# Office of Utilities Regulation

## Electricity Efficiency Improvement Fund

Rules of Procedure

for

Operation and Administration



March 4, 2011

#### **DOCUMENT TITLE AND APPROVAL PAGE**

DOCUMENT NUMBER: ELE2011001 DET001

DOCUMENT TITLE: Electricity Efficiency Improvement Fund (EEIF) - Rules of Procedure Operations and Administration

#### 1. PURPOSE OF DOCUMENT

Arising out of JPS's 2009 Tariff Submission, which was implemented on 1st October 2009, the Office approved the establishment of the EEIF. The Fund is to augment JPS proposed capital, operation and maintenance expenditure of US\$45M on system loss reduction initiatives over the five-year price cap period 2009-2014. This Determination Notice sets out the Rules of Procedure which are necessary to provide a clear understanding of the principles, parameters and processes governing the administration of the EEIF.

#### RECORD OF REVISIONS

Revision Number	Description	Date	
	Rules of Procedure, Operation and Administration – Electricity Efficiency Improvement Fund (EEIF).	March 4, 2011	

#### APPROVAL

This Document is approved by the Office of Utilities Regulation and the Determination therein becomes effective on March 7, 2011.

By Order of the Office:

Ahmad Zia Mian

Director General

March 4, 2011

The Rules of Procedure for Operation and Administration of the Electricity Efficiency Improvement Fund Document No. ELE2011001\_DET001

March 4, 2011

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#### DEFINITIONS

- "Advanced Metering Infrastructure (AMI)" refers to systems that measure, collect and
  analyze energy usage and allows for automated communication between a smart
  electricity meter and the utility company. These systems facilitate real time access to
  energy consumption data by the utility company from customers in possession of smart
  meters. Smart meters also provide information to customers thereby enabling them to
  make intelligent decisions in relation to their energy usage.
- "Appeal Tribunal, The" means the appellate body appointed by the Minister to settle
  contentious issues raised by entities such as the Jamaica Public Service Company Limited
  (JPS) in the event that JPS is aggrieved by a decision of, or an alleged failure to act by,
  the Office of Utilities Regulation (OUR) pursuant to the relevant legislation as well as the
  All-Island Electric Licence (2001).
- "Assets" means the material assets and facilities owned, operated or leased by the Licensee, including real estate.
- 4. "Force Majeure" means events as stated in the All Island Electric Licence (2001) "any event or circumstance or combination of such events or circumstances that (i) occurs inside Jamaica, except as provided in clause (h) below, (ii) is outside the reasonable control of the Licensee, (iii) cannot be prevented or overcome by the exercise of reasonable diligence, and (iv) materially and adversely affects the performance by the Licensee of its obligations under this Licence, to the extent that such event(s) or circumstance(s) meet the foregoing requirements (i) through (iv), including: acts of God, fire, explosion, chemical contamination, earthquakes, flood, lightning, drought, tsunami, flood, torrential rain, storm, cyclone, typhoon, or tornado, pestilence or other natural catastrophes, epidemics or plague, or any strikes, work to rule, go-slows or other labour disturbances that directly affect the Assets of the Licensee, (b) any failure or inability by the Licensee to obtain or renew any licences (other than this Licence), concessions or permits or other Government Requirements that are necessary for the Licensee to conduct its business on terms and conditions at least as favourable as those contained in the original licence (and not this Licence), concession or requirements of the relevant Government Requirements and the exercise of due diligence to obtain such licence (other than this Licence), concession or permit, (c) any strikes, work to rule, go-slows or other labour disturbances that extend beyond that Assets of the Licensee, are widespread or nation-wide or are of a political nature, including labour actions associated with or

