# JAMAICA ELECTRIC UTILITY SECTOR

# **SUPPLY CODE**

#### **DISCLAIMER**

This is a draft document and is a work in progress. The document is in the process of preparation and editing and as such Table of Contents, page numbering, appendixes, glossary will be added or modified as appropriate based on stakeholders review comments.

This draft document is for review only by the OUR and Stakeholders. It should not be relied upon by any other party or parties or used for any other purpose.

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The data, conclusions and recommendations will remain draft until the documents have gone through the review process and is approved by the legally authorized entities.

#### SC 1 INTRODUCTION TO THE CODE

In exercise of powers conferred by Section 47 of the Jamaica Electricity Act 2015 and all other powers enabling it in that behalf , the Office of Utilities Regulator has developed the Jamaica "Electricity Supply Code, 2016".

# SC 1.1 Scope

This Code details the obligations of the licensee and Consumers vis-à-vis each other and specifies the set of practices that shall be adopted by the licensee to provide efficient, cost effective and Consumer friendly service to the Consumers.

All the forms and formats annexed to the Supply Code are for guidance. The licensee may make suitable amendments in the forms/formats after seeking prior approval of the Regulator and such amended forms/ formats would be posted on the website of the respective licensees for use by Consumers.

This Code shall be applicable to:

- (1) the Licensee and all Consumers in the Island of Jamaica as covered under the Electricity Act 2015
- (2) This Code shall come into force on the date of publication in the Jamaica Gazette

# SC 1.2 Structure of the Supply Code;

The Supply Code consists of 13 Sections as follows;

Section-1: Introduction to the Code

Section-2: System of Supply and Classification of Consumers

Section-3: New Connections

Section-4: Customers with Embedded Generation

Section-5: Point of Supply and Licensee's Equipment within Consumer's

Premises

Section-6: Wiring and Apparatus in Consumer's Premises

Section-7: Contract Demand and Agreement (Tariff Design)

Section-8: Disconnection and Reconnection

Section-9: General Provisions

Section-10: Payment and Disconnection

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Section-11: Theft of Electricity

Section-12: Emergencies

Section-13: Planning

Appendices



#### SC 2 SYSTEM OF SUPPLY AND CLASSIFICATION OF CONSUMERS

# SC 2.1 System of Supply

The declared frequency of the Alternating Current (AC) shall be 50 cycles per second.

The declared voltage of the AC supply is as follows:

Low Voltage (LT) or Low Voltage (LT);

- 1. Single Phase: 220 volts between phases.
- 2. Single Phase: 110 volts between phases and neutral.
- 3. Three Phase: 220 volts between phases with single phase at 110 volts or 220 volts
- 4. Three Phase: 415 volts between phases with single phase at 240 volts
- 5. Three Phase: 415 volts between phases with single phase at 110 volts.

Three phase service supplied under a general service rate or power rate that includes incidental lighting will be given under the following conditions;

- a at 220 volts 3-phase with single phase at 110 or 220 volts.
- b at 415 volts 3-phase with single phase at 240 volts.
- c at 415 volts 3-phase with single phase at 110 volts in which case Consumer will be required to furnish the necessary transformer from one or other of the available service voltages.

415/240 volt supplies will only be furnished to installations exceeding 50 Kw of demand or 75 H.P. of connected load where such supply is taken from an individual transformer or is available from an existing supply of similar characteristics.

Only customers already furnished with a supply at 440 volts 3-phase may be permitted to increase their power requirements at this voltage provided the additional equipment is being installed at the same location. Single phase loads must be substantially balanced over the 3-phases but a single phase load, provided it does not exceed 10% of the 3-phase load, may be taken from one phase.

The licensee shall design and operate a distribution system in conjunction with the transmission system. The licensee shall not permit the voltage at the point of supply to the Consumer to vary from the declared voltage which is:

In the case of low voltage -- by more than 5% on either side.

In the case of medium voltage up to 24 kV -- by more than 5% on the higher side or by more than 5% on the lower side

# SC 2.2 Allowed capacity at each voltage

The supply voltage for different Contract demands shall normally be as follows:

Supply	Minimum	Maximum	
Voltage	Connected Load	Connected Load or	
		Contract demand	
110 volts		Licensee to supply this data	
Supply	Minimum	Maximum	
Voltage	Connected Load	Connected Load or	
		Contract demand	
		Licensee to supply this data	
220 volts	XX		
		Licensee to supply this data	
415 volts	50 kW	Licensee to supply this data	

Supply Voltage	Minimum demand	Contract	Maximum demand	Contract
12 kV	xx kVA		xx kVA	
24 kV	xx kVA		xx kVA	

Provided that if the licensee is satisfied that there are sufficient grounds for deviation in the norms above stated and such deviation is technically feasible, it may grant the same for reasons to be recorded in writing.

# SC 2.3 Customer classification (per the tariff methodology)

The classification of Consumers, tariff and conditions of supply applicable to each category shall be as fixed by the Regulator from time to time in the tariff determination order or otherwise.

#### SC 3 NEW CONNECTIONS

# SC 3.1 Licensee's Obligation to Supply

The Licensee shall, on an application by the owner or occupier of any premises located in Jamaica, give supply of electricity to such premises within the time specified in this Code provided;

- (a) the supply of power is technically feasible,
- (b) the Consumer has observed the procedure specified in this Code, and
- (c) the Consumer agrees to bear the cost of supply and services as specified.

# SC 3.2 Licensee's obligation to extend the Distribution System and Consumer's share in the Cost

#### SC 3.2 .1 Types of Line Extensions

A line extension is the extension of the Licensee's distribution lines to facilitate electric service supply to an applicant's property, subdivision or commercial building.

The request for line extensions may be categorized under the following headings:

#### SC 3.2.2 Complex Connection A

An application is categorized under complex connection A if the request for service connection lies within 30 to 100 meters of an existing secondary line, and construction or modification of the Licensee's distribution system is necessary to provide the service.

#### SC 3.2.3 Complex Connection B

An application is categorized under complex connection B if the request for service connection lies within 101 to 250 meters of an existing secondary line, and construction or modification of the Licensee's distribution system is necessary to provide the service.

#### SC 3.2.4 Major Job

An application is categorized as a major job if the request for service connection falls in any of the following categories:

- goes beyond 250 meters from an existing distribution system.
- is a subdivision (Residential, Commercial and Industrial).
- requires pad-mounted transformers.
- requires underground or transmission works.

- is a townhouse or Apartment Complexes that will result in multiple meter installations and are in excess of 100 kVA.
- requires specialized installation of 100 kVA or more that can impact the quality of power supplied to customers sharing that circuit. Jobs of this type include, but are not restricted, to facilities with large welding plants (>25kW), large motors (>60kW), capacitor banks (>60kVA) or electronic switching equipment.
- requires system improvements, modifications or relocations of the Licensee's distribution system.
- requires service upgrade (phase or transformer) to an existing customer. Line extensions can be further categorized as obligatory or non-obligatory jobs.

#### SC 3.2.5 Obligatory Jobs

These are jobs that do not require transformation and the supply point lies within 100 meters along a public roadway/highway or 30 meters along on private property.

Obligatory jobs also includes the following:

- i) System Improvement Corrective actions necessary to make Licensee system safe or compliant with codes, standards or improved operational efficiency. (Provided that the unsafe condition or compliance breach did not result from a third party action).
- ii) System Upgrade Capacity upgrade of less than 50% of the supplying transformer. See Appendix A2 for Examples of Obligatory type jobs.

SC 3.2.6 Non-Obligatory Jobs: Jobs that do not meet the requirements of Obligatory shall be classified as nonobligatory. These include relocations, underground extensions, works beyond Licensee metering point, transmission works and works that require easements. A job that meets the specifications in Obligatory but requires special installations or will impact the quality of service to other customers, are also considered as non-obligatory, until a proper assessment is made. These include welding facilities, motor (>10hp) facilities with direct starts, telecom switching stations, frequency converters, or harmonic generating equipment. (Refer to Standards Terms and Conditions of Contract)

# SC 3.3 Service connection/ extension work got done by Consumers

#### SC 3.3.1 Requisition for Supply

An application is considered valid when the applicant provides all the information necessary to initiate the process. The information necessary for initiating a job by category is as follows:

#### SC 3.3.2 Complex Connection 2A & 2B type jobs

Licensee Name - the name of the Licensee making the application. .

Applicant's Name - the first, last and other name of the applicant making the request

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Contact Number - the number the applicant can be reached.

Service Address - the address/ location where the service is required.

Mailing Address - the address where correspondences can be sent during the application process.

Driving Instructions - directions to the location where the service is required

Comments - any other information that will assist in the application process.

Customer(s) to be served - the name of the person(s) that will initiate the service Contract with Licensee.

#### SC 3.3.3 Major Jobs

Licensee Name - the name of the Licensee making the application.

Applicant's Name - the first, last and other name of the applicant making the request.

Contact Number - the number the applicant can be reached.

Service Address - the address/ location where the service is required.

Mailing Address - the address where correspondences can be sent during the application process. Driving Instructions - directions to the location where the service is required.

Comments - any other information that will assist in the application process.

Customer(s) to be served - the name of the person(s) that will initiate the service Contract with Licensee.

Required supporting documents

- Electrical Distribution Design
- Land Title
- Parish council approval
- Surveyor's pre-checked plan
- Surveyor's boundary peg declaration
- Underground facilities plan
- Drawings

Note: An applicant may initiate the application process by a written application to the Licensee.

Line Extensions along a Public Roadway/Highway (within 100 meters)

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A request for service connection to premises that is located along a public roadway/highway within 100 meters of an existing secondary distribution system.

A premises is eligible for service connection under this category provided the following conditions holds:

- Service is available at the required voltage.
- The service extension is overhead.
- The premise is not already supplied.
- The premise is not considered a housing scheme or subdivision.

#### **Cost Options**

The request for service connection shall be provided at no cost to the applicant.

#### **Refund Options**

A refund is not applicable under this category.

#### **Guaranteed Standards**

There are no guaranteed standards governing this request. However, the Licensee will provide the applicant with an estimated timeline for the completion of the works required for construction.

Line Extensions on Public Roadway/Highway (in excess of 100 Metres)

A request for service connection to premises that is located along a public roadway/highway in excess of 100 meters of an existing secondary distribution system.

#### Requirements

A premises is eligible for a line extension under this category provided the following conditions hold;

- The premises is in excess of 100 meters of the Licensee's distribution system.
- The service extension is overhead.
- The premises is not already supplied.
- The premises is not considered a housing scheme, subdivision, commercial complexes or apartment schemes.

#### **Cost Options**

The request for service connection shall be provided to the applicant at a cost to be determined. The applicant shall be afforded the following payment options:

- Option 1 Making a n on-refundable contribution in aid of construction which should be equivalent to 50% of the total estimated cost for the line extension or system upgrade (inclusive of cost of labour and materials such as transformers, wire and poles, but excluding metering equipment and metering labour) less net retirement value of existing plant, provided the deduction is at least equivalent to the cost of a 100 meters extension.
- Option 2 Making a refundable deposit equal to the total estimated cost for the extension (inclusive of the cost of labour and materials such as transformers, wire and poles, but excluding metering equipment and metering labour) less net retirement value of existing plant.

# **Refund Options**

An entitlement to a refund shall be determined by Licensee and shall be calculated using the total revenue earned from the energy, customer and demand charges generated by the customer(s) connected to the energized line extension, within three (3) years of its completion up to the total value of the refundable deposit. Any sum in excess of that due for refund within three (3) years is forfeited. In all circumstances, including instances where the application for the line extension was made on behalf of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number (TRN) of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the person to whom the refund amount shall be made payable.

The Licensee will endeavour to ensure that the revenue earned from the aforementioned during the relevant period is appropriately and promptly refunded, at the end of the refundable period, to the applicant or his/her authorised representative. The applicant is equally encouraged to promptly bring to the Licensee's attention other customers serviced via the extension.

#### **Guaranteed Standards**

- For jobs between 101 to 250 meters A quotation should be submitted to the applicant within the standard 15 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 40 working days after full payment of contribution from the applicant.
- -For jobs in excess of 250 meters There is currently no guaranteed standards governing this category. However, the Licensee prepares a project proposal document, which is submitted to the applicant and is used as a guide to the time required for the completion of the job.

#### **Extensions on Private Property**

A request for line extension to premises that is on a private property, in excess of 30 meters and that is currently not connected to the Licensee's distribution systems.

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#### Requirements

A premises is eligible for a line extension under this category provided the following conditions hold:

- -The premises is on a private property or along a private roadway.
- The premises is not already supplied.
- A valid GEI certificate is in force for the premises (the premises is immediately ready to receive permanent electricity service).
- -The service extension is overhead.
- Easement on property must be at no cost to IPS.

#### **Cost Options**

The request for service connection shall be provided to the applicant at a cost to be determined. This cost shall be based on an estimate that will be prepared by the Licensee. The applicant shall be required to pay the total estimated cost of the line extension in excess of the first 30 meters (including transformers, poles, wire, labour and any other relevant associated cost, excluding metering equipment and metering labour).

Extensions on private property, on the incoming (line) side of the Licensee's revenue meter will be owned and maintained by Licensee at its expense. Extensions on private property, on the load (customer's) side of the Licensee's revenue meter will be owned and maintained by the applicant at their expense.

#### **Refund Options**

A refund is not applicable under this category.

#### **Guaranteed Standards**

- For jobs between 30 to 100 meters - A work estimate should be submitted to the applicant within the standard 10 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 30 working days after full payment of contribution from the applicant.

For jobs between 101 to 250 meters - A work estimate should be submitted to the applicant within the standard 15 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 40 working days after full payment of contribution from the applicant.

For jobs in excess of 250 meters - There is currently no guaranteed standards governing this category. However, the Licensee prepares a project proposal document, which is submitted to the applicant and is used as a guide to the time required for the completion of the job.

#### SC 3.3.4 Transformation

A request for service connection to premises that is located along a public roadway, highway and or private property in excess of 30 meters of an existing secondary distribution system, and which requires the installation of a transformer to meet the voltage requirement of the applicant.

#### Requirements

A premises is eligible for a line extension under this category provided the following conditions hold:

- The premises is in excess of 30 meters along a public roadway, highway or on a private property.
- The premises is not already supplied, or
- The voltage required does not exist; hence installing a transformer is required.
- The service extension is overhead.

#### **Cost Options**

The request for service connection shall be provided to the applicant at a cost to be determined. This cost shall be based on an estimate that will be prepared by the Licensee. The applicant shall be afforded the following payment options:

- Option 1 Making a non-refundable contribution in aid of construction equivalent to 50% of the total estimated cost of the transformation (inclusive of the cost of transformers, hardware, labour and any other associated costs, excluding metering equipment and metering labour).
- Option 2 Making a refundable deposit equal to the total estimated cost for the transformation excluding metering equipment & labour.
- Option 3 For premises along private roadways or on private property requiring transformation, when no service of the required voltage already exists, the applicant shall be required to pay the full cost of transformation (excluding metering equipment & labour). Service will be metered as close as practicable to the property boundary.

#### **Refund Options**

An entitlement to a refund shall be determined by Licensee and shall be calculated using the total revenue earned from the energy, customer and demand charges generated by the customer(s) that is serviced from the transformer within three (3) years following completion of the installation, up to a maximum sum equivalent to the refundable deposit. Any amount in excess of that eligible for refund within three (3) years is forfeited. In all circumstances, including instances where the application for the line extension was made on behalf of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number (TRN) of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the person to whom the refund amount shall be made payable.

