksheet.

Type of Electricity Supplier Licence			
Licence Number			
Name of Electricity Supplier			
Business Address: (use ALT+Enter to enter new line in same cell)			
Contact Persons	Person 1	Person 2	Person 3
Contact Name			
Contact Phone			
Contact email address			
Reporting period	H1: 1 JANUARY - 30 JUNE		
Submission Date (day month year):			

===== END OF BUSINESS AND OTHER DETAILS =====



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

KPI category: Technical Data
 RESPONSE DATE: 31 JULY, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Capacity Factor	percentage		
Net electricity generated	MWh		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Availability (Operating Ratio)	percentage		
Operating Capacity	MW		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
----------------------	--

Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Generation Capacity / Demand	ratio		
Generation Capacity	MW		
Demand for this month	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Heat Rate	kJ/kWh		
Energy Input into System	BTU/hr		
Power Output	kW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF TECHNICAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

KPI category: Commercial Data
 RESPONSE DATE: 31 JULY, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Customer Bill Collection Rate	percentage		
Revenues collected	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Bad Debt on Collections (% of billed)	percentage		
Debt Written Off	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Total O&M Cost / Revenue	percentage		
Operation Cost	BSD		
Maintenance Cost	BSD		
Total Revenue	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF COMMERCIAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

KPI category: Financial Data
 RESPONSE DATE: 31 JULY, 2020

QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Average Industrial Tariff	BSD/kWh		
Industrial Tariff, fixed component	BSD/kVA		
Industrial Tariff, variable component	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Average Residential Tariff	BSD/kWh		
Residential Tariff, fixed component	BSD/kWh		
Residential Tariff, variable component	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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BIANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Cost Recovery Ratio	percentage		
Effective Tariff	BSD/kWh		
Cost per kWh	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

===== **END OF FINANCIAL DATA KPI REPORTING** =====



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

KPI category: Fuel Data
 RESPONSE DATE: 31 JULY, 2020

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Total Cost of Fuel	BSD		
Cost of Heavy Fuel Oil (HFO)	BSD		
Cost of Automotive Diesel Oil (ADO)	BSD		
Cost of other fuels	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Total Electricity Generated	MWh		
Electricity Generated from HFO	MWh		
Electricity Generated from ADO	MWh		
Electricity Generated from other fuels	MWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			

Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Fuel Charge	BSD/kWh		
HFO Contribution to Fuel Charge	BSD/kWh		
ADO Contribution to Fuel Charge	BSD/kWh		
Other fuel Contribution to Fuel Charge	BSD/KWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Total Volume of Fuel Purchased	bbl		
Volume of HFO Purchased	bbl		
Volume of ADO Purchased	bbl		
Volume of other fuels Purchased	bbl		
Does this KPI require confidentiality ? If yes, why?			

Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Total Volume of Fuel Used in Generation	bbl		
Volume of HFO used in Generation	bbl		
Volume of ADO used in Generation	bbl		
Volume of other fuels used in Generation	bbl		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

-----END OF FUEL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Biannual Report

KPI category: Financial Data
 RESPONSE DATE: 31 JULY, 2020

QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Operating Cost Per Employee	BSD/employee		
Total Operating Cost* *(Excl. power purchases, depreciation, and interest payment)	BSD		
Number of Employees at end of period	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

BIANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Customer / Employee Ratio	ratio		
Total Number of Customers at end of period	unitless		
Total Number of Employees at end of period	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			

All Assumptions:	
Additional Comments:	

----- END OF EFFICIENCY DATA KPI REPORTING -----

----- END OF BIENNIAL REPORT -----



Annex 8: Annual PES Reporting Template



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

This template is to be used by PES to fulfil its reporting obligations to the URCA.

INSTRUCTIONS

Complete the ***Business & other details*** worksheet before entering data or values in any other worksheets.

All units for KPIs and their supporting variables are given. Please give numeric values to 2 decimal points (2 d.p.) where applicable.

Some reporting fields are filled using drop-down selection. Please select the accurate description.

If you believe the data for a KPI should be kept confidential *from the public*, please mark that KPI as confidential and give your supporting reasons as to why URCA should respect your request of confidentiality.

***** Important*****

Though this is the yearly report, each KPI has its own reporting frequency, (all of which are due at the end of the annual period).

Those KPIs bordered by:-

purple, are to be reported on monthly (using data from the last thirty-one (31) days (month) only);

blue, are to be reported on quarterly (using data from the last three (3) months only);

green, are to be reported on biannually (using data from the last six (6) months only); and

orange, are to be reported on annually (using data from the last twelve (12) months only).