directed against a ruling party, or those that are directed against the Licensee (or its contractors or suppliers) as part of a broader pattern of labour actions against companies or facilities with foreign ownership or management, (d) expropriation, requisition, confiscation, nationalization or compulsory acquisition by a Government Authority of the Licensee or any substantial portion of the Assets, (e) acts of war (whether or not declared), invasion, blockade or embargo, (f) acts of threats of terrorism or threat from terrorists, widespread riot, widespread violent demonstrations, widespread armed insurrection, widespread rebellion or revolution, (g) the closing or drastic reduction in capacity of public harbours, ports, docks, canals, roads, airports or other infrastructure, the rationing thereof or any import or export restrictions, or (h) to the extent that they result in disruption of the Licensee's ability to receive shipments of fuel, major equipment or critical spare parts, any strikes, work to rule, go-slows or other labour disturbances that occur outside of Jamaica."

- "Fund" means the Electricity Efficiency Improvement Fund (EEIF) established to
  provide financial resources to be used specifically to implement Advanced Metering
  Infrastructure and other loss reduction and revenue assurance technologies.
- "Jamaica Public Service Company Limited (JPS)" means the Licensee under the All-Island Electric License (2001) which has been granted the right and obligations under said license to generate, transmit, distribute and supply electricity for public and private purposes within Jamaica.
- "kWh" means Kilowatt-hours, which is the unit energy used to measure electricity consumption.
- "Licence" means the All Island Electric Licence (2001), which authorizes JPS to generate, transmit, distribute and supply electricity in Jamaica.
- "Office, the /OUR" means the Office of Utilities Regulation as created and defined by the OUR Act (1995) as amended.
- 10. "OUR Act" means the Office of Utilities Regulation Act (1995) and amendments thereto.
- 11. "O&M" means the Operation and Maintenance of the utility plant as a part of the process of supply of generating, transmitting, distributing and supplying electricity.

- 12. "Rate Base" means the value of the net investment in the licensed business.
- 13. "Red Areas" mean geographic areas where a high level of illegal abstraction of electricity takes place.
- 14. "EEIF Assets" mean assets purchased with proceeds from this Fund.

#### INTRODUCTION

#### REGULATORY FRAMEWORK

- 15. These Rules for the administration of the Electricity Efficiency Improvement Fund have been established pursuant to Section 4 (1), (2) and (3) of the OUR Act, by virtue of which the functions of the Office are to, inter alia, regulate the provision of prescribed utility services by licensees or specified organizations, to give directions to licensees so as to afford to customers economical and reliable service and to undertake measures so as to protect the interests of consumers and Conditions 6 (paragraph 4), 8, and 32 as well as Schedule 3, Exhibit 1 of the Jamaica Public Service Company Limited All-Island Electric Licence (2001). The Fund was established in 2009 pursuant to the tariff structure approved by the Office, with a view to curtailing the high level of overall electricity losses experienced by JPS. The Office took this decision in accordance with its regulatory prescribed by the relevant statutory instruments as follows:
  - Section 11(1) of the OUR Act gives the Office the authority to inter alia "....by
    order published in the Gazette, prescribe the rates or fares to be charged by a
    Licensee or specified organization in respect of its prescribed utility services."
  - Section 4 (3) (b) of the OUR Act requires that the Office "protect the interests of consumers in relation to the supply of a prescribed utility service" and
  - iii. Condition 2 (3) of the All-Island Electric Licence, 2001, bestows upon the Licensee (JPS) the obligation to "... provide an adequate, safe and efficient service based on modern standards, to all parts of the island of Jamaica at reasonable rates so as to meet the demands of the island and to contribute to economic development."

This regulatory oversight gives the Office the mandate to establish the Fund as part of the tariff structure and to ensure that the charges paid by the consumers are fair, reasonable and cost reflective.