The Licensee will endeavour to ensure that the revenue earned from the aforementioned during the relevant period is appropriately and promptly refunded, at the end of the refundable period, to the applicant or his/her authorised representative. The applicant is equally encouraged to promptly bring to the Licensee's attention other customers serviced via the transformation.

#### **Guaranteed Standards**

- For jobs between 30 to 100 meters A work estimate should be submitted to the applicant within the standard 10 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 30 working days after full payment of contribution from the applicant.
- For jobs between 101 to 250 meters A work estimate should be submitted to the applicant within the standard 15 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 40 working days after full payment of contribution from the applicant.
- For jobs in excess of 250 meters There is currently no guaranteed standards governing this category. However, the Licensee prepares a project proposal document, which is submitted to the applicant and is used as a guide to the time required for the completion of the job.

#### 3.3.4 Service Upgrade

A request requiring an increased capacity of 50% or greater when service of identical phase and voltage characteristics already exists or for service requiring upgrade from single phase to three phase regardless of capacity change.

#### Requirements

A premises is eligible for increased capacity under this category provided the following conditions hold:

- The premises is along a public roadway/highway.
- The premises is already supplied with electricity.
- The service extension is overhead.

#### **Cost Options**

The request for a service upgrade shall be provided to the applicant at a cost to be determined. The applicant shall be afforded the following payment options:

- Option 1 - Make a non-refundable contribution in aid of construction equivalent to 50% of the total estimated cost of the upgrade (inclusive of transformers, wires, poles, labour and any other associated cost, excluding metering equipment and metering labour) less net retirement value of existing plant.

- Option 2 - Make a refundable contribution in aid of construction equivalent to the total estimated cost of the upgrade less net retirement value and be refunded a sum equal to the additional revenue.

The applicant will not be required to pay a deposit/contribution in aid of construction for capacity increases less than 50% where service of identical phase and voltage characteristics already exists.

#### **Refund Options**

An entitlement to a refund shall be determined by IPS and shall be calculated using the total revenue earned from the energy, customer and demand charges generated by the customer(s) that is serviced from the transformer within three (3) years following completion of the installation, up to a maximum sum equivalent to the refundable deposit. Any amount in excess of that eligible for refund within three (3) years is forfeited. In all circumstances, including instances where the application for the line extension was made on behalf of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number (TRN) of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the signature of the person to whom the refund amount shall be made payable.

- Option 2 - Make a refundable contribution in aid of construction equivalent to the total estimated cost of the upgrade less net retirement value and be refunded a sum equal to the additional revenue.

The applicant will not be required to pay a deposit/contribution in aid of construction for capacity increases less than 50% where service of identical phase and voltage characteristics already exists.

#### **Refund Options**

An entitlement to a refund shall be determined by JPS and shall be calculated using the total revenue earned from the energy, customer and demand charges generated by the customer(s) that is serviced from the transformer within three (3) years following completion of the installation, up to a maximum sum equivalent to the refundable deposit. Any amount in excess of that eligible for refund within three (3) years is forfeited. In all circumstances, including instances where the application for the line extension was made on behalf of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number (TRN) of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the person to whom the refund amount shall be made payable.

The Licensee will endeavour to ensure that the revenue earned from the aforementioned during the relevant period is appropriately and promptly refunded, at the end of the refundable period, to the applicant or his/her authorised representative. The applicant is equally encouraged to promptly bring to the Licensee's attention other customers serviced via the transformation.

#### **Guaranteed Standards**

- For jobs between 30 to 100 meters A work estimate should be submitted to the applicant within the standard 10 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 30 working days after full payment of contribution from the applicant.
- For jobs between 101 to 250 meters A work estimate should be submitted to the applicant within the standard 15 working days. The Licensee is required to complete construction necessary for electricity supply within the standard 40 working days after full payment of contribution from the applicant.
- For jobs in excess of 250 meters There is currently no guaranteed standards governing this category. However, the Licensee prepares a project proposal document, which is submitted to the applicant and is used as a guide to the time required for the completion of the job.

#### Housing Schemes/Subdivisions/Commercial Complexes

A subdivision is any property that is modified resulting in a requirement for multiple meters and approved by the local authority, parish council, or Government Ministry. A Housing Scheme is classified as a request for service connections to a property where independent meters are required for houses that are constructed by a developer and are offered for sale, lease or rental.

# Requirements

A property is eligible for line extensions under this category provided the following conditions hold:

- The appropriate approvals are granted from the Parish Councils (Local Government Authority). (Approvals for a housing scheme, subdivision, commercial, industrial, lownhouse or apartment complex)

#### Cost Options

The request for a service upgrade shall be provided to the applicant at a cost to be determined. The applicant shall be afforded the following payment options:

- Option 1 - Making a non-refundable contribution in aid of construction equivalent to 50% of the total estimated cost for the work (including transformers, poles, wire, labour and any other associated cost excluding metering equipment and metering labour).

- Option 2 - Making a refundable deposit equivalent to the total estimated cost for the work (including cost of transformers, poles, wires, labour and any other associated cost excluding metering equipment and metering labour).

# **Refund Options**

- Option 1 - (Residential) an applicant is entitled to a refund equivalent to revenues earned from the energy, customer and demand charges generated from assumed energy sales of 5,400kWh per house for each house connected during the first three (3) years following completion of the extension, up to a maximum sum not exceeding the refundable deposit. The refund will be calculated as per the prevailing tariff during the refundable period. Any amount in excess of that eligible for refund within three (3) years is forfeited. In all circumstances, including instances where the application for the line extension was made on behalf

of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the person to whom the refund amount shall be made payable.

Option 2 - An applicant is entitled to a refund equivalent to revenues earned from the energy, customer^ and demand charges generated from actual energy sales for each customer(s) connected during the first five (5) years following completion of the extension, up to a maximum sum not exceeding the refundable deposit. The refund will be calculated as per the prevailing tariff during the refundable period. Any amount in excess of that eligible for refund within five (5) years is forfeited. In all circumstances, including instances where the application for the line extension was made on behalf of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number (TRN) of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the person to whom the refund amount shall be made payable.

The Licensee will endeavour to ensure that the revenue earned from the aforementioned during the relevant period is appropriately and promptly refunded, at the end of the refundable period, to the applicant or his/her authorised representative. The applicant is equally encouraged to promptly bring to the Licensee's attention other customers serviced via the transformation.

#### **Guaranteed Standards**

There is no guaranteed standard governing this request. However, the Licensee will provide the applicant with an estimated timeline for the completion of the works required for construction.

#### **SC 3.3.6 Underground Extensions**

A request for an underground line extension of the Licensee's primary and secondary facilities.

#### Requirements

A premises is eligible for an underground line extension under this category provided the following conditions hold:

- The applicant, to facilitate excavation/backfilling, landscaping, working in the public domain and traffic management, and shall acquire all statutory approvals.
- The applicant provides the rights-of-way easements and covenants are satisfactory to the Licensee.
- All civil infrastructures shall be at the applicant's cost.

#### **Cost Options**

The request for a service upgrade shall be provided to the applicant at a cost to be determined by Licensee. The applicant shall be afforded the following payment options:

- Option 1 - Make a non-refundable contribution in aid of construction equivalent to the total estimated cost for the work (including cost of transformers, wires, labour and any other associated cost excluding metering equipment and metering labour), less a sum equivalent to 50% of the cost, which would have applied for equivalent overhead service.

Option 2 - Make a non-refundable contribution in aid of construction equivalent to the total cost of the work less a sum equal to the cost, which would have applied for overhead service plus a refundable deposit equivalent to the total cost of the equivalent overhead service.

#### **Refund Options**

A refund is not applicable under this category.

#### **Guaranteed Standards**

There are no guaranteed standard governing this request. However, the Licensee will provide the applicant with an estimated timeline for the completion of the works required for construction.

#### SC 3.3.7 Streetlights

Streetlights for local pedestrian, recreational, and vehicular traffic are installed using the following specification:

- Lamp Wattage 100W High Pressure Sodium (HPS) for minor/local roads and 250W HPS for major roads
- . Lamp Ballast/Starter Electronic (Recommended).

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- Luminaries Mounting Height should be 10.5m/ 35 ft.
- Approximate distance between the poles should be 61m/200 ft.
- Bracket Length should be 1.3m/4ft or 2m/6 ft.

#### Requirement

A request for streetlights is eligible provided the following conditions hold:

- a. A written request should be submitted to Licensee through the Parish Councils (Local Government Authority) who will be responsible for the payment of the streetlight bill (See Appendix Al: Streetlight Application Form).
- b. In instances where the lights are required for new sub-divisions, the Developer must submit the request to the respective Parish Council.
- c. Where no infrastructure (poles, transformers, wires, etc.) is required, streetlights will be installed at no charge to the Local Authority based on a pre-approved annual quota.
- d. Licensee has a maximum of six (6) weeks to install the streetlight(s) if no infrastructure is required.

#### **Cost Options**

Option 1 - If no infrastructure is required Licensee will install the streetlight(s) and start billing, as per the tariff, the respective Local Authority one (1) month after the streetlight is installed.

Option 2 - If infrastructure is required the Local Authority should pay a nonrefundable full cost of the material and labour associated with providing the infrastructure (poles, conductors, transformers, easement, labour) less three (3) years of revenues earned from the energy, customer, and demand charges generated from energy sales to be derived from the lights, is to be paid by the party requesting the installation.

#### **Refund Options**

A refund is not applicable under this category.

#### **Guaranteed Standards**

There are no guaranteed standard governing this request. However, the Licensee will provide the applicant with an estimated timeline for the completion of the works required for construction.

#### Note:

Where lights are to be installed on behalf of individuals/developers, the individual/developers will write to the local authority indicating the location, type and size of the lights required. The respective Local Authority will have the option to allocate this from their annual quota or write to IPS and request asking for the estimated cost to install the lights and the approximate three years of revenue and maintenance cost for the streetlight(s). On payment by the applicant to the

Local Authority, they will ask Licensee to install the light(s). If infrastructure work is required, the Local Authority will pay Licensee as per (13.2:b) above.

Relocation (Poles, Service lines, Guys etc)

A request for the relocation of the Licensee's poles, service lines and guys.

Requirements

Relocation of the Licensee's property is effected upon a request from the applicant.

**Cost Options** 

The applicant will be charged the estimated cost for relocation of poles, guys, etc. to a standard equivalent to the facilities being replaced, less retirement value, as it is the Licensee's policy to always secure requisite easements prior to commencing construction. Where lines are erected without easement, these shall be relocated at the Licensee's cost, or the appropriate easements acquired.

Excess costs for system upgrades and/or improvements will be at the Licensee's expense.

**Refund Options** 

A refund is not applicable under this category.

**Guaranteed Standards** 

There are no guaranteed standard governing this request. However, the Licensee will provide the applicant with an estimated timeline for the completion of the works required for construction.

# SC 3.3.8 Smart Streetlight Programme

As required by Condition 28 (6) of the JPS Electricity Licence , the Licensee shall, by December 30, 2016, commence a programme for the implementation of smart LED lighting technology, that has intelligence capable of remotely reading the consumption of each lamp; provides a unique identifier; allows for the identification of out-of-service lamps; provides for the dimming of lights when necessary; can accommodate video surveillance and other smart features and is designed in line with international best practices. This programme is hereinafter referred to as the "Smart Streetlight Programme". The Office shall utilise a Fund or the System Benefit Fund (as defined in the EA), to allow the Licensee to recover the costs of implementing the Smart Streetlight Programme. Licensee shall maintain information relating to the consumption of each lamp and make remote access to such data available to the Ministers responsible for energy and national security.

# SC 3.4 Extension Design & Build work completed by Developers

#### SC 3.4.1 Definition

In accordance with Licensee line extension Policy, special provision is being given to developers, should they so wish, to undertake the design and construction of line extensions within their own development in accordance with the Licensee's design and construction standards. Upon satisfactory completion, the Licensee will be prepared to assume ownership of, operate and maintain the line extension.

#### Requirements

Licensee will own, operate and maintain these circuits providing the following holds:

- The appropriate approval is granted for a housing scheme or a sub-division.
- The property is not already supplied.
- Designs are done in accordance with Licensee Design Standards. (The National Electric Safety Code (NESC), 2002 edition or later).
- Designs that have been checked and approved by a registered Professional Engineer (PE).
- Load details shall be submitted to the Licensee Engineering and Technology Department for approval.
- The applicant shall provide easements for all facilities to be placed on, under, or over private property for which ownership to be transferred to Licensee and such easements shall only be procured from lawful, legal and or equitable owners of affected property.
- The applicant shall provide easement documents with adequate lead-time to facilitate verification and validation by Licensee.
- A statutory certification is received from the Government Electrical Inspector (GEI).
- The lines are into service and energized via the Licensee network.

#### **Cost Options**

The request for service connection shall be provided to the applicant at a cost to be determined. The applicant shall be afforded the following payment options:

Option 1 - The Developer/applicant will be required to make a final nonrefundable contribution representing 50% of the total project cost. This contribution shall be made as follows: The applicant will be required to make an initial payment which represents the total estimated cost of all materials listed in the Licensee approved design and material list provided, thereafter, Licensee will provide the applicant with the said materials. The applicant shall be responsible for construction of the line extension and for obtaining all required easements, statutory approvals and GEI

certification for the Works. Any initial payment made under this option in excess of the 50% of the total project cost will be determined and refunded as per refund option 1, below.

Option 2 - The applicant will be required to make an initial payment, which represents the total estimated cost of all materials, listed in the above mentioned Material List, thereafter, Licensee will provide the applicant with the said materials. The applicant shall be responsible for construction of the service extension and for obtaining all required easements, statutory approvals and GEI certification for the Works. All payments and related cost made under this option may be refunded as per refund option 2A or 2B below.

#### **Refund Options**

Under Cost Option 1 - Upon acceptance and energization of this electrical line extension by Licensee, the applicant shall invoice Licensee for labour and associated expenses. Licensee will certify and accept invoice and will reimburse the applicant where applicable, for related expenses (inclusive of material, labour and associated expenses) over and above 50% of the project cost, up to a maximum of 50% of the Licensee estimate, as determined by the certified invoice and initial payment made.

Under Cost Option 2 - Upon acceptance and energization of this electrical service extension by Licensee, the applicant shall invoice Licensee for an amount not exceeding the difference in cost of Licensee estimate and the initial down payment made for execution of the Works. The amount of this invoice will be certified by Licensee and accepted as final payment towards the Works. In accordance with Licensee standard terms and conditions, the total estimated cost of the project might be refundable under options 2A or 2B, below. The amount of the invoice inclusive of the applicant's initial deposit, will determine the maximum refundable amount payable. Your entitlement to a refund will be determined by your choice of option 2A or 2B as outlined below:

Option 2A - The applicant is entitled to a refund equivalent to revenues earned from the energy, customer, and demand charges generated from energy sales for each customer(s) connected during the first five (5) years following completion of the extension, up to a maximum sum not exceeding the refundable deposit. The refund will be calculated as per the prevailing tariff during the refundable period.