The "Justification of Estimated Values" field is to be used to explain why the value may be abnormal.

The "Methodology for Actual & Estimated Values" field is to be used to explain how the value was ascertained (eg. read from measurement instrument, read from system control panel, etc).

Additional space for further comments has been provided for you to share any additional questions, comments, or concerns you have about that KPI.

When submitting this report, please submit to Utility Regulation & Competition Authority at info@urcabahamas.bs, with subject heading "(Name of Licensee) Performance Report [Annual] 2020".

Please name this report with the same subject heading as the e-mail.

Any KPIs that require accompanying reports are to be attached to the selfsame e-mail.

----- END OF INSTRUCTIONS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

Contents

RESPONSE DATE: *31 JANUARY, 2021*

1. Business and Other Details
2. Technical Data KPIs
3. Quality of Service Data KPIs
4. Commercial Data KPIs
5. Financial Data KPIs
6. Fuel Data KPIs
7. Efficiency KPIs
8. Social Impact Data KPIs

----- END OF CONTENTS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

BUSINESS AND OTHER DETAILS

RESPONSE DATE: 31 JANUARY, 2021

Instructions

Complete the following business details regulatory template *before* entering data or values in any other worksheet.

Type of Electricity Supplier Licence			
Licence Number			
Name of Electricity Supplier			
Business Address: (use ALT+Enter to enter new line in same cell)			
Contact Persons	Person 1	Person 2	Person 3
Contact Name			
Contact Phone			
Contact email address			
Reporting period	A1: 1 JANUARY - 31 DECEMBER		
Submission Date (day month year):			

----- END OF BUSINESS AND OTHER DETAILS -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: **Technical Data**
 RESPONSE DATE: 31 JANUARY, 2021

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Capacity Factor	percentage		
Net electricity generated	MWh		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Availability (Operating Ratio)	percentage		
Operating Capacity	MW		
Installed Capacity	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Generation Capacity / Demand	ratio		
Generation Capacity	MW		
Demand for this month	MW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Heat Rate	kJ/kWh		
Energy Input into System	BTU/hr		
Power Output	kW		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

ANNUAL

Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Cost of Electricity Generation	BSD/MWh		
Cost of Power Produced Internally	BSD		
Cost of Power Procured Externally	BSD		
Total Megawatt-hours sold	MWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
6. a) Customers per kilometer (transmission)	customers/km		
b) Customers per kilometer (distribution)	customers/km		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
7. System Losses (% of supply)	percentage		

Electricity supplied to grid	MWh		
Total Electricity Billed	MWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
8. Load Factor	ratio		
Annual Electricity supplied	MWh		
Peak Annual Demand	MW		

Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
9. Number of Outages per Year	#/yr		
Does this KPI require confidentiality ? If yes, why?			

Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator			
10. Number of Transformer Failures per Year	Unit	Value	Is the value actual or estimated?
	#/yr		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator		Data Required	
11. 5-year forecast of projected Demand and Generation requirements		The Licensee shall annually prepare and submit to URCA a five-year forecast of projected demand and generation requirements.	

----- **END OF TECHNICAL DATA KPI REPORTING** -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: **Quality of Service Data**
 RESPONSE DATE: 31 JANUARY, 2021

ANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. SAIDI	hours/year		
Amount of Time consumer on the system was without power in a year	minutes/year		
Total Number of Customers Served	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. SAIFI	Interruptions/year		
Total number of sustained customer interruptions in one year	Interruptions/year		
Total Number of Customers Served	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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----- END OF QUALITY OF SERVICE DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: **Commercial Data**
 RESPONSE DATE: 31 JANUARY, 2021

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Customer Bill Collection Rate	percentage		
Revenues collected	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Bad Debt on Collections (% of billed)	percentage		
Debt Written Off	BSD		
Total Electricity Billed	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Total O&M Cost / Revenue	percentage		
Operation Cost	BSD		
Maintenance Cost	BSD		
Total Revenue	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

ANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Tariff Settings and Adjustments	times/year		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Profit/(Loss)	BSD		
Revenue	BSD		
Operating Cost	BSD		
Finance Cost	BSD		

Does this KPI require confidentiality ? If yes, why?	
Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
6. Bad Debt	BSD		

Does this KPI require confidentiality ? If yes, why?	
Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

----- END OF COMMERCIAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: **Financial Data**
 RESPONSE DATE: 31 JANUARY, 2021

QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Average Industrial Tariff	BSD/kWh		
Industrial Tariff, fixed component	BSD/kVA		
Industrial Tariff, variable component	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Average Residential Tariff	BSD/kWh		
Residential Tariff, fixed component	BSD/kWh		
Residential Tariff, variable component	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			

Additional Comments:	
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BIENNIAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Cost Recovery Ratio	percentage		
Effective Tariff	BSD/kWh		
Cost per kWh	BSD/kWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

ANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Operating Expenses Covered by Revenues	percentage		
Utility Operating Cost	BSD		
Billed Revenue	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Accounts Receivable	Days		
Year-end Accounts Receivable	BSD		
Annual Operating Revenues	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Data Required
6. Audited Financial Statements	The Licensee shall submit its audited financial statements, with certificate of the external auditors, for the Licensed Business and the accompanying annual report (which shall provide together with the current year at least ten years of operating and financial statistics) to URCA as required by URCA having regard to the Licensee's requirements for its annual report and audited financial statements.

Reporting Indicator	Data Required
7. CAPEX	The Licensee shall, annually, provide URCA with its capital investment plan and updated five-year capital investment plan.

----- END OF FINANCIAL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: Fuel Data
 RESPONSE DATE: 31 JANUARY, 2021

MONTHLY

Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Total Cost of Fuel	BSD		
Cost of Heavy Fuel Oil (HFO)	BSD		
Cost of Automotive Diesel Oil (ADO)	BSD		
Cost of other fuels	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Total Electricity Generated	MWh		
Electricity Generated from HFO	MWh		
Electricity Generated from ADO	MWh		
Electricity Generated from other fuels	MWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			

Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Fuel Charge	BSD/kWh		
HFO Contribution to Fuel Charge	BSD/kWh		
ADO Contribution to Fuel Charge	BSD/kWh		
Other fuel Contribution to Fuel Charge	BSD/KWh		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

Reporting Indicator	Unit	Value	Is the value actual or estimated?
4. Total Volume of Fuel Purchased	bbl		
Volume of HFO Purchased	bbl		
Volume of ADO Purchased	bbl		
Volume of other fuels Purchased	bbl		
Does this KPI require confidentiality ? If yes, why?			

Justification of Estimated Values (if applicable)	
Methodology for Actual & Estimated Values	
All Assumptions:	
Additional Comments:	

Reporting Indicator	Unit	Value	Is the value actual or estimated?
5. Total Volume of Fuel Used in Generation	bbl		
Volume of HFO used in Generation	bbl		
Volume of ADO used in Generation	bbl		
Volume of other fuels used in Generation	bbl		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF FUEL DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: **Financial Data**
 RESPONSE DATE: 31 JANUARY, 2021

QUARTERLY			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Operating Cost Per Employee	BSD/employee		
Total Operating Cost* *(Excl. power purchases, depreciation, and interest payment)	BSD		
Number of Employees at end of period	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

BIANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Customer / Employee Ratio	ratio		
Total Number of Customers at end of period	unitless		
Total Number of Employees at end of period	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			

All Assumptions:	
Additional Comments:	

ANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
3. Staff Cost / Total Cost	ratio		
Staff Cost	BSD		
Total Cost	BSD		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF EFFICIENCY DATA KPI REPORTING -----



PUBLIC ELECTRICITY SUPPLIERS REPORTING REQUIREMENTS
KEY PERFORMANCE INDICATORS AND BASIS OF PREPARATION

Annual Report

KPI category: Social Impact Data
 RESPONSE DATE: 31 JANUARY, 2021

ANNUAL			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
1. Number of Households Electrified Annually	percentage		
Number of new domestic connections at end of year	unitless		
Total number of domestic connections for entire system	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			
Reporting Indicator	Unit	Value	Is the value actual or estimated?
2. Number of Applications for New Connections	unitless		
Total number of Domestic applications	unitless		
Total number of Non-Domestic applications	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			

All Assumptions:			
Additional Comments:			
Reporting Indicator			
3. Number of Applications approved (Acceptance Index)	Unit	Value	Is the value actual or estimated?
	unitless		
Number of Application approved	unitless		
Number of Applications submitted	unitless		
Does this KPI require confidentiality ? If yes, why?			
Justification of Estimated Values (if applicable)			
Methodology for Actual & Estimated Values			
All Assumptions:			
Additional Comments:			

----- END OF FINANCIAL DATA KPI REPORTING -----

----- END OF ANNUAL REPORT -----