#### BACKGROUND

- 16. Over the past 20 years up to the year 2009, JPS has not been able to achieve its system losses target as specified in the tariff. There are three distinctive periods:
  - i. 1989 to 1993 where system losses were relatively flat in the 19% region, although there was a 4-5% sales growth per annum;
  - ii. 1994 to 2001 where system losses trended down from a high of 19.1% in 1994 to a low of 16.6 % in 2001. Sales growth for this period was in the region of 4 5% per annum; and
  - iii. 2002 to 2009 where system losses trended upwards from 17% to 24%, with sales growth of 1 2% per annum. The fiscal period 1999 recorded the lowest level of losses at 16.9%. Since 2002 losses began to trend in an upward direction and for the period ending December 2009 the company recorded the highest level to date, 24.0%.
- 17. In its 2009 tariff submission, JPS proposed to reduce system losses from 22.9% recorded at the end of 2008 to 16.3% over the five-year rate cap period primarily as a result of its ongoing loss reduction initiatives. This reduction it was further proposed would come at a budgeted capital expenditure (CAPEX) and O&M cost of US\$45M.
- 18. Arising out of JPS' 2009 Tariff Submission, which was approved on October 1st of that year, the OUR, gave approval for the establishment of this Fund in the amount of US\$ 0.4US¢/kWh (approximately US\$13M annually) to augment the proposed spending by JPS.

#### RATIONALE FOR THE RULES

- 19. These Rules of Procedure are to:
  - Provide a clear understanding of the principles, parameters and processes governing the administration of the Fund;
  - ii. Facilitate the transparent and prudent administration of the Fund;

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- Ensure that JPS is held accountable for the inflows into, and outflows from, the Fund; and
- iv. Establish the framework within which the OUR may effectively monitor the

#### 21. These Rules of Procedure set out the:

- i. Scope and purpose of the Fund;
- ii. Circumstances under which the Fund may be applied;
- iii. Utility Company's record-keeping; and
- iv. Accounting for taxation with regards to the Fund.

#### PART 1 – THE ELECTRICITY EFFICIENCY IMPROVEMENT FUND

#### 1.1 PURPOSE AND OBJECTIVES OF THE FUND

- 22. The primary aim of the Electricity Efficiency Improvement Fund ("the EEIF") is to provide a financial mechanism through which loss reduction strategies may be effectively deployed and losses systematically reduced through the implementation of AMI and other agreed loss reduction technologies.
- 23. The EEIF represents monies that have been included as the EEIF tariff based on the known rate and the actual energy sales in JPS' monthly revenues. This money is to be accounted for separately from JPS' own Funds, through the maintenance of separate regulatory accounts for the EEIF revenues and assets.
- 24. The Fund is to provide an additional pre-tax revenue stream of 0.4US¢/kWh (approximately US\$13M annually) to augment JPS expenditure on loss reduction activities.
- 25. These objectives are not exhaustive but are key deliverables. The revenue benefits anticipated as a consequence of the reduction in losses should redound to the benefit of electricity rate payers as well as JPS. The appropriate application and use of the Fund should ultimately result in customers experiencing a decline in both the fuel and non-fuel components of their tariff and JPS, over time, benefitting from a relatively higher

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rate of return within the framework of the price cap mechanism approved by the Office, primarily through reduced penalties on the recovery of its fuel cost.

#### 1.2 APPLICATION OF FUND

26. The Fund shall be used only for capital expenditures directly related to the implementation of the AMI and other approved loss reduction and revenue assurance technologies.

#### 1.3 ROLE OF THE UTILITY COMPANY

- 27. In the administration of the Fund, JPS is required to and is held accountable for:
  - i. Developing and presenting to the OUR, the annual system losses plan and targets as a part of its Annual Tariff Adjustment Submission. The plan should include the loss reduction expenditure budget and the schedule of quarterly funding requirements from the EEIF for the OUR's approval.
  - Submitting quarterly reports and special reports, as requested by the OUR, with respect to:
    - a. the status of the EEIF;
    - variance analyses of actual expenditure versus budgeted expenditure on all approved items and projects;
    - variance analyses on actual loss reduction performance against the stipulated targets; and
    - d. the total loss reduction projects associated with the use of the EEIF revenues.