Option 2B - The applicant is entitled to a refund equivalent to revenues earned from the energy, customer, and demand charges generated from energy sales of xxxkWh per house for each house connected during the first three (3) years following completion of the extension, up to a maximum sum not exceeding the refundable deposit. The refund will be calculated as per the prevailing tariff during the refundable period.

If a refund is granted under options 2A or 2B, it shall not exceed the sum of the initial deposit and the amount of the certified invoice, and shall not attract any interest. IPS will use best efforts to advise the applicant whether they are entitled to a refund and to effect the refund, if any, within six (6) months after the termination of the three (3) or five (5) years period, relating to the

option selected. In all circumstances, including instances where the application for the line extension was made on behalf of the applicant by a third party, the applicant will be required to sign a Refundable Deposit form which shall indicate the name, identification number and tax registration number (TRN) of the person to whom the refund amount should be made payable. This Refundable Deposit form shall bear the signature of the applicant and, if different from the applicant, the signature of the person to whom the refund amount shall be made payable.

The Licensee will endeavour to ensure that the revenue earned from the aforementioned during the relevant period is appropriately and promptly refunded, at the end of the refundable period, to the applicant or his/her authorised representative. The applicant is equally encouraged to promptly bring to the Licensee's attention other customers serviced via the transformation.

#### **Guaranteed Standards**

There are no agreed guaranteed standards for this type of line extension, however, the Licensee will provide the applicant with an estimated timeline for the approval of the design, provision of materials after payment and acceptance and energization of line after receipt of the Government Electrical Inspectors Certificate (GEI) and associated easements.

#### **SC 3.4.2 Special Provisions**

Projects that suggest clear, long-term, revenue potential but cannot proceed because applicants are unable to afford the requisite deposit/contribution in aid of construction, should be referred to the VP Power Delivery with a completed assessment of "Revenue/Contribution/Deposit Worksheet". The respective Officer will determine whether to refer the project to National Electrification Solution (NESOL) for further assessment.

Projects which clearly indicate revenue within the first year in excess of the total cost for the extension will be forwarded to the VP Power Delivery together with an attached completed "Revenue/Contribution/Deposit Worksheet" to assess whether the requirement for a deposit/contribution in aid of construction might be waived or an irrevocable letter of credit, from an approved bank, for the amount of deposit/contribution in aid of construction might be accepted in lieu of payment (This should only be applicable for the 100% refundable option).

Upon request, the applicant will be provided the details of the estimated costs for the job.

# **SC 3.5 Temporary Power Supply**

When the Licensee has unsold service available temporary service may be supplied under any rate applicable to the class of service required with an additional charge for all costs of connection and disconnection. The minimum charge set forth in the applicable rate selected shall be applicable to such temporary service, but in no case shall it be less than one full month's minimum in addition to the charges for connection and disconnection provided above

Any person requiring power supply for purpose that is temporary in nature, may apply for temporary power supply in the specified form. Requisition for temporary supply shall normally be given xx days before the day when supply is required for loads up to xx kW and xx days before for higher loads.

The Consumer shall furnish the proof of occupation or permission from the local authority or from the owner of the premises, as the case may be, where temporary connection is required.

If the supply is feasible, the licensee shall advise the Consumer the charges to be paid for the cost of laying and dismantling the extension work, service line, meter, etc, together with the charges for the estimated consumption during the period of supply applied for and the rental of equipment & material. All the charges shall be payable in advance.

In case temporary supply is required for a period more than xx days, the licensee may permit the Consumer to pay charges for estimated consumption for xx days and serve the bills for monthly consumption. In case the Consumer fails to pay the bills in time and the advance with the licensee does not cover the charges for the balance period, the supply is liable for disconnection.

After the period of temporary supply is over and supply has been disconnected, the licensee shall prepare the final bill and send it to the Consumer within xx days from the date of disconnection of supply and return the balance amount, if any, within 30 days of surrender of original money receipt.

# SC 3.7 System of Supply and Metering

If the Licensee owns and installs more than one metered supply, except for the convenience of the Licensee, on the Consumer's premises, the rate for service furnished through each metered supply shall be determined as if such services were rendered to a separate Consumer.

The electrical energy supplied to a Consumer will be for the use of the Consumer only and shall not be for resale either separately or through sub-metering to another or others without the written consent of the Licensee.

The Licensee may, under certain conditions and on the written request of the Consumer, shall permit the installation of one or more sub-meters for information purposes and not for resale. In such cases the meters shall be owned supplied and installed by the Consumer who will be solely responsible for reading and maintaining them.

The meter at the point of delivery will be the property of the Licensee and will be tested at regular intervals. The Licensee at any time, upon the written or verbal request of a Consumer, will test the meter of such Consumer, provided only one such test shall be made free of charge within a twelve month period, and the Consumer shall pay the cost of any additional tests within this period unless the meter is shown to be inaccurate in excess of 2%.

In the event of the stoppage or the failure of any meter to register, the Consumer will be billed for such period on an estimated consumption based upon his use of electrical energy in a similar period of like use.

In the event of any registration inaccuracy in excess of 2%, the account shall be adjusted to allow for the payment by the customer of charges for the energy consumed based on the customers' use of electrical energy during a similar period of like use provided that in no case shall the account be adjusted for a period exceeding six months prior to the date of the adjustment. No part of a minimum charge will be refunded.

# **SC 3.8 Connection Agreement**

An agreement, in the standard format, shall be executed by the applicant on the standard application form for a new connection and for change in the agreed parameters like Contract demand etc. In case of any special circumstances, special clauses may be added to the agreement, if agreed to between the licensee and the Consumer, provided such clauses do not contravene the provisions of the Electricity Act 2015 and other rules and regulations/codes in force. These special clauses shall form a part of the agreement. A copy of the agreement shall be given to the Consumer after finalization.

The standard format of agreement for LT Consumers shall be as per Appendix— xx and for MV Consumers shall be as per Appendix — xx, as appended with this code.

No Consumer shall sell electrical energy supplied to him by the Licensee to any other person.

In case of outage or shortages in electricity supply system of the licensee, the supply of electricity to the Consumer may be curtailed, staggered or cut-off as may be warranted according to the situation. The licensee may also curtail, stagger or cut-off electricity supply to Consumers on account of periodical maintenance of electricity supply system also, after giving due notice to the Consumers.

The electrical energy supplied to the Consumer shall not be utilized by the Consumer in any manner prejudicial to the licensee and all usage must be in accordance with the provisions of the agreement and the Electricity Act, 2015, as applicable.

No Consumer shall divert the use of energy to any other purpose, other than that mentioned in the agreement or extend the line beyond its premises other than that for which it was sanctioned by the licensee, until and unless prior sanction of the licensee is obtained for such diversion or extension.

If there is a need to modify/ amend the agreement signed between the licensee and Consumer, it will be done by a supplementary agreement.

Where the Consumer's installation is disconnected from the licensee's supply as per direction of the Government or the Electrical Inspector, the supply shall be reconnected on payment of specified reconnection fee with the approval of the Government or the Electrical Inspector or other appropriate authority, as necessary. During the period of temporary disconnection the Consumer shall be liable to pay the fixed/ minimum charges except when the disconnection is done on the orders of the District Collector.

Any amendment for the purpose of change of name, shifting of premises, change in connected load or change of tariff category shall be done if both the Consumer and the licensee agree to these amendments and the same shall be incorporated in the agreement by execution of a supplementary agreement. The supplementary agreement has no agreement period.

In case the Consumer is found consuming electricity in excess of the sanctioned and connected load, such Consumer shall be billed as per the procedure detailed in the tariff order.

#### SC 3.8.1 Termination of Agreement

If power supply to a Consumer remains disconnected for a continuous period of xx days for non-payment of charges or dues or non-compliance of any direction issued under this Code, the licensee shall issue a fifteen days' notice to the Consumer for termination of the agreement. In case no effective steps are taken by the Consumer for removing the cause of disconnection and for restoration of power supply, the agreement of the licensee with the Consumer for power supply shall be terminated on expiry of the period of notice, provided the initial period of the agreement is over. The connection shall also be disconnected permanently and remove supply network for that particular connection without affecting supply to other Consumers. During temporary disconnection within the initial period of agreement, the Consumer shall be liable to pay the fixed charges or minimum charges as per applicable tariff order. In such cases, the connection be disconnected permanently and agreement may be terminated after the completion of initial period of agreement.

Domestic and single-phase Non-domestic category of Consumers may terminate the agreement after giving a 15 days' notice. Consumers other than domestic and single-phase non-domestic category can terminate the agreement after the expiry of the initial period of one year on giving one month's notice. The licensee shall arrange for special meter reading, at a mutually acceptable date, to facilitate preparation of the final bill of the Consumer. The agreement shall be terminated on the last day of the billing month and the licensee shall raise the final bill accordingly.

On termination of the agreement, the licensee shall be entitled to remove the service line and other equipment of the licensee for supply of power from the premises of the Consumer. After permanent disconnection, if the Consumer wishes to revive the connection, then it would be treated as an application for new connection and would be entertained only after all outstanding dues have been cleared.

The Licensee shall furnish service under its current Rates or any amendments thereto from time to time and these Terms and Conditions and subject also to the provisions of its Licences under the Electric Lighting Law and Regulations made under the said Licences or the Law.

Copies of these Standard Terms and Conditions may be obtained at the Licensee's Head Office at 6 Knutsford Boulevard, Kingston 5 and at all parish and branch offices.

These Terms and Conditions may be modified by the special Terms and Conditions of individual rates, or of written Contracts.

Unless and otherwise specifically provided in any rate applicable or in a Contract between the Consumer and the Licensee, the term of any agreement shall become operative on the day the Consumer's installation is connected to the Licensee's service for the purpose of taking electricity energy and shall continue thereafter until cancelled by written notice by either party.

The Licensee reserves the right with respect to applicants whose capacity requirements exceed 100 kVA or whose establishments are remote from the Licensee's existing suitable facilities, or whose load characteristics otherwise require unusual investments by the Licensee in service facilities, to make arrangements for supply under special Contract.

# **SC 3.9 Applicable Tariff**

The classification of consumers, tariff and conditions of supply applicable to each category shall be as fixed by the Regulator from time to time in the tariff determination or otherwise.

The applicability of rates will be determined in accordance with the following, subject to the specific provisions of the individual rates.

#### SC 3.9.1 Residential

Rates applicable to residential Consumers are limited in their applicability to the sole use of individual family living quarters and premises for normal residential and housekeeping requirements. These rates are also applicable to convents, churches, nursing homes, schools, hospitals and other institutions not operated for profit. Where a business is conducted in connection with the home and all electric service is taken through one meter, rates having residential applicability may be used for the entire service only as long as 75% or more of the consumption is for residential purposes. When the consumption electrical energy for such business use exceeds 25% of the total, the wiring must be so arranged (at the expense of the Consumer) as to allow the measurement of the consumption on separate meters or all electrical energy will be billed under commercial schedules.

If the Licensee (as it may under unusual circumstances) permits more than one family living quarters to be served through one meter, the minimum bill, the first billing block and kilowatt hours of the applicable residential rate shall be muLTiplied by the number of separate family quarters

so served and the number of kilowatt hours in each succeeding block of the rate shall be increased in the same proportion. Where not over four rooms in a home are sublet to paying guests, it will be considered as a residential establishment. If this number is exceeded, it will be considered to be a commercial establishment.

#### SC 3.9.2 Commercial

Commercial Consumers are considered to be stores, offices, restaurants, hotels, theatres, garages, similar business and merchandising establishments and apartment buildings (except individually metered apartment living quarters). Wherever rates are referred to as general rates they are intended to apply to such Consumers as above outlined.

#### **SC 3.9.3 Power**

Power Consumers are those engaged in the use of apparatus such as motors, battery charges, welding equipment, industrial heating appliances, X-ray machines and for all manufacturing and industrial purposes. Apparatus such as described herein may also be used under general rate schedules in accordance with the provisions of the individual schedule.

#### SC 4.0 CUSTOMERS WITH EMBEDDED GENERATION

## **SC 4.1 Connection Requirements**

Generators must be a qualified facility before it can be interconnected to the Licensee system.

JPS shall determine the Point of Interconnection on the distribution network for the QF. The QE shall identify the additional interconnection facilities necessary to interconnect the QF to JPS' distribution network that is to be itemized in Exhibit XX.

The QE is responsible for the design, installation, operation, maintenance and ownership of the interconnection facilities.

The QE shall be responsible for the cost of the interconnection facilities from the QF to the Point of Interconnection.

The QE shall provide interconnection facilities that adequately protect JPS' distribution system, personnel and other persons from damage and injury, which may be caused by the QF.

The QE shall be responsible for its expenses, including overheads associated with owning, operating, maintaining, repairing, and replacing its interconnection equipment.

**Distribution Upgrades** 

JPS shall design, procure, install, and own any distribution upgrades required to accommodate the QF up to the Point of Interconnection.

The actual cost of the distribution upgrades, including overheads, shall be the responsibility of the QE. The methodology for the calculation of such costs shall be in accordance with JPS' current line extension policy.

Responsibilities of JPS and QE

Each Party shall at its own cost and expense, operate, maintain, repair and inspect and shall be fully responsible for, the facility or facilities, which it now or hereafter may own or lease.

Maintenance of the QF and interconnection facilities shall at a minimum be performed in accordance with the applicable manufacturer's recommended maintenance schedule.

JPS and the QE shall each be responsible for the safe installation, maintenance, repair and condition of their respective lines and equipment on their respective sides of the Point of Interconnection.

# **SC 4.2 Intelligent Network**

Section 44 (1) (g) of the Electricity Act 2015 mandates the implementation of intelligent network technology after consultation with the Office and Single Buyer. The Licensee shall implement intelligent network technology as part of its System as may be defined by the Minister from time to time.

The intelligent network technology shall be implemented on a basis which is cost reflective, consistent with the Price Controls and in accordance with such terms and conditions as are approved by the Office after consultation with stakeholders in the electricity sector.

# SC 4.3 Net Billing

Under Condition 2: General Conditions, Item 5 of the License the Licensee shall purchase electricity from independent power producers and persons who have entered into a net billing arrangement, for transmission and distribution through the System.

The Licensee shall have an obligation to connect to independent power producers and persons who have entered into a net billing arrangement, where a power purchase agreement or standard offer contract, respectively, has been executed, save where both the Licensee and the Government Electrical Regulator agree that the respective connection will compromise the safety and protection of the System

SC 4.3.1 The net billing policy stipulates that provision be made for small commercial and residential electricity generation installations with capacity up to 100kW from renewable energy sources. The net billing provisions in the policy further reiterate that by the nature of these renewable installations, supplemental power will be needed from the national grid from time to time, and on occasion they will have excess energy available for sale to the national grid. These installations will be allowed to exchange power with the national grid under a net billing arrangement which involves the following:

The installation of up to two (2) meters at the premises where the renewable energy facility is located. In the case of two meters, each meter will measure energy flow in opposite directions. One meter will account for flows from JPS to the customer premises and the other from the generation facility at the customer premises to JPS. In the case of the installation of a single meter, that meter will have the capability to measure energy flows in both directions.

JPS will be responsible for the installation and maintenance of the meters. Meter costs will be recovered through the rates charged to the customer for electricity from JPS.

A standard contract to be executed by JPS and the customer, which will specify the rate fixed by the Office at which the customer will sell energy to, and purchase energy from the national grid. These rates will be verified by the Office and published in the newspapers from time to time.