#### 1.4 ROLE OF OUR

- 28. Pursuant to inter alia the mechanism set out in paragraph 23 by which the Fund is facilitated, the OUR will have the power to:
  - i. Identify and approve the expenditure by JPS on loss reduction activities;

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- ii. Determine realistic and achievable system losses target at the annual tariff reset post 2011, taking into account all relevant factors (e.g. the actual impact of planned initiatives, amount spent, timing of implementation etc.);
- Determine and adjust the amount included in the revenue requirement for loss reduction initiatives at annual resets; and
- iv. Engage the services of an auditor, to certify whether the operations of, and expenditures from the EEIF are consistent with the rules set out herein (such costs to be paid for out of the EEIF).
- 29. In the administration of the Fund the OUR shall be responsible for:
  - Reviewing JPS' annual loss reduction plan and approving the annual EEIF budget expenditure and the withdrawal schedule from the Fund;
  - Reviewing requests for additional funding beyond those approved in the annual EEIF budget; and
  - Monitoring by way of quarterly, annual and special reports all movements in the regulatory accounts.

#### 1.5 THE EEIF - FINANCING AND ADJUSTMENTS

30. The EEIF shall be financed through a special provision approved by the Office and embedded in the tariff for this purpose. This special provision shall be part of the energy rate expressed in terms of US¢/kWh.

#### 1.6 THE EEIF - BAD DEBT ADJUSTMENT FACTOR

31. The bad debt adjustment factor gives recognition to the fact that the full amount of JPS' billed and payable revenues are not collected because of delinquent customers. In keeping with the 2009 tariff determination the applicable bad debt adjustment factor to the monthly billed revenues of the EEIF shall be 98.9% such that the amount accruing to the fund is equal to - billed revenues x 0.989.

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<sup>1</sup> bad debt ratio of 1.1%

#### 1.7 THE FUND - TAXATION

- 32. Tax deductions shall be accounted for, at the corporate income tax rate of 331/3% of the gross revenues dedicated to the EEIF (after bad debt adjustment), in the regulatory accounts.
- 33. The total value of tax benefits obtained through capital or investment allowance for the EEIF Assets should be accounted for in the EEIF regulatory accounts. Where the assets are jointly funded or not readily identifiable, the Office may determine a deemed amount of tax recoverable on the basis of the expenditures charged to the Fund, the class of assets and the allowances or depreciation applicable. The amount of taxation recoverable shall be accrued to the fund within 90 days after the close of a calendar year.
- 34. In addition to the above, as part of its 2014 tariff submission JPS should provide the OUR, with the total value of the tax benefits obtained through capital or investment allowance for the EEIF Assets. The tax benefits should be accounted for in the EEIF regulatory accounts.

#### 1.8 BUDGET APPROVAL OF LOSS REDUCTION PLAN

- 35. JPS is required to submit its annual and updated 5-year Loss Reduction Plan (2009-2014) to the OUR each year. The OUR, shall upon reviewing the plans, approve the allocation from the Fund and associated payment schedule for a one year period.
- 36. In the event, that additional funds are required in the EEIF to continue the AMI project beyond those approved by the OUR in the Annual Tariff Adjustment Determination are required, JPS shall request approval from the OUR, for such supplemental expenditure by submitting full justification as to the reasons the supplemental funds are needed. Such justiciation shall include inter alia the subject matter in respect of which the supplemental funds are to be expended.
- 37. The OUR, shall approve/disapprove the allocation from the EEIF within one calendar month of the date of submission of the budget.

#### 2 LOSS REDUCTION PLAN CONTENTS AND BUDGET SUBMISSIONS

38. JPS annual Loss Reduction Budget submissions shall be made on December 1 of each year. The submission shall include the Company's updated five-year loss reduction plan (2009-2014) as well as the annual plan, each with the commencement date of January 1 and ending December 31.

The following outlines the information to be provided in each plan:

#### i. The Five-year Plan

The Five-year plan shall include:

- 1. System losses budget for each year showing
  - a. JPS O&M expenditure;
  - b. JPS Capital expenditure;
  - c. EEIF expenditure (capital); and
  - d. A breakdown of items in the system losses capital expenditure indicating those acquired by JPS funds separate from the EEIF.
- 2. Description of the strategies to be employed over the period; and
- 3. The expected impact on system losses for each period.

#### ii. The Annual Plan

The annual plan shall include:

- 1. System loss budget for each quarter showing inter alia:
  - a. JPS O&M expenditure;
  - b. JPS Capital expenditure;
  - c. EEIF expenditure (capital); and

- d. A breakdown of items in the system loss capital expenditure indicating those acquired by JPS funds separate from the EEIF.
- 2. Description of the strategies to be employed over each of the quarterly period including the "Red Areas" to be tackled; and
- 3. The quarterly system losses reduction target at the end of each period.
- 4. The actual system loss reduction measured against the projected target.

#### PART 2-THE EEIF MONITORING

#### 2.1 EEIF REPORTS

- 39. JPS shall provide rolling quarterly reports to the OUR within 30 days of the expiry of each quarter. These reports shall contain inter alia:
  - A statement showing the monthly inflows and outflows from the regulatory accounts.
  - 2. A statement detailing the variance between budgeted expenditure and actual expenditure for the EEIF projects and the overall system losses projects.
  - A summary of the capital items purchased and any associated expenditure from the EEIF.
  - A summary of JPS' total loss reduction expenditure including O&M expenditure related to the loss reduction effort.
  - Details of actual billed sales and net generation for each month which comprises the twelve-month rolling average for the system.
  - A summary of the physical activities of the loss reduction programme showing project profiles and all measurable achievements for the preceding quarter.

#### 2.2 MONITORING

- 40. The OUR shall monitor the usage of the relevant Fund by way of quarterly system losses reports and special reports, as requested from time to time. Such reports shall set out:
  - i. The flows in and out of the EEIF;
  - ii. The actual system losses performance versus the targeted level; and
  - The overall progress of the Loss Control division created by JPS in 2009, which is devoted exclusively to projects aimed specifically at addressing system losses.
- 41. The primary objective of the monitoring function is to ensure that the Fund is effectively maintained and managed thereby achieving the stated objectives for which it is established.

#### 2.3 AUDITS

- 42. Annual audits of the Fund shall be conducted at the end of each calendar year as part of the JPS's annual audit.
- 43. The Office reserves the right to commission an independent audit and request such information of the JPS that the Office deems necessary. Any independent audit so commissioned shall be paid for from the EEIF.

#### PART 3 – TREATMENT OF ASSETS

- 44. While JPS shall record all revenues, assets and other financial transactions associated with the EEIF in its normal accounts the Company shall establish and maintain regulatory accounts that reflect all revenues, assets and other financial transactions independent of its general financial accounts. This is to enable the OUR, to better monitor the activities of the Fund and make appropriate adjustments to the tariff based on the status of the Fund and the outcome of the programme.
- 45. The book value of the EEIF Assets shall be revalued from time to time in a manner consistent with similar assets owned by the company predicated on the formula approved

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- by the OUR. The book value of the EEIF Assets at any given time shall therefore reflect the value based upon the most recent revaluation.
- 46. In keeping with Condition 6, Sub-section 4 of the Licence, JPS "shall maintain (which shall include appropriate registration in respect of intellectual property), repair and replace all relevant assets throughout the term of this Licence in accordance with good industry practice so as to enable it to meet its obligations under this Licence."
- 47. The OUR, shall make adjustments to the tariff based on the EEIF Assets in the regulatory accounts at the periodic Tariff Review exercise. These adjustments shall include adjustments for the tax benefits obtained through capital or investment allowance for the EEIF Assets. The balance remaining in the Fund at the termination of the programme shall be used to adjust the overall tariff downwards.