#### SC 4.3.2 Renewable Premium

In order to encourage the development of renewable energy technology, the Government of Jamaica has determined that renewable plants will be allowed to sell electricity to JPS at a maximum of 15% above the avoided cost of energy. In this regard the Policy therefore provides that the pricing mechanism for the supply of energy to the national grid under the SOC arrangement will incorporate this renewable premium.

#### SC 4.3.3 Facility Licensing

The Electric Lighting Act empowers the Minister to issue Licenses to persons wishing to supply electricity for any public or private purpose. Persons wishing to sell electricity to JPS must therefore first obtain a Licence from the Minister before their facility can be connected to the national grid.

#### **SC 4.3.4 The Standard Offer Contract**

The Standard Offer Contract ("SOC") is a standardized contract, the terms of which are approved by the Office as set out in Annex B to this Determination, under which JPS customers who generate electricity for their own use from renewable resources may sell their excess energy (i.e. electricity supply beyond that which is needed to meet the customer's own needs) to JPS. The compensation for the energy exchanged between JPS and the customer under the SOC is to be determined via a net billing arrangement whereby the customer will pay the prevailing retail price for energy consumed from the national grid as is applicable to the customer's rate and class and JPS will purchase the customer's excess electricity at the "short run avoided cost of generation"..

#### SC 4.3.5 Eligible JPS Customers

Participation in the SOC arrangement is open to residential and commercial customers of JPS who generate their own electricity using a facility which:

- a. has a capacity of less than or equal to 100kW in the case of commercial customers or less than or equal to 10kW in the case of residential customers;
- b. uses renewable technologies as its primary source of power; and
- c. complies with all relevant technical specifications and standards as are set out in the SOC as may be amended from time to time.

## **SC 4.3.6 Application Process**

Eligible JPS customers may participate in the SOC arrangement by making an application with supporting documentation to JPS to interconnect to the national grid. Additionally, the customer is required to make an application to the Office for a licence to supply electricity. The application form for grant of licence is set out in Annex xx. The application process is set out in Annex D to this Determination.

# SC 5.0 POINT OF SUPPLY DELIVERY AND LICENSEE'S EQUIPMENT IN PREMISES

# **SC 5.1 Point of Supply Delivery**

The point of delivery is defined as the point or place at which the Licensee delivers to the Consumer the supply of electricity to be used by the Consumer as follows:

- (a) Supply furnished at secondary voltage will be delivered at the Consumer's end of the incoming service wires at the point where such service wires are connected to the Consumer's premises.
- (b) Supply furnished at primary voltage will be delivered at the high tension side of the main transformer bank, which is to be considered as the point of supply delivery.

The point of supply should be such that meter/metering equipment should be visible and easily accessible from road side.

#### SC 5.2 Dedicated Feeder

If a Consumer is or has been provided a separate feeder at his request in addition to the feeder from which supply is provided to the Consumer by the licensee, such additional separate feeder shall be termed as "Dedicated feeder". On receipt of such request, the licensee will check the feasibility based on merit of providing a dedicated feeder to the Consumer's premises. If found feasible, the Consumer will be provided with a dedicated feeder and the Consumer will be liable

to pay additional charges as provided for the recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply The dedicated feeder shall be extended from the power substation to the Consumer's point of supply delivery.

# SC 5.3 Licensee's Equipment in Consumer's Premises

The Licensee shall have the right to install and maintain in convenient and suitable places on the premises of the Consumer free of charge, all transformers, meters, wires and other equipment necessary for the satisfactory supply of electricity to the Consumer. All transformers, meters, wires and other equipment furnished by the Licensee shall remain its property and the Consumer shall be liable for all damages to or loss of the Licensee's property located on the Consumer's premises, unless such damage or loss is caused by the negligence of the Licensee.

The Licensee shall have the right of free access to the said premises and every part thereof at all reasonable times during the period of the Contract and during the period that electricity is supplied and as long as any of the property of the Licensee remains on the said premises, for the purpose of installing, inspecting, repairing, replacing and removing all transformers, meters, wires, and other equipment of the Licensee, and of inspecting and examining any electrical wiring, appliances and equipment of the Consumer connected thereto and for any other lawful purpose.

The meter, cut-out/ MCB, service mains and other equipment belonging to the licensee, shall be handled or removed by an authorized /representative of the licensee only. The seals, which are fixed on the meters /metering equipment, load limiters and the licensee's apparatus, shall not be tampered, damaged and broken. The responsibility for the safe custody of licensee's equipment and seals on the meters/metering equipment within the Consumer's premises shall be on the Consumer.

In the event of any damage caused to the licensee's equipment in the Consumer's premises by reason of any act, neglect or default of the Consumer or his employees/ representatives, the cost thereof as claimed by the licensee shall be payable by the Consumer. If the Consumer fails to do so on demand, it shall be treated as a contravention of the terms and conditions of supply agreement and the supply shall be liable to be disconnected after due notice. The Consumer shall however be liable to pay the charges for the balance initial period of the agreement.

The licensee shall maintain the meters and equipment, installed at Consumer's premises from where the electricity is supplied to the Consumer.

#### SC 5.3.1 Failure of fuse / supply:

Should the licensee's service fuse or fuses fail, at any time, notice thereof should be sent to the licensee's local office. Only authorized employees possessing the photo identity card of the licensee are permitted to replace these fuses in the licensee's cutouts. Consumers are not allowed to

replace these fuses. The licensee should not allow its employees to carry out any repairs in the Consumer's installations.

The licensee shall take all reasonable precautions to ensure continuity of supply of electrical energy to the Consumer but shall not be responsible for or be liable to the Consumer for any loss to him or damage to his plant and equipment due to interruptions in supply of electrical energy due to Force Majeure Conditions.

The licensee shall always be entitled to teMporarily discontinue the supply for such period as may be necessary for maintenance or for any other reasons, subject to reasonable advance notice being given in this behalf, with the object of causing minimum inconvenience to the Consumer.

#### SC 6.0 WIRING AND APPARATUS IN CONSUMER PREMISES

# **SC 6.1 Wiring in Consumer's Premises**

For the protection of the Consumer and the public in general, it is necessary that all wiring and electrical equipment shall conform to the Rules and regulations made by the appropriate Minister under the provisions of the Electric Lighting Law, as well as any further requirements of the Licensee or the Government Electrical Inspector. The Licensee may refuse to make connection or give service if it shall be advised that an electrical installation does not conform to such requirements or these Terms and Conditions. The Consumer shall not materially increase his load without first notifying the Licensee and obtaining its consent.

#### **SC 6.1.1 General Wiring Conditions:**

#### **Mains:**

The Consumer's mains shall, in all cases, be brought back to the licensee's point of supply and sufficient cable shall be provided for connecting up with the licensee's apparatus.

#### Switches and Fuses:

The Consumer shall provide proper linked quick-break main switches of requisite capacity to carry and break current in each conductor near the point of commencement of supply. The switches in the Consumer's premises shall be on the live wire and the neutral conductor shall be marked for identification where it leaves the Consumer's main switch for connecting up to the meter. No single pole switch or cut-out should remain inserted in any neutral conductor.

#### **Balancing of load:**

The Consumer taking three-phase supply shall balance his load between the phases.

#### Earthing:

Gas and water pipes shall not be used for earthing purposes. All wiring shall be kept as far as possible away from gas and water pipes.

# Plugs:

All plugs shall be provided with switches on the live wire and not on the neutral. . .

#### SC 6.1.2 Domestic appliances:

For the safety of the wiring at the Consumer's premises, separate circuit for the equipment other than lighting and fan load like heaters, geysers, air-conditioners, oven, etc. shall be run with adequate size of wire from the main distribution board of the Consumer. Wall plugs used on the circuits for domestic appliances shall be of the three-pin type, the third pin being connected to "earth". Two pin plugs shall not be allowed. All appliances used in any location must be effectively earthed.

# SC 6.1.3 Apparatus interfering with licensee's system

The licensee may discontinue the supply, if the Consumer installs any instrument, apparatus that are likely to affect adversely, the supply to other Consumers. Supply shall be restored on taking appropriate remedial action by the Consumer to the satisfaction of the licensee.

# SC 6.1.4 Consumer's Apparatus

The apparatus/ appliances/ gadgets used by Consumers should conform to the standards and specifications prescribed by the Bureau of Standards or equivalent.

- The Consumer shall install only such motors or other apparatus or appliances as are suitable for operation with the character of the service supplied by the Licensee, and which shall not be detrimental to same, and the electrical energy must not be used in such a manner as to cause voltage fluctuations or disturbances in the Licensee's distribution system.
- (b) It is the responsibility of the Consumer to provide the necessary equipment to protect all motors and other apparatus or appliances from damage resulting from low voltage, single phasing conditions, etc.
- (c) All apparatus used by the Consumer shall be of such type as to secure the highest practicable commercial efficiency, power factor and the proper balancing of phases. Motors that are frequently started, or motors arranged for automatic control, must be of a type to give maximum starting torque with minimum current flow.

Failure to comply with these Regulations will render the Consumer liable for disconnection forthwith.

#### SC 6.1.5 A.C. Motor Installations

The Licensee's requirements regarding the starting of induction motors are as follows:

- a) Motors up to but not including 10 h.p.

  The motors may be started directly on the lines without the use of a current limiting starter.
- b) Motors from 10 h.p. to 15 h.p. inclusive

  If these motors are started without load it is permissible to start them directly on the lines without the use of current limiting starter. If required to start under load, a current limiting starter must be installed.
- c) Motors over 15 h.p.
  All motors in this category whether of squirrel cage or slip ring type must be equipped with current limiting starters of a type acceptable to the Licensee. In case of violation of this rule, service may be discontinued by the Licensee until such time as the Consumer has conformed to the Licensee's terms and conditions as regards motors and starting equipment. Such suspension of service by the Licensee shall not constitute a cancellation of Contract. Notwithstanding any of the above conditions, the Licensee reserves the right to review each individual case and insist if necessary on the correct type of motor and

starting equipment being installed for any specific motor load.

# **SC 6.2 Power Factor of Apparatus**

- (a) Gaseous tube installations shall be equipped if necessary with condensers of sufficient capacity to maintain at least 85% Power Factor.
  - Fluorescent lighting installation shall be of the Power Factor corrected type to maintain at least 85% Power Factor.
- (b) In the case of other apparatus or equipment taking a highly intermittent or fluctuating supply of energy and /or low Power Factor, the Licensee will require the Consumer to furnish and install at his own expense the corrective equipment necessary to stabilize the intake and maintain at least 85% of Power Factor.
- (c) The Licensee reserves the right to refuse or discontinue service to installations that do not meet the above Power Factor and other requirements until the conditions have been rectified.

# SC 6.3 Inspection and Testing of Consumer's Installation

Before any wiring or apparatus in the case of low-tension Consumer, and any transformer, switchgear or other electrical equipment in the case of high-tension Consumer is connected to the system, it shall be subject to inspection and approval of the licensee and no connection shall

be made without the licensee's approval. In addition, all high-tension installations will have to be approved by the Government Electrical Inspector

Upon receipt of the test report, the licensee will notify to the Consumer the time and day when the licensee proposes to inspect and test the installation. The Consumer shall ensure that the Licensed Electrical Contractor or his representative, technically qualified, employed by him is present at the time of inspection to furnish to the licensee any information concerning the installation required by him. The licensee shall provide a copy of the inspection report to the Consumer and obtain the acknowledgement of the Consumer.

Manufacturer's test certificate in respect of all medium voltage apparatus shall be produced, if required.

The licensee shall not connect the conductors and fittings on the Consumer's premises with its works unless it is reasonably satisfied that the connection will not at the time of making connection cause a leakage from the installation or apparatus of a magnitude detrimental to safety.

If the Consumer's installation is found to be not safe for connection, the licensee shall advise the Consumer in writing specifying the defects to be rectified. On receipt of intimation of rectification of defects, the licensee shall retest the installation.

The licensee shall levy no charge for the first test. Subsequent tests, necessitated due to faults found at the initial test shall be charged for in accordance with the rates approved by the Regulator. The licensee will not accept any responsibility with regard to the maintenance or testing of wiring on the Consumer's premises.

#### SC 6.4 Extensions and Alterations

No electrical installation work, including additions, alterations, repairs and adjustments to existing installations, except such replacement of lamps, fans, fuses, switches, low voltage domestic appliances and fittings as in no way alters its capacity or character, shall be carried out upon the premises of or on behalf of any Consumer, for the purpose of supply to such Consumer except by a licensed electrical Contractor. Extension or alterations of load to all high-tension installations will have to be approved by the Government Electrical Inspector.

If as a result of such proposed extensions and alterations, there is possibility of an increase in connected load or Contract demand over sanctioned connected load or Contract demand, the Consumer shall take steps to submit requisition for additional supply. Failure to regularize the increase in connected load or Contract demand may not only result in billing at other rates, as provided for under the rules, but may also result in disconnection of supply after due notice.

# SC 6.5 Access to Consumer's Premises for inspection of Consumer's Installation

The authorized persons of the licensee are entitled, at any reasonable time and on informing the occupier of their intention, may enter the premises of the Consumer to which energy is supplied, for the purpose of inspecting and reading meters on the Consumer's premises, for disconnecting supply, for removing the licensee's apparatus, for testing, repairs, replacing, altering and maintenance of its property or for doing all things necessary or incidental to proper continuance and maintenance of supply to the Consumer. All such persons visiting Consumer's premises must carry photo-identity cards issued by the licensee and shall produce the same to the Consumer or the occupier before entering the premises. The Consumer should immediately check with the licensee if the credentials of representatives are in question.

The Licensee or his authorized person shall be entitled to enter the premises immediately after informing the Consumer, for checking unauthorised use of energy, unauthorized additions and alterations to equipment, theft and misappropriation of energy, diversion of power, by-passing or tampering of the meter, or for general inspection and testing. On detection of unauthorised use of energy, unauthorized additions and alterations to equipment, theft and misappropriation of energy, diversion of power or bypassing or tampering of the meter the licensee may take actions as per prevailing laws.

If the Consumer does not provide reasonable facility to the licensee to enter the premises for the reasons stated above, the licensee may give a xx hours' notice in writing to the Consumer, of its intention to discontinue the supply. If the Consumer still does not provide access, the licensee shall be entitled to discontinue supply to the Consumer.

# **SC 6.6 Rating of Installations**

The connected load of domestic category of Consumers shall be determined as per the load details of the equipment. If the licensee has reasons to believe that a particular domestic connection or a group of domestic connections might be involved in unauthorized abstraction of power, the Officer in-charge may conduct a survey of the Consumer's premises.

The licensee shall be at liberty to inspect such premises and carry out assessment of load and advise the Consumer accordingly. In case the load is found increased than the Contract demand/connected load, then the licensee shall take further steps as per Rules and Regulations. The connected load of all categories other than Domestic category of Consumers shall be the aggregate of the manufacturer's rating of all energy consuming devices, in the Consumer's premises, which can be used simultaneously. This shall be expressed in kW, kVA or HP. During the process of determination of connected load, if the manufacturer's rating is not available, the licensee may use suitable apparatus to determine the load of the item. If, both air-conditioner and room heater are found in the same premises, the load of the item with higher rating shall be taken into account. Items stocked for the purpose of sale/ repair or genuinely as spare shall not

be considered for the purpose of determination of connected load. The licensee shall carry out periodic survey of streetlights and record the type of lamps being used along with their load. All installations other than those of Domestic category are subject to rating/re-rating by the licensee at its discretion. If the Consumer is not satisfied with the rating determined by the licensee, he may get his apparatus rated by one of the Mpn Bureau of Standards. Both the Consumer and the licensee may appoint their respective representatives to be present during the process of determination of load at the institute. The final report issued by the institute shall be accompanied with the details of test(s) conducted. The rating determined by the said Institute shall be final and acceptable to both the Consumer and the licensee.

Where for any reason, it is not possible to determine the maximum demand, power factor or any other electrical quantity in respect of an installation, the licensee shall determine such quantities periodically by rating/re-rating, which shall be binding on the Consumer.

# SC 6.7 Generator in the Consumer's Installation and Parallel Operation with the Supply System of the Licensee

Operations of the generator in the Consumer's premises running parallel with the licensee's system is permissible only with the written consent of the Licensee. The Licensee may levy parallel operation charges with the approval of the Regulator.

Where no such consent has been given, the Consumer shall arrange the plant, machinery and apparatus of his generating units, including an extension of or addition to the same, to operate in an isolated mode and the generator, in no case, should get connected to the licensee's system. The licensee, on advising the Consumer, can enter the premises and inspect the arrangement to ensure that at no time the generator gets connected to its system.

Where consent has been given for parallel operation, the Consumer shall arrange his installation to protect it from disturbances in the licensee's system. The Consumer should also ensure that his supply does not get incorrectly connected to the licensee's system. The licensee shall not be liable for any damage caused to the Consumer's plant, machinery and apparatus on account of such parallel operation, or any adverse consequence arising thereof. For parallel operation with the grid, the Consumer shall have to follow the provisions of the Generation Code, Transmission Code, Distribution Code and the Dispatch Code, and other relevant regulations. The actual operations shall be carried out in coordination the licensee.

In case the Consumer's supply gets extended to the Licensee's system from a generator or inverter or from any other source, without appropriate approval from the Licensee, causing damage to the licensee's apparatus or to human life, the Consumer shall be liable for the same and shall duly compensate the Licensee for all losses caused to the licensee or to the licensee's other Consumers.

#### SC 6.8 Harmonics

If the licensee detects and proves to the Consumer that the Consumer's system is generating harmonics, the licensee shall request the Consumer to install appropriate harmonic filter. The Consumer shall install such filters within a period of six months, failing which the Licensee may levy penalty on the Consumer as decided by the Regulator besides disconnection.

# SC 7.0 CONTRACT DEMAND, AND AGREEMENT

#### **SC 7.1 Contract Demand**

#### SC 7.1.1 Low Voltage Consumers without Maximum Demand (MD) based (two part) tariff

The Contract Demand for LT Consumers without MD based (two part) tariff will be the connected load of the premises as per the agreement entered into between the Consumer and the Licensee.

LT Consumers with MD based tariff and all MV Consumers

The Contract Demand shall be as per the agreement entered into between the Consumer and the Licensee. However, in case of LT connections with demand based tariff, the licensee has to indicate the connected load and Contract demand both in the agreement.

#### SC 7.1.2 Procedure for Enhancement of Contract Demand/Connected load

Applications for enhancement of load shall be submitted to the licensee in the specified forms (attached as Annex xx & yy) along with fee as specified for Recovery of expenses and other charges for providing electric line.

Within xx days, the licensee shall examine the feasibility of supply of the enhanced load and advise the Consumer:

- (a) Whether the additional power can be supplied at the existing voltage or at a higher voltage.
- (b) Addition or alterations, if any, required to be made to the system and the cost to be borne by the Consumer.
- (c) Amount of additional security deposit, cost of additional infrastructure and the system strengthening charges or capacity building charges, if any, to be deposited.
- (d) Change in the classification of Consumer, if required.

The application for enhancement of the Contract demand will not be accepted if the Consumer is in arrears of payment of the licensee's dues. However, the application may be accepted if the payment of arrears due from the Consumer has been stayed by a Court of law.

If the supply of enhanced load is feasible, the Consumer shall:

- (a) Furnish work completion certificate of Consumer's installation and Test report from a Licensed Electrical Contractor where alteration of installation is involved.
- (b) Furnish Letter of approval for the electrical installation of the Consumer from the Government Electrical Inspector in case of medium or high voltage connection, if required.
- (c) Pay additional security deposit, cost of addition or alteration required to be made to the system, if any, and the other applicable charges.
- (d) Execute a supplementary agreement.

In cases where LT demand based tariff is applicable and the Consumer desires to enhance his connected load without any change in Contract demand, he shall make an application to the licensee along with the details of load of existing equipment and equipment that are proposed to be connected,. The licensee shall inspect the premises of the Consumer and shall verify the connected load within xx days and inform the Consumer as to whether the connected load is within the ceiling prescribed. In case any change is required in the applicability of tariff, the licensee shall inform the Consumer in writing within 30 days of receipt of application. The licensee & Consumer shall enter into agreement for enhancement of connected load, if Contract demand and applicability of the tariff is not required to be changed and the list of equipment giving details of connected load shall form a part of the agreement. The Consumer shall not be required to pay any additional security deposit in such case. However, necessary charges towards Supply Affording Charges as per recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply shall be payable.

If no addition or alternate to the system including new/ alternate metering arrangement is required, the enhanced load will be released immediately after completion of the requisite formalities. If the system needs any alternate or addition, the procedure as given for a new connection shall be followed.

In case where the Consumer either desires to enhance the Contract demand beyond the maximum permissible limit as specified in this Code he shall be required to switch over to higher voltage level or desires to switch over to higher voltage having existing Contract demand eligible for higher voltage load limits, the supply affording charges and other charges as specified for recovery of expenses and other charges for providing electric line or plant used for the purpose of providing supply shall be payable.

#### SC 7.1.3 Procedure for Reduction of Contract Demand

If the Consumer so desires, one time reduction in the Contract demand shall be allowed within the period of agreement. The reduction in Contract demand shall be limited to 50% of the Contract demand as per agreement in force at the time of making application provided the requested reduction in Contract demand shall not be less than the specified minimum Contract demand for a particular voltage class as specified in Chapter 3 of this Code. Supply Affording Charges and other applicable charges once paid shall not be refundable.

Application for reduction in Contract Demand shall be submitted to the Licensee in the specified format. A Test report from a competent Licensed Electrical Contractor shall be submitted by the Consumer before reduction in Contract Demand is allowed by the Licensee. .

On receipt of application for reduction in Contract demand, the licensee shall take the following steps:

The licensee shall consider the grounds stated in the application and allow the application or convey the reasons for non-consideration in writing within a period of 15 clear days.

- (a) the application is not decided by the licensee within abovementioned period of 15 clear days, the Consumer may, by a written notice to the licensee, draw its attention to the matter and if no decision is still communicated to him within the period of further 15 clear days, the permission of reduction of Contract demand shall be deemed to have been granted with effect from the next working day after expiry of such notice period.
- (b) In case the reduction in Contract demand is allowed, the same shall take effect from the first day of the month following the month in which the decision for reduction in Contract demand is communicated.

After the expiry of the initial period of agreement, the Consumer will be entitled to reduce Contract demand of his connection limited to the minimum Contract demand for a particular voltage class as specified in this Code and such request when made to licensee shall come into effect from the date of completion of formalities such as execution of agreement etc. Any subsequent request for reduction in Contract demand can also be made to the licensee after expiry of at least one year from the date of effect of such reduction in Contract demand.

When reduction of Contract demand is agreed to, the Consumer shall execute a supplementary agreement. The effect of reduction in Contract demand shall be passed on to the Consumer after finalisation of agreement by the licensee.

The request of the Consumer for reduction in Contract demand of his connection shall not be refused by the licensee on the ground that there are dues payable to the licensee against the connection.

The Consumer shall not be entitled to get refund of new connection charges/supply affording charges on account of such reduction in Contract demand. However, if the Consumer subsequently after reduction in Contract demand requires enhancing the Contract demand again, he shall be required to pay supply affording charges etc. as applicable at the time of such request.

### SC 7.2 Agreement

### SC 7.2.1 Rephasing/Rescheduling of Contract demand

In case the Consumer has executed agreement for Contract demand in phases and requests for rephasing/rescheduling of Contract demand, the Consumer may be permitted provided that such rephasing/rescheduling of Contract demand shall not result in reduction of Contract demand.

The Consumer is required to apply for rephasing/rescheduling of Contract demand at least one month prior to the date of commencement of Contract demand to be rescheduled.

This facility shall be allowed to the Consumer only once during the initial period of agreement.

#### SC 8.0 METERING & BILLING

# **SC 8.1 Requirement of Meters**

No new connection shall be given without a meter and cut-out or a Miniature Circuit Breaker (MCB) or Circuit Breaker (CB) of appropriate specification complying with relevant standards. The Licensee should procure sufficient quantity of suitable meters/metering equipment for new service connections, providing meters for unmetered connections and replacement of stopped/defective meters/ metering equipment.

All Consumers shall have to accept the installation of an appropriate metering device, load-limiter, tamper proof boxes or other apparatus when the licensee approaches them to install one, and the Consumer shall be required to provide appropriate and suitable site for placement of meter and related equipment to the satisfaction of the licensee.

# SC 8.2 Supply and installation of Meters

All Consumers shall have to accept the installation of an appropriate metering device, load-limiter, tamper proof boxes or other apparatus when the licensee approaches them to install one, and the Consumer shall be required to provide appropriate and suitable site for placement of meter and related equipment to the satisfaction of the licensee.

All metering facilities shall be subject to the approval of Licensee. Licensee retains the right to refuse service or disconnect an existing service, where it is not satisfied that the facility meets the minimum acceptable standard for installation.

Metering facilities for townhouse complexes, commercial/industrial installations, apartments, plazas, subdivisions, and housing schemes requiring multiple stations, and all meter centres shall be accessible on a 24-hour basis to Licensee personnel. All meters shall be clearly identified for emergency, safety and maintenance purposes. Designs for such facilities shall be submitted to Licensee for approval prior to construction.

Approval request shall be accompanied by a drawing illustrating full details of supply up to, and including the metering facility. This drawing shall be duly notarized by a Registered Professional Electrical Engineer, licensed to practice in Jamaica.

The placement of meters shall be at the perimeter fence or at the property boundary, and shall be installed such that safe and reasonable access to meters is afforded to Licensee personnel on a 24 hour basis. Meters shall be viewable and accessible without the need to enter locked premises.

The placement of meters in locations other than that specified in Section 3.1 shall only be allowed on the prior written permission of Licensee, and under special, or extenuating circumstances.

All revenue meters for any building shall be installed at a common location and subject to the conditions stated above.

For supply points in excess of 30m from existing Licensee distribution line, customers shall make provisions for extensions to provide for service within 30m. Such extensions shall be subject to the Licensee Line Extension Policy and the conditions outlined in section 2 and 3 of this document.

Wooden poles shall be straight, treated hardwood, with a minimum height of 7.0m above ground. Poles shall be of nominal length of 9m with a minimum top diameter of 150 mm for round wooden pole, and 127 mm x 127 mm for square poles. Poles shall be planted to a minimum depth of 10% of their length plus 0.7m.

A projection out of the wall of at least 13 mm is required for embedded socket-type meters. In the case of existing installations where the meter socket is too deeply embedded, the applicant will be required to provide a 38 mm x 25 mm deep recess around the socket before re-certification.

All meter sockets, with removable covers, shall be constructed to permit sealing of the covers by Licensee. Licensee will not install its meters on sockets that do not meet this requirement.

- 1. A maximum of three (3) revenue meters will be allowed on a wooden pole for overhead service.
- 2. There shall be a maximum of four (4) revenue meters on a concrete column.
- 3. Whenever meters are installed on pole there shall be separate conduits for the incoming main and the load line to the customer's premises.

#### Identification of potheads & meter sockets

- Potheads and Meter sockets must be clearly marked so that each pothead can be easily identified with its corresponding meter socket. In the case of condominium and apartments, the meter sockets must be clearly identified with apartment numbers. This identification must be permanent.
- 2. Licensee reserves the right to terminate Contracts where there is tampering or removal of identification marks. The Government Electrical Inspector (GEI) shall give no consideration for a new Contract without re-certification.

#### Method of Identification

A metal strip approximately 19 mm x 50 mm must be bonded around the conduit as near as possible to the pothead and a similar metal strip affixed to the meter socket with corresponding identification at the pothead.

#### Multi-potheads

A maximum of six (6) potheads will be allowed per group and there shall be a maximum of four (4) groups associated with each supply point. Groups should be no less than 300 mm apart.

Where there are more than thirteen (13) services, a meter centre or station shall be used. Meter centres shall have a maximum of fourteen meters per unit (fig. 1). The installations shall be individually certified by the Government Electrical Inspector. All un-served meter sockets shall be locked by Licensee, and appropriately sealed. No service shall be provided to a facility where sockets are not lockable.

Current Transformers (CTs) shall be installed in a separate chamber and they must be placed before the main switch (on line side). CTs shall be housed in suitable metal enclosures provided with doors capable of being locked. Specialized metering requirements for indoor 24kV services are outlined in Licensee Spec#: PMC32006.

Potheads for overhead connections shall be placed at a minimum height of 6m from grade, and shall be compliant with all electrical and mechanical clearances as outlined in JS21, Licensee ES1300, NEC and NESC.

Provisions for service wire connections must have a minimum height of five metres (5m) above the ground.

#### **Customer Service Main**

The main service cable supplying a customer, however mounted, shall be one continuous run without breaks, and no joint boxes shall be installed at any point between the pothead and the revenue meter.

#### **Grounding of Service Neutral**

All service neutral conductors shall be grounded inside the meter socket, and tied to the main distribution board (breaker panel) neutral bar.

#### Height of Meter Sockets

The maximum height for the installation of meter sockets shall be 2m and the minimum height shall be 1.7 m above grade and single installations. For muLTi-meter installations, the minimum acceptable meter height shall be 450mm.

The minimum acceptable height for meter sockets that are installed in meter centres shall not be less than 450 mm above floor level.

Meters and meter-stations shall have an uniMpeded front clearance of 1500mm.

Whenever meters are placed in locked cages by the owners for iMproved security, the metered facility shall meet all requirements of this policy and Licensee shall provide their own locks. The metering area shall be kept free of stored materials/garbage or other objects that poses an obstruction to the view or access to the meter or metering facilities. Licensee personnel shall have unimpeded and unobstructed access to all metering facilities and equipment, to facilitate reading, replacement, maintenance, testing and investigation.

All apartment buildings shall have meter sockets arranged in groups at a common location.

It is the responsibility of the customer to satisfy Licensee that metering facilities will be accessible to Licensee personnel on a 24-hour basis.

#### Modifications to Existing Installations

Whenever modifications are done to a building infrastructure, or the electrical facilities, then such modification(s) shall meet the requirements of this policy. Approval for the modifications shall be obtained from Licensee prior to the start of construction and the facility shall be recertified by the Government Electrical Inspector (GEI).