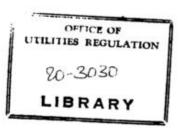
#### APPENDIX 1 – THE APPEALS PROCESS

Below is the Appeals Process as outlined under Condition 32 of the All Island Electricity Licence:

- (i) If the Licensee is aggrieved by a decision of, or failure to act, by the Office, under this Licence, the Licensee may appeal to the Appeal Tribunal (hereinafter called "the Tribunal) –
  - a) in the case of a decision of the Office, within thirty (30) days after notification to the Licensee of that decision;
  - b) in the case of a failure of the Office to act, within twenty-one (21) days after the date on which the Office was required to act.
  - (ii) On hearing an appeal under this Licence the Appeal Tribunal shall have regard to the legality, rationality and procedural propriety of the Office in arriving at its decision and may:
    - a) confirm, modify or reverse the decision of the Office or any part thereof; or
    - b) by a direction in writing, refer the decision back to the Office for reconsideration by it, either generally or in relation to any matter specified in the direction, and the Tribunal shall, at the same time, state the reasons for so doing.
  - (iii) The Tribunal may, on application by the Licensee, order that the decision of the Office to which an appeal relates shall not have effect until the appeal is determined.
  - (iv) The Appeal Tribunal may dismiss an appeal if it is the opinion that the appeal is frivolous or vexatious or not made in good faith;
  - (v) Where the Appeal Tribunal dismisses an appeal, it shall inform the Licensee and the Office in writing stating the reasons therefor,
  - (vi) in making a decision the Appeal Tribunal shall observe reasonable standards of procedural fairness and the rules of natural justice and act in a timely fashion.

- (i) The Appeal Tribunal shall consist of three members appointed by the Minister as follows:
  - (a) one member shall be a former Judge of the Supreme Court or the Court of Appeal and shall be the Chairman of the Tribunal;
  - (b) one member shall be appointed on the recommendation of the Licensee; and
  - (c) one member shall be appointed on the recommendation of the Office.
  - (ii) The members of the Tribunal shall hold office for such period not exceeding two years as the Minister may determine and shall be eligible for reappointment.
  - (iii) The Minister may appoint any person to act in the place of the chairman or any other member of the Tribunal in the case of the absence or inability to act of the chairman or other member
  - (iv) (a) Any member of the Tribunal other than the chairman may at any time resign his office by instrument in writing, addressed to the *Minister* and transmitted through the chairman, and from the date of the receipt by the *Minister* of such instrument that member shall cease to be a member of the Tribunal.
    - (b) The chairman may at any time resign his office by instrument in writing addressed to the *Minister* and such resignation shall take effect as from the date of receipt by the Minister of that instrument.
  - (v) The Minister may at any time revoke the appointment of any member of the Tribunal if such member-
    - (a) becomes of unsound mind or becomes permanently unable to perform his functions by reasons of ill health;
    - (b) is convicted and sentenced to a term of imprisonment;
    - (c) fails without reasonable excuse to carry out any of the functions conferred or imposed on him under this Licence;
    - (d) engages in such activities as are reasonably considered prejudicial to the interest of the Tribunal.

- (vi) If any vacancy occurs in the membership of the Tribunal, such vacancy shall be filled by the appointment of another member thereof by the Minister.
- (vii) The names of all members of the Tribunal as first constituted and every change in the membership thereof shall be published in the Gazette.
- (viii) There shall be paid to the Chairman and other members of the Tribunal in respect of each appeal, such remuneration, whether by way of honorarium, salary or fees, and such. allowances as the *Minister* may determine.
- (ix) The decisions of the Tribunal shall be by a majority of votes of the members.
- (x) The Tribunal shall regulate its own proceedings."



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