## **Detection of Irregularity**

Whenever any irregularity is discovered on an installation, the irregularity shall be reported to the Revenue Protection Department for immediate action. In the case of theft, tampering, or incorrect configuration, the customer shall be required to modify the installation to meet Licensee policy. These modifications shall first be approved by Licensee and certified by the Government Electrical Inspector before re-connection.

#### **Requirements for Meter Centres**

Whenever meter centres are used the front cover shall be of a non-removable type or provisions made for sealing the individual covers.

Whenever meters or meter centres are installed in a locked room, Licensee shall be provided with copies of keys. The customer shall further provide a secured facility suitable for storage and easy access for these keys. Suitability shall be established by Licensee at the time of application.

No new connection shall be given without a meter and cut-out or a Miniature Circuit Breaker (MCB) or Circuit Breaker (CB) of appropriate specification complying with relevant standards. The Licensee should procure sufficient quantity of suitable meters/metering equipment for new service connections, providing meters for unmetered connections and replacement of stopped/defective meters/ metering equipment.

The licensee is authorised to review the status of the meters already installed in the context of upgraded technology becoming available and suitability of the site where meter is placed in the Consumer's premises. The licensee may install remote metering device in the Consumer premises as per the technical requirements of the specific device and in such cases the Consumers shall provide access to the meter through his telephone line. The licensee may also install maximum demand (MD) meter having MD recording feature or such additional features in the Consumer's premises. The licensee is also authorised to install 'check meter' at one Consumer's location or for a group of Consumers. In case the difference in consumption recorded by the 'check meter' and the 'billing meter' is found to be more than permissible limits, the licensee shall be free to install the billing meter on electricity pole or pillar boxes after giving

# **SC 8.3** Testing of Meters

It shall be the responsibility of the licensee to satisfy himself regarding the accuracy of the meter before it is installed and may test them for this purpose.

Meters should be tested according to the OUR Meter Testing Administrative and Operational Protocol.

The meter will be the property of the Licensee and will be tested at regular intervals. The Licensee at any time, upon the written or verbal request of a Consumer, will test the meter of such Consumer, provided only one such test shall be made free of charge within a twelte month period, and the Consumer shall pay the cost of any additional tests within this period unless the meter is shown to be inaccurate in excess of 2%.

In the event of the stoppage or the failure of any meter to register, the Consumer will be billed for such period on an estimated consumption based upon his use of electrical energy in a similar period of like use.

In the event of any registration inaccuracy in excess of 2%, the account shall be adjusted to allow for the payment by the customer of charges for the energy consumed based on the customers' use of electrical energy during a similar period of like use provided that in no case shall the account be adjusted for a period exceeding six months prior to the date of the adjustment. No part of a minimum charge will be refunded.

#### **SC 8.4 Defective Meters**

The Licensee shall have the right to test any meter and related apparatus if there is a reasonable doubt about the accuracy of the meter, and the Consumer shall provide the licensee necessary assistance in conduct of the test. The Consumer shall be allowed to be present during the testing.

A Consumer may request the licensee to test the meter, if he doubts its accuracy, by applying to the licensee along with the requisite testing fee. The licensee shall test the meter within 15 days of the receipt of the application and fee. Preliminary testing of electronic meters can be carried out in the premises of the Consumers through electronic testing equipment.

In all cases of testing of a meter in the laboratory, the Consumer shall be informed of the proposed date of testing at least 7 days in advance, so that he may be present at the time of testing, personally or through an authorized representative. The signature of the Consumer or his authorized representative, if present, shall be obtained on the Test Result Sheet.

If a Consumer is desirous of getting his meter tested at own cost through an independent laboratory instead of laboratory of licensee, he may get it tested at the laboratory approved by the Regulator on payment of necessary charges.

#### SC 8.4.1 Meter (Including Maximum Demand Indicator) Not Recording

The Consumer is expected to advise the licensee in writing, as soon as he notices that meter has stopped/ is not recording if the situation comes to his notice. The licensee shall acknowledge the intimation given by the Consumer.

If during periodic or other inspection by the licensee, any meter is found to be not recording, or a Consumer makes a complaint in this regard, the licensee shall arrange to test the meter within 7 days. In case of LT Consumers the meter should be repaired/ replaced within xx days in urban areas, and within xx days in rural areas. In case of HT Consumers, meter should be repaired/ replaced within xx days.

No metering charges towards meter/metering equipment shall be payable during the month in which meter/metering equipment remained defective for more than 15 days in urban area and more than 30 days in rural area.

#### SC 8.4.2 Meter Reading, Bill Generation and Bill Distribution

In respect of domestic Consumers meter should be read only during daylight hours. The periodicity of the meter reading for the categories of Consumers shall be monthly.

The meter reader shall carry the photo identity cards provided by the licensee which shall be pinned up on uniform so that it is visible during the course of meter reading.

The licensee may use hand held instruments, meter reading instrument (MRI) or wireless equipment for recording meter readings and for the generation of bills on the spot. If bills are prepared

on the basis of MRI downloads or if meter reading is taken on the basis of remote meter-reading and the Consumer wishes to have a record of the reading taken, he shall be allowed so by the officer/ personnel taking the meter reading.

In case, during spot billing procedure, the licensee's representative could not take meter reading due to the absence of the Consumer, the representative may leave a note and request the Consumer to inform the meter reading over telephone. The Consumer may thereafter take the delivery of the bill on any convenient date. However this procedure of receiving meter reading over telephone shall not extend beyond one meter reading cycle at a stretch.

It shall be the licensee's obligation to assign a unique Consumer number for each Consumer and communicate the same to the concerned Consumer.

It shall be open to the licensee to adopt a scheme for prepayment of energy charges for such Consumers who are getting unmetered supply and the details of such prepayment scheme shall be got approved by the licensee from the Regulator and shall be implemented after ensuring adequate publicity.

Bills shall be prepared for each category on the basis of the information provided in the prevailing tariff determination.

When supply to a new Consumer is commenced in the middle of a month the Fixed Charges shall be charged as per actual in the first billing month. However, other charges such as Minimum charges etc. shall be levied on prorate basis for the number of days for which supply is given. The units to be charged under various blocks or slabs shall also be accordingly prorated. For the purpose of this sub-clause, the month shall be computed as 30 days.

The licensee shall arrange to get the name of the bill distributor rubber-stamped and the bill distributor shall write down the delivery date of the bill on the body of the bill before it is handed over to the Consumer.

Whenever bills are to be issued for Audit Recovery or by Vigilance and for other recoveries etc. except demand for additional security deposit, such bills should be issued monthly and accompanied with the written details of basis of billing, period of billing etc. In case of non-payment of above bills in full within the stipulated time (not less than 15 clear days), the balance amount due shall be added in the ensuing current bills of the Consumer continuously till either full bill is paid or settled otherwise. The licensee shall endeavor to take monthly Meter Reading Instrument (MRI) download for all connections where meters with MRI download facility are installed.

If for any reason, meter is not accessible for reading, the licensee shall send a notice in writing to the Consumer to keep the meter available for reading at the time and date given in the notice. If after the notice being given as described, the Consumer still does not give access to the meter for reading, the licensee shall be free to send a provisional bill together with a surcharge. The rate of surcharge shall be as provided in the prevailing tariff orders. The provisional bill shall be prepared on the basis of average monthly consumption of the previous financial year.

The amount thus billed shall be adjusted against the bill raised on the basis of actual meter reading during subsequent billing cycle. Such provisional billing shall not continue for more than two meter reading cycles at a stretch. If the meter remains inaccessible even for the next cycle, the Consumer will be served with a notice, to open his premises for reading of the meter at a fixed time and date. If the meter is not accessible at the time fixed in the notice, the supply will liable to be disconnected after serving a 24-hour notice under section xx of the Electricity Act.

The billing for the duration when the meter remains dysfunctional may be done in the following manner:

- a) In case a check-meter is available, the readings of the same may be used for assessment of consumption.
- b) In case, if during the period when the main meter is defective, the check meter is not installed or is also found defective, the quantity of electricity supplied shall be determined on the basis of average monthly consumption of previous three meter reading cycles. However, if the meter is found defective within three months of the date of connection, the quantity of electricity may be assessed on the basis of average monthly consumption of three meter reading cycles recorded by new meter; provided that if in the opinion of the licensee, the conditions in the Consumer's installation during the month in question were such as to render billing on such average consumption not equitable either to the Consumer or to the licensee
- c) The licensee, in absence of proper assessment immediately, may issue bill on provisional basis to the Consumer on the basis of average monthly consumption of previous three meter reading cycles subject to revision at a later date.

The licensee shall develop a detailed document describing systems, procedure and accountability regarding replacement of defective meters.

Licensee may send bills to Consumers by hand, electronic mail, or by post. On a written request from a Consumer the licensee shall send it by registered post and the expenses of such delivery of bill shall be recoverable from the Consumer.

The licensee shall ensure distribution of bills to the Consumers not less than XX days before the due date for cash payment.

# SC 8.4.3 Special Reading of Meters in cases of Change of Occupancy / Vacation of Premises for Domestic Consumers

It shall be the responsibility of the owner of the connection to get a special reading done by the licensee at the time of change of occupancy or on the premises falling vacant.

The owner/user of the connection may request in writing to the licensee for special reading at least 15 days in advance of the said vacancy of the premises by the existing user or change of the occupancy, as the case may be. The Licensee shall arrange a special reading to be done and

deliver the final bill, including all arrears till the date of billing, at least 7 days before the vacancy of the premises. The final bill shall also include payment for the period between the date of special reading and date of vacancy of premises on pro-rata basis. The charges towards special reading shall be recovered from Consumer as per recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply.

The bill for metered connections shall have details of Consumer, reading, consumption, arrears (if any), date of bill, due date for payment etc. The bill may contain additional information, if any, as per the directions of the Regulator .The Licensee from time to time may also provide further additional information as may be required.

# SC 9.0 CUSTOMERS PROVIDING DEMAND RESPONSE (Reserved)

#### SC 10.0 PAYMENT AND DISCONNECTION

#### SC 10.1 Payment

Bills will be determined by the Licensee on a monthly basis and rendered to the Consumer every month in accordance with the terms of the rate applied.

Each bill is due and payable at the office of the Licensee within 10 days of the date bill is rendered. Failure to receive a bill will not entitle the Consumer to the remission of any charge for non-payment within the time specified. In the case of new connections or disconnections made by the Licensee during a billing period, Consumers' bills for service may be pro-rated in accordance with current procedure.

The word "month" as used herein and in the rates is hereby defined to be the elapsed time of approximately thirty days.

The Consumers are required to make payment of the bills issued to them regularly within due dates.

The licensee shall ensure adequate publicity of the addresses/ locations and working hours of the collection centres including those of banks where Consumers can make payments. The licensee shall provide a choice of maximum alternative modes of payment to the Consumers like payment through cash, local cheque, bank draft, banker's cheque, Electronic Clearing System (ECS), credit card, drop boxes etc.

During the days when there is rush on the collection window, separate queuing arrangement should be made for senior citizens, women and physically handicapped persons and they should be attended with priority.

The due date of payment for all Consumers shall normally be 10 days from the date of issue of bill. If due date of payment mentioned in the bill is a public holiday, the succeeding working day shall be treated as the due date.

In the event of non-realization of cheque, the licensee shall have the right to initiate any action as per law besides recovery towards charges for dishonored cheque as per .........(to be inerted)

In case of non-receipt of bill within the specified period the Consumer may contact the bill issuing office to collect the duplicate bill and arrange payment of the bill. In case the licensee is not in a position to provide duplicate bill, the Consumer shall pay on the basis of past average bill amount. The licensee shall investigate the cause of non-receipt of bill and take suitable steps to ensure that the Consumer receives his electricity bills promptly thereafter.

Every Consumer shall be issued a receipt in token of having received the payment.

The Consumer may also be allowed to make advance payment of future bills, which shall be adjusted in the succeeding months. However, only the regular bill amount shall be adjusted from the advance payment. Before adjusting any other amount, the consent of the Consumer shall be sought.

Commercial categories of Consumers committing default in the payment of the billed amount shall be liable to pay delayed payment surcharge, on the amount outstanding, at rates as per applicable retail supply tariff order.

#### Disputed/Erroneous Bills

- (a) In the event of any objection in respect of the billed amount, the Consumer may make a representation before the JPS office. The supply of electricity shall not be cut off if such person deposits, under protest,
  - a an amount equal to the sum claimed from him, or
  - b the electricity charges due from him for each month calculated on the basis of average charge for electricity paid by him during the preceding six months, whichever is less, pending disposal of any dispute between him and the licensee.
- (b) The representation may be made on plain paper along with the following details:

- (i) Name and address of the Consumer mentioning telephone number, if any
- (ii) Service connection number
- (iii) Category of connection
- (iv) Facts and relief sought in brief

The designated officer shall resolve the dispute within a maximum period of seven days from the date of receipt of such written representation.

- (c) If the Licensee finds the bill to be erroneous, a revised corrected bill shall be furnished to the Consumer indicating the revised due date not less than seven days of the date of delivery of revised bill. Excess amount paid by the Consumer, if any, shall be adjusted in the subsequent bill(s).
- (d) In the event that the original bill was correct, the Consumer shall be advised accordingly to pay the balance, if any, with surcharge as applicable as per original bill within 7 days.
- (e) In case the Consumer is not satisfied with the decision of the licensee or otherwise, he may approach the Regulator.

In case of death of a Consumer the legal heir shall be liable to pay the dues of such Consumer. The legal heir should also take steps to get the connection changed in his name within a period of three months.

#### SC 10.2 Disconnection

It shall be the responsibility of the licensee to ensure that no default in payment is continued beyond a reasonable period subject to a maximum of three months without action for temporary disconnection. The authorised official of the licensee will ensure that all the cases pertaining to default in payment are monitored regularly and timely action is initiated for temporary or permanent disconnection.

The Licensee may discontinue its service to the Consumer for any of the following reasons:-

(a) For non-payment on due date of bills for electric service. In this case, if the Consumer has a deposit with the Licensee as a guarantee of payment of bills, the amount of the deposit may be applied to the payment of bills for service then due and the remainder, if any, returned to the Consumer. The application of such deposit to the payment of unpaid bills shall not affect the Licensee's legal right to collect unpaid balances by available legal methods.

If a Consumer fails in payment of any bill in full, without the approval of the authorised Officer, by the due date, the service connection of the Consumer will be liable to be dis-

connected on temporary basis after giving not less than fifteen clear days' notice in writing to such Consumer. Effort should be made that before disconnecting a domestic connection; an adult member of the family should be informed. If the proof of removal of the cause for disconnection is produced to the satisfaction of the Licensee's employee deputed for the purpose, the supply shall not be disconnected.

- a For refusal or failure to make a deposit or increase a deposit, when requested, to assure payment of bills.
- b When the Licensee has reasonable evidence that the Consumer has been previously disconnected for non-payment at his present or any other location and is receiving service for his own use under a different name in order to avoid past payments due to the Licensee.
- c Because of a dangerous condition on the Consumer's premises in wiring or energy consuming devices.
- d Because of a fraudulent use of the service or tampering with the Licensee's equipment.
- e For any other violation of its Terms and Conditions which the Consumer refuses or neglects to correct within 10 days of the date of a notice in writing from the Licensee specifying such violation and requiring its correction.
- f For any other violation of its Terms and Conditions which the Consumer refuses or neglects to correct within 10 days of the date of a notice in writing from the Licensee specifying such violation and requiring its correction.
- g After temporary disconnection, the supply shall be restored only after the Consumer pays the outstanding charges/dues/ amount of instalment fixed along with disconnection-reconnection charges.

The Consumer shall be required to make a written request to the office of the licensee if the Consumer wishes to get his connection temporarily disconnected for a period up to six months. For duration of temporary disconnection the Consumer shall be liable to pay in advance all the monthly charges that are fixed in nature like fixed charge, minimum charge, metering charges etc. The Consumer shall also be liable to pay disconnection / reconnection charges to avail the facility of temporary disconnection. The period of

#### SC 10.3 Reconnection

If service shall have been discontinued for any of the reasons set forth in Section xxx the following conditions shall be complied with before service is restored:-

(a) Any violation of the rules and regulations must be corrected.

- (b) Satisfactory arrangements for the payment of all bills for service then due must be made and a satisfactory guarantee furnished regarding payment of all future bills.
- (c) Any dangerous conditions must be removed, and if the Consumer had been warned of the condition a reasonable time before the discontinuance of service and failed to remove the dangerous condition, a reasonable fee for reconnection of service may be charged.
- (d) All bills for service due; including estimated amounts due to Licensee by reason of fraudulent use or tampering must be paid. A deposit to guarantee the payment of future bills shall be made.
- (e) A reconnection fee as set out in the Rate Schedule must be paid. This fee may be revised from time to time as approved by the OUR.
- (f) If reconnection of service is requested by the same Consumer on the same premises within one year after discontinuance of service the same reconnection fee may be charged.

If the Licensee disconnector calls at a Consumer's premises to disconnect service for non-payment of a bill, and before disconnection the Consumer tenders a cheque representing the full amount of the bill, the disconnector, if authorized by the Licensee to do so, may accept payment instead of disconnecting service.

# SC 11.0 BACK BILLING, ILLEGAL ABSTRACTION OF ELECTRICITY AND IRREGULARITIES

#### **SC 11.1 Introduction**

The Licensee Revised Back Billing Policy (the Revised Back Billing Policy) is formulated to ensure that in any case of back billing, neither the customer nor Licensee is prejudiced or benefits unlawfully as a consequence.

An objective of the policy the recovery through back billing of illegally abstracted energy by Licensee customers or users. Over time, the methods employed in the abstraction of energy have become more complex and multi-faceted leading to the conclusion that the existing policy could benefit from modifications that encompass this complexity.

The objective of this Revised Back Billing Policy is to promote transparency, by outlining logical and justified circumstances that will allow Licensee to recover through back billing the energy consumed by its customers/ users that is unbilled or lost, without causing any unfair advantage or disadvantage to either Licensee or its customers.

#### SC 11.2 General Guidelines

In any case where it is necessary for Licensee to back bill an account of a customer, Licensee shall adhere to the provisions set out herein and shall be bound to act in accordance with the provisions.

In all cases of under-billing of an account caused by the Licensee error or omission, the recovery of revenues for lost energy through back billing shall abide by the siMple principle that a customer should not be unfairly disadvantaged because of an error or the omission of Licensee.

In all cases of irregularity, Licensee will diligently and using its best efforts determine whether the irregularity was caused by external sources, where a customer had no control, or by deliberate interference with Licensee' equipment or device by a customer/user or a third party on behalf of a customer/user, that results in a customer/ user enjoying an unauthorized benefit, whilst causing loss to Licensee.

Licensee will collect and provide documentary evidence including any test report and historical billing information regarding the integrity of the meter, when requested to prove the period and the quantum of any benefit enjoyed by the customer.

Where meter tampering is suspected, the meter shall be removed and placed in a tamper-proof bag and tagged with the relevant information including location from which it was removed (address), date and time of removal and name of the customer. The customer shall have the option to have the meter tested either at the Bureau of Standards Mp or at the Licensee ISO Approved and Authorized Meter Testing and Calibration Centre (Licensee meter testing laboratory). If the customer is unable to so indicate when the meter is removed, the customer shall within forty-eight (48) hours of the removal of the meter notify Licensee failing which Licensee shall proceed to test the meter at the Licensee meter testing lab. The result of the meter test will be provided to the customer.

In the recovery of payment for lost energy through back billing Licensee shall be guided by the principle that neither a customer nor Licensee should be unfairly disadvantaged or benefited because of an irregular activity for which Licensee had no control or responsibility.

Pursuant to Determination Notice Ele2009/04:Det/03 issued September 18, 2009, Licensee is allowed to charge a siMple rate equivalent to the prevailing interest rate on customer deposits on all sums associated with back billing arising from theft of electricity.

Where Licensee back bills a customer in circumstances where there is no supporting evidence of unauthorized abstraction of electricity, Licensee is required to refund the customer the monies paid along with a simple rate equivalent to the prevailing interest rate on customer deposits.

#### **SC 11.2 Procedure following Meter Change**

Effective December 5, 2011 all new accounts (including those where the meter is already installed) Licensee should have the appurtenant meter checked and, if necessary, a new meter installed on the premises prior to activation. Under such circumstances, Licensee shall not back bill the customer beyond the point of commencement of the new account.

In a large scale meter replacement exercise, customers' accounts showing an immediate increase in consumption post meter change will not be back billed except in cases where there is convincing evidence of an unauthorized abstraction of electricity, in which case the relevant provisions set out below in this Policy would apply.

#### SC 11.1.3 Incorrect billing due to Licensee internal process failure or mistake

#### Example:

Application of wrong multiplication factor;

Application of wrong rate for any rate class of customer.

In cases where the application of a wrong multiplier (multiplication factor for indirect metering), or application of a wrong rate class (direct and indirect metering) resulted in an account being incorrectly billed, the account shall be back billed to allow for the payment of the differential of the actual charges for which the account should have been billed for a period not exceeding two (2) months or from the Contract date for the customer, whichever is less.

Any other similar situation of incorrect billing owing to Licensee error by reason of a failure of its internal processes or mistake not specifically described above should be treated in accordance with principles mentioned in this section.

Failure to bill an account registered or not registered in Licensee Customer Information System Example:

An account billed since its inception but was not billed for a certain period due to Licensee internal process failure.

An account that has never been billed, as the meter related to the account is a dummy meter, that is, not registered in Licensee' system. `

In cases where Licensee fails to bill an account properly registered in the Licensee meter database for a period due to an internal process failure, the account shall be back billed or adjusted to allow for the payment of the differential of the actual charges for which the account should have been billed for a period not exceeding two (2) months or exactly for the time period for which the account was not billed, whichever is less.

In cases where the account is not registered in the Licensee Customer Information System or the meter is not included in the Licensee meter database (dummy meter) and therefore was never billed, and the non-registration in either case is not due to an error or failure by Licensee, the account shall be back billed or adjusted for the period for which the customer/user received the

unauthorized benefit but not exceeding six (6) years. In such a case, the customer shall have the responsibility of providing the evidence of the date of installation of the dummy meter, if a period of less than six (6) years is to be applied in the circumstances.

Where Licensee fails to register an account in its Customer Information System or the meter was not included in the Licensee meter database due to its own error or omission and therefore the account was never billed, the account shall be back billed for a period not exceeding two (2) months or exactly for the period for which the account was not billed, whichever is less.

Incorrect billing due to the meter exceeding the maximum accuracy deviation tolerance of +/- 2% due to normal degradation and/or natural causes

#### Example:

Corrosion

Ingress of foreign particle, 

Moisture ingress.

Normal degradation due to wear.

In cases where the accuracy of a meter falls outside the maximum deviation tolerance of +/-2% due to normal degradation and/or natural causes resulting in an account being incorrectly billed, the account shall be back billed, to allow for the payment of the differential of the actual charges for which the account should have been billed, or adjusted for a period not exceeding (6) months or from the Contract date for the customer, whichever is less.

In any other similar situation of incorrect billing owing to inaccuracy of the meter due to natural causes but not described above Licensee shall be guided by the principles outlined in the above section.

Incorrect billing due to unauthorized modification of service installation by a customer/user or third party on behalf of a customer by a deliberate act, that results in an unauthorised benefit to a customer/user and revenue loss to Licensee

#### Example:

Unauthorized upgrade of service cable from single phase two wire to two phase three wire while the existing meter is a single phase two wire one.

In cases where an account is found to have been under-billed or not billed because of an incorrect registration of the energy consumption arising from unauthorized modification of service installation equipment by a customer/user or third party on behalf of a customer, which Licensee can satisfactorily show would not have occurred except for a deliberate and wilful act, that has resulted in unauthorised benefit to a customer/user causing revenue loss to Licensee, the account shall be back billed to allow for the payment of any amount which ought to have been billed for the correct consumption for a period not exceeding six (6) years or from the service Contract date for the customer, whichever period is less.

In any other similar situation of incorrect billing owing to an illegal modification of service installation equipment but not described above, Licensee shall be guided by the principles outlined in the above section.

Incorrect billing due to deliberate diversion of energy by a customer/user or third party on behalf of a customer, that results in an unauthorised benefit to a customer/user and revenue loss to Licensee

Example

Meter bypass to divert energy;

Direct connection from the pothead to divert energy;

Use of an electrical contractor to divert energy;

Inverted meter.

In cases where an account is found to have been incorrectly billed because of an under registration of the energy consumption arising from deliberate diversion of energy by a customer/user or third party on behalf of a customer, that resulted in unauthorised benefit to a customer/user causing revenue loss to Licensee, the account shall be back billed to allow for the payment of any amount for the correct consumption for which the account should have been billed for a period not exceeding six (6) years or from the service Contract date for the customer, whichever period is less.

Any other similar situation of incorrect billing due to unauthorized abstraction of energy arising from the deliberate diversion of energy not described above, Licensee shall be guided by the principles outlined in the above section.

Incorrect billing due to partial or non-registration of consumption by the meter caused by unauthorized interference with the meter and/or related accessories by a customer/user or third party on behalf of a customer that results in unauthorised benefit to a customer/user and revenue loss to Licensee

**Gear Tampering** 

**Example: Gear Tampering** 

Gear tampering of an electro-mechanical meter, where a customer inherited the meter on premises from a previous account.

Gear tampering of an electro-mechanical meter, where a customer received a new meter since the current Contract was established.

In any case where an account is found to have been incorrectly billed because of an under-registration of the energy consumption arising from illegal modification of the gear, or any other Component of the meter, which Licensee can satisfactorily show would not have occurred except

for a deliberate and willful act of interference that resulted in unauthorised benefit to a customer/user causing revenue loss to Licensee, the account shall be back billed to allow for the payment of differential of charges related to correct consumption for which the account should have been billed.

Where the customer/user inherited the affected meter on the premises from a previous customer or if Licensee did not connect the present account into the grid with a new meter, the account shall be back billed or adjusted for a period not exceeding two (2) years or from the service Contract date for the customer, whichever is less.

If during the currency of service Contract, Licensee connected the current customer with a new meter and the same meter was found, tested

and certified to be under-registering due to unauthorized modification of the meter gear or any other Component of the meter not specifically provided for in any other section of this Policy, which Licensee can satisfactorily show would not have occurred except for a deliberate and willful act, then the matter will be treated as a deliberate attempt by the customer to reduce consumption in an unauthorized manner. In such instance, the account shall be back billed or adjusted for the period for which the customer/user received the unauthorized benefit from the Contract date for the current customer but not exceeding six (6) years.

Provided that in all cases as described in Sections 9.1- 9.3 the meter shall be subject to an authorized meter test either at the Licenseeeter testing laboratory or at the election of the customer/user at the meter testing laboratory of the Bureau of Standards and the test results shall be made available to the customer involved, the latter being to the cost of the customer should the meter be found to be under-registering.

In any other similar situation of under-billing owing to partial or non- registration of consumption caused by unauthorized interference with the meter by any customer/user/third party on behalf of any customer or otherwise Licensee shall be guided by the principles outlined in the above section.

Circuit Modification or of Related Accessories

Example: circuit modification or of related accessories

De-linking the Potential Link of a meter;

CT shunting/disconnection internal to an electronic meter;

Insertion of shunting resistance to the current coil;

Replacement of the current coil inside an electromechanical meter to augment the capacity;

CT/PT cross phasing for indirect metering;

External CT shunting for indirect metering;

CT cross phasing/disconnection inside the test switch or unauthorised test switch operation to disconnect the meter;

Unauthorised replacement of the meter specification plate.

In cases where an account is found to have been incorrectly billed because of a circuit modification (internally or externally) of the meter and/or related accessories (potential link, CT, PT, test switch, Energy Guard, primary or secondary concentrator, meter centre etc), that violated the standard of installation and resulted in unauthorised benefit to a customer/user causing revenue loss to Licensee, the account shall be back billed to allow for the payment of any amount related to the correct consumption parameters for which the account should have been billed.

Any such case as described in Section 9.6, will be treated as a deliberate act on behalf of any customer to interfere with the meter and/or related accessories to reduce billed consumption in an unauthorized manner and the account shall be back billed or adjusted for the period for which the customer/user received the unauthorized benefit but not exceeding six (6) years or from the service Contract date for the customer, whichever period is less.

In any other similar situation of under-billing owing to partial or no registration of consumption caused by unauthorized interference of any customer/user/third party on behalf of any customer to the meter but not described above, Licensee shall be guided by the principles outlined in the above section.

Incorrect billing due to metering infrastructure damage caused by a customer/user or third party interference that result in unauthorised benefit to a customer/user and revenue loss to Licensee

#### Example:

Meter or Meter face glass broken,

Meter burnt,

Physical Damage to Installation Accessories.

In any case where an account is found to have been incorrectly billed because of an under-registration of the energy consumption arising from damage caused to the meter, its Components and/or its accessories (i.e. not due to normal wear & tear or natural causes), that resulted in unauthorized benefit to a customer/user causing revenue loss to Licensee, the account shall be back billed to allow for the payment of differential of charges related to correct consumption for which the account should have been billed.

In cases where the damage to the meter, its Components and/or its accessories was caused by any event or circumstance outside of a customer's control, which event or circumstance resulted in under registration of consumption and resulted in unexpected benefit to a customer/user and revenue loss to Licensee, provided that the cause of the event or circumstances is not attributable to Licensee or that there was no failure or undue delay by Licensee to remedy the matter, if

the event or circumstance was reported to them, the account shall be back billed or adjusted for a period not exceeding two (2) months.

In cases where the damage to the meter, its Components and/or its accessories was caused by a deliberate act on the part of any customer/user or third party causing under-registration of consumption that resulted in unauthorised benefit to any customer/user and revenue loss to Licensee, provided that Licensee can provide satisfactory evidence to show that the damage which resulted in the meter under-registering would not have occurred except for a deliberate act, the account shall be back billed or adjusted for the period for which any customer/user received the unauthorized benefit but not exceeding two (2) months and the customer will be required to pay the replacement and installation cost of a new meter as approved by the OUR.

Any other similar situation of under-billing owing to partial or no registration of consumption caused by unauthorized interference by any customer/user/third party on behalf of any customer or engaged by the customer with any meter which results in physical damage to the meter but not described above Licensee shall be guided by the principles outlined in the above section.

#### Overbilling of a Customer's Account

Where an account has been overbilled or subject to excess charges, because of an error or omission by Licensee, or a condition of the meter or service installation infrastructure, Licensee shall adjust or back bill (as appropriate) the account for a period not exceeding six (6) years or for the exact period for the overbilling occurred, whichever is less

By way of Directive ELE2011007\_DIR001, the Office of Utilities Regulation (OUR) directed Jamaica Public Service Licensee Limited (Licensee) to prepare a revised back billing policy and to submit the revised policy to the Office by December 23, 2011 for review and approval.

The Licensee Revised Back Billing Policy (the Revised Back Billing Policy) is formulated to ensure that in any case of back billing, neither the customer nor Licensee is prejudiced or benefits unlawfully as a consequence.

An objective of the previous policy was the recovery through back billing of illegally abstracted energy by Licensee customers or users. Over time, the methods employed in the abstraction of energy have become more complex and multi-faceted leading to the conclusion that the existing policy could benefit from modifications that encompass this complexity

The objective of this Revised Back Billing Policy is to promote transparency, by outlining logical and justified circumstances that will allow Licensee to recover through back billing the energy consumed by its customers/ users that is unbilled or lost, without causing any unfair advantage or disadvantage to either Licensee or its customers.

#### SC 11.1.4 Overbilling of a Customer's Account

Where an account has been overbilled or subject to excess charges, because of an error or omission by Licensee, or a condition of the meter or service installation infrastructure, Licensee shall adjust or back bill (as appropriate) the account for a period not exceeding six (6) years or for the exact period for the overbilling occurred, whichever is less.

Upon detection of theft of electricity, the authorized officer of the licensee or supplier, as the case may be, may immediately disconnect the supply of electricity to such premises.

The Licensee or supplier, as the case may be, on payment of the assessed amount or electricity charges in accordance with the provision of Regulations stipulated in this Code, shall, without prejudice to the obligation to lodge the compliant and restore the supply line of electricity within forty eight hours of such payment.

If the person does not make payment within the stipulated time, the Licensee or Supplier may proceed to recover its dues against assessment order and take such further action as is permitted under the relevant Acts.

The assessment order of charges for theft of electricity issued by the authorized officer shall be pending adjudication by Appropriate Court. In all cases where theft of electricity has been detected, the Licensee or Supplier shall file the case with Appropriate Court for decision in the matter.

Levy of interest for delayed payment - In case of default by the person in payment of assessed amount, the person, in addition to the assessed amount, shall be liable to pay, on expiry of thirty days from the date of order of assessment, an amount of interest at the rate of sixteen per cent per annum compounded every six months pending adjudication by Appropriate Court.

In the premises where the theft of electricity has been detected, the Licensee or Supplier shall remove the cause of theft immediately by making seizure by removing line / cable/ plant or any other item/ equipment or meter up-to the distribution mains, which are found being used or likely to have been used for the purposes of theft of electricity. The Licensee or Supplier may subsequently further remove or divert or convert his line, cable or electrical plant or devices to prevent further theft of electricity provided that such action shall not result into any inconvenience in affording quality supply or disruption of supply, to other Consumers.

Measures to prevent diversion of electricity, theft or unauthorized use of electricity or tampering, distress or damage to electrical plant, electric lines or meter.

In order to reduce and prevent the menace of theft or unauthorized use of electricity or tampering, distress or damage to electrical plant, electric lines or meter, it is necessary to initiate following preventive measures:.

The Licensee or Supplier shall arrange periodic inspection/ testing of meters.

The Licensee or Supplier shall arrange to provide tamper proof meter boxes on meters so as to ensure that meters installed at all the Consumers' premises have tamper proof meter boxes. The Licensee or Supplier shall simultaneously also review the status of service lines to ensure that it is in good working condition & well insulated. Wherever required, service lines should be replaced to prevent theft.

The Licensee or Supplier should intensify the efforts for regular inspection of premises of Consumers and other persons to ensure prevention of theft or unauthorized use of electricity or tampering, distress or damage to electrical plant, electric lines or meter. Priority should be given for detection of direct theft cases by the vigilance teams of the Licensee or Supplier, particularly in theft prone areas.

The Licensee or Supplier shall evolte a system for carrying out regular monthly monitoring of consumption of high value Consumers, which shall include all the HT connections and LT connections having Contract demand of 50 HP & above. Variations in the consumption should be carefully analyzed. The Licensee or Supplier should arrange prompt inspection in doubtful cases.

The Licensee or Supplier shall arrange to ensure that 24KV & 11 KV feeder line and 24/11 KV substation line losses are worked out. The Licensee or Supplier shall take suitable steps for reduction of losses in the pockets identified by working out losses in the above manner.

The Licensee or Supplier shall install meters on all distribution transformers and carry out energy audit so as to identify localized high loss pockets and take further suitable action for reduction of losses in such pockets.

The Licensee or Supplier shall endeavor to install remote metering devices on all HT/EHT connections on priority for the purpose of monitoring of consumption and prevention of theft of electricity. The Licensee or Supplier shall further endeavor to install remote metering devices on high value LT connections.

The Licensee or Supplier shall arrange to give due publicity through the media, TV and newspaper to bring the awareness about the level of commercial losses, its iMplication on the honest Consumers and seek the cooperation for prevention of theft or unauthorized use of electricity or tampering, distress or damage to electrical plant, electric lines or meter. The Licensee or Supplier shall also display boards containing the information about the above at its offices.

The Licensee or Supplier shall arrange to provide requisite security force to the Authorized Officers for their safety and expenses on such account shall be pass-through in ARR (Aggregate Revenue Requirement). Such security squads shall have to invariably acLicensee the Authorized Officers in order to ensure their safety.

The Licensee or Supplier may replace overhead bare conductors with cables in theft prone areas, wherever necessary, to prevent theft by direct hooking with the Licensee's lines

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The Licensee or Supplier may provide HV distribution system (LT less system) in theft prone areas using small capacity distribution transformers, wherever necessary, to prevent theft by direct hooking.

The Licensee or Supplier is authorized to relocate the meters of existing Consumers to an appropriate location but within the boundary wall so that it is clearly visible and the meters are easily accessible for reading, inspection/ testing and other related works. In case of doubtful cases where continuous vigil is not possible, the Licensee or Supplier may install check meters on its poles/ feeder pillars. Where theft of electricity is detected, for the period subsequent to detection of theft, the Licensee or Supplier may install billing meters for such connections on its poles/ feeder pillars.

The Licensee or the Supplier shall take all precautions to prevent damage or distress to their lines/ plants, meters or other such equipment by providing adequate protection and security. The Licensee or the Supplier shall take prompt appropriate action as per the provisions of the Electricity Act, 2015 if any damage or distress is caused to their lines/ plants, meters or other such equipment so as to deter/curb such practices.

# SC 12.0 EMERGENCIES (Later after JPS discussions)



# SC 13.0 PLANNING (further discussion MSET)

(Need Transition Provisions to accommodate Ministry rule on Power Wheeling and Auxiliary Interconnections)



# APPENDICES

**JPS Standard Terms & Conditions of Service** 

**Service Connection Application form** 

**Standard Offer Contract** 

**Guaranteed Standards** 

**Overall Standards** 



# SCHEDULE 1

**TABLE 1: GUARANTEED STANDARDS - Effective as of January 7, 2015** 

CODE	FOCUS	DESCRIPTION	PERFORMANCE MEASURE
EGS 1(a)	Access	Connection to supply – New & Simple Installations	New service Installations within five (5) working days after establishment of contract, includes connection to RAMI system.
EGS 2(a)	Access	Complex Connection to Supply	Automatic compensation as of June 1, 2015.  From 30m and 100m of existing distribution line (i) estimate within ten (10) working days (ii) connection within thirty (30) working days after payment
EGS 2(b)	Access	Complex Connection to Supply	Automatic compensation as of January 1, 2016.  From 101m and 250m of existing distribution line (i) estimate within fifteen (15) working days (ii) connection within forty (40) working days after payment
EGS 3	Response to Emergency	Response to Emergency	Automatic compensation as of January 1, 2016.  Response to Emergency calls within five (5) hours – emergencies defined as broken wires, broken poles, fires.
EGS 4	First Bill	Issue of First Bill	Automatic compensation as of June 1, 2016.  Produce and dispatch first bill within forty (40) working days after service connection.
EGS 5(a)	Complaints/ Queries	Acknowledgments	Automatic compensation as of January 1, 2016.  Acknowledge written queries within five (5) working days  Automatic compensation as of June 1, 2016.
EGS 5(b)	Complaints/ Queries	Investigations	Complete investigations within thirty (30) working days. Complete investigations and respond to customer within thirty (30) working days. Where investigations involve a 3 <sup>rd</sup> party, same is to be completed within sixty (60) working days.
EGS 6	Reconnection	Reconnection after Payments of Over- due amounts	Automatic compensation as of June 1, 2016.  Reconnection within twenty-four (24) hours of payment of overdue amount and reconnection fee.  Automatic compensation.
EGS 7	Estimated Bills	Frequency of Meter reading	Should NOT be more than two (2) consecutive estimated bills (where Licensee has access to meter).  Automatic compensation as of June 1, 2016.
EGS 8	Estimation of Consumption	Method of estimating consumption	An estimated bill should be based on the average of the last three (3) actual readings.
EGS 9	Meter Replacement	Timeliness of Meter Replacement	Automatic compensation as of June 1, 2015.  Maximum of twenty (20) working days to replace meter after detection of fault which is not due to tampering by the customer.
EGS 10	Billing Adjust- ments	Timeliness of adjustment to customer's account	Automatic compensation.  Where it becomes necessary, customer must be billed for adjustment within three (3) months of identification of error, or subsequent to replacement of faulty meter.
EGS 11	Disconnection	Wrongful Disconnection	Automatic compensation as of June 1, 2015.  Where the Licensee disconnects a supply that has no overdue amount or is currently under investigation by the Office or the Licensee and only the disputed amount is in arrears.
			Automatic & special compensation.

EGS 12	Reconnection		ection after ul Discon-	The Licensee must within five (5) hour	restore a supply it wrongfully disconnects
		nection	ar Biscon	Automatic & specia	
EGS 13	Meter	Meter change		The Licensee must one (1) billing peri include: the date of of change, reason fo	notify customers of a meter change within od of the change. The notification must the change, the meter readings at the time or change and serial number of new meter.  sation as of January 1, 2016.
EGS 14	Compensation	Making tory pay	compensa- ments	Accounts should be verification of bread	e credited within one (1) billing period of
ESG 15	Service Disruption	Transitioning existing customers to RAMI System		Where all requirem Licensee and the cu must not be disrupt tate transition to the	ents have been satisfied on the part of the astomer, service to existing JPS customers ed for more than three (3) hours to facili-
		Pr	e-paid Mete	ring Guaranteed Sta	andards
EPMS 1	Service Conne	Service Connection Transiti		ng existing custom- aid metering system	Transition to the pre-paid metering service must be completed within fifteen (15) days of establishment of contract.
EPMS 2				ng existing custom- aid metering system	Except where there is the need for the premises to be re-certified by a licensed electrical inspector, there should be no disruption in customer's service.

## 1. Wrongful Disconnection

The standard is defined as follows:

The Licensee commits a breach where it disconnects a customer's supply that has no overdue amount reflected on the associated account. This standard will also apply to accounts that are under investigation by the Office or the Licensee itself and on which the Licensee is requested or has undertaken to place a hold on the disputed sum but disconnects the account prior to the Office's or its own ruling on the matter and there were no outstanding sums owed beyond the disputed sum.

### 2. Reconnection after Wrongful Disconnection

The standard is defined as follows:

A breach occurs where the Licensee, after erroneously disconnecting a supply, fails to reconnect same within FIVE (5) hours of being notified or having itself detected the error.

# 3. Changing Meters

The standard is defined as follows:

The Licensee must provide customers with details of the date of change, reason for change, meter readings on the day and serial number of the new meter on the day of the meter being changed within one (1) billing period of the change. This communication may be done via a method convenient to the customer and the Licensee.

#### 4. Compensation

Compensation for breaches of the Guaranteed Standards shall be as follows:

# 4.1 General Compensation

- 1. For residential customers, a breach of a standard will result in compensation equal to the reconnection fee. The reconnection fee shall be published on the website of the Licensee.
- 2. For commercial customers, the compensation will remain four (4) times the customer charge. The customer charge shall be published on the website of the Licensee.
- 3. Breaches will attract multiple payments up to eight (8) periods.

## **Compensation for Breach of Guaranteed Standards**

CUSTOMER CLASS	COMPENSATION
Domestic:	
Rate 10 – Residential Service	\$1,650.00
General Service:	
Rate 20 – General Service	\$3,608.00
Power Service:	
Rate 40 (all LV) – Power Service	
Rate 40A – Power Service	\$25,420.00
Rate 50 (all MV) – large Power	

## 4.2 Special Compensation

#### **Wrongful Disconnection**

- 1. **Compensation for wrongful disconnection** will be TWO (2) times the reconnection fee for residential customers and FIVE (5) times the customer charge for Commercial customers.
- 2. **Reconnection after wrongful disconnection** standard when breached will attract compensation of TWO (2) times the reconnection fee for residential customers and FIVE (5) times the customer charge for commercial customers.

#### 4.3 Automatic Compensation

The Licensee will be required to automatically apply the necessary compensation to account for breaches in keeping with the schedule outlined in Table 1: *Guaranteed Standards - Effective as of January 7, 2015*:

Automatic Compensation will be applicable where there is a breach which is brought to the attention of the Licensee, as well as those breaches, which the Licensee itself recognises. Automatic compensation becomes effective as of the effective dates indicated in Table 1, or as otherwise agreed between the Licensee and the Office. Customers will be required to submit claims prior to the effective date of the standard becoming automatic.

# SCHEDULE 2 OVERALL STANDARDS

CODE	STANDARD	UNITS	TARGETS JULY 2014 – MAY 2019
EOS1	No less than 48 hours prior notice of planned outages.	Percentage of planned outages for which at least forty-eight (48) hours advance notice is provided.	100 %
EOS2	Percentage of line faults repaired within a specified period of that fault being reported	Urban: 48 hours Rural: 96 hours	100%
EOS3	System Average Interruption Frequency Index (SAIFI)	Frequency of interruptions in service	To be set annually
EOS4	System Average Interruption Duration Index (SAIDI)	Duration of interruptions in service	To be set annually
EOS5	Customer Average Interruption Duration Index (CAIDI)	Average time to restore service to average customers per sustained interruption.	To be set annually
EOS6	Frequency of meter reading	Percentage of meters read within time specified in the Licensee's billing cycle.	99%
EOS7 (a)	Frequency of meter testing	Percentage of rates 40 and 50 meters tested for accuracy annually	50%
EOS7 (b)	Frequency of meter testing	Percentage of other rate categories of customer meters tested for accuracy annually	7.5%
EOS8	Billing punctuality	98% of all bills to be mailed within a specified time after meter is read.	5 Working days
EOS9	Restoration of service after unplanned (forced) outages on the distribution system	Percentage of customer's supplies to be restored within 24 hours of forced outages in both Rural and Urban areas.	98%
EOS10	Responsiveness of call centre representatives	Percentage of calls answered within 20 seconds	90%
EOS11	Effectiveness of call centre representatives	Percentage of complaints resolved at first point of contact	To be set
EOS12	Effectiveness of street lighting repairs	Percentage of all street lighting complaints resolved within 14 days	99%

Standards will not be in effect during periods of Force Majeure.