Office of Utilities Regulation

JPS 2014 – 2019 Rate Case Submission

Summary Report



April 11, 2014

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Background

In accordance with the Amended and Restated All-Island Electric Licence 2011, the Jamaica Public Service Company Limited (JPS) filed its application for new non-fuel tariff rates on April 7th 2014.

The current non-fuel tariff rates, fixed by the Office of Utilities Regulation (OUR) effective October 1, 2009 are set to expire upon approval of the new rates. To obtain new non-fuel tariff rates the Licence stipulates that JPS must submit a filing with the OUR by the succeeding fifth anniversary of the last submission.

In its submission JPS has proposed adjustments to the methodology used to calculate the fuel rate and is also seeking revisions to the Performance Based Rate-making Mechanism (PBRM).

The submission includes:

- 1. An application for the recalculation of the non-fuel base rate;
- 2. A report on the quality of service provided by the Company during the last five years; and
- 3. Proposed revisions to several PBRM components with justification

JPS states that the objectives of the 2014 - 19 tariff proposals are to:

- 1. ensure fair and cost-reflective tariffs that send appropriate price signals but allow all customers affordable access to the product;
- 2. ensure JPS remains viable so as to continue attracting much needed capital to improve system reliability and quality of service;
- 3. provide an attractive tariff to the largest industrial customers to encourage economic growth and development for the country;
- 4. continue the improvement in product quality and service delivery to customers with particular focus on the T&D network and to reducing system losses; and
- 5. mitigate the Company's exposure to risks outside its control

JPS further states that the company is mindful of the fact that, at the time of the filing of the tariff review, Jamaica and by extension electricity customers, are experiencing an economic contraction precipitated by global financial turmoil. It is said in the report that the Company has experienced the impact of these economic conditions in the form of sales decline, increased levels of system losses and illiquidity in the credit markets that has forced the rescheduling of required financing. JPS has proposed the introduction of a new tariff design that will restrict the increase to both residential and small commercial enterprises that consume at the lowest consumption band. The proposed new tariff design is reflective of the cost to serve the various rate classes. The Company is also proposing to also begin to rebalance the proportion of revenue that it earns from fixed charges and variable energy charges and so lead to a more cost reflective tariff in terms of fixed cost recovery. Currently approximately 89% of JPS' non-fuel costs are fixed while only 23% of revenues are recovered through a fixed charge.

Summary of JPS Request

1. Proposed Rate Changes

I. Residential (Rate 10)

JPS is proposing to **increase** the residential tariff, on average, by **21%**.

The **first tier** (customers with monthly consumption < 100 kWh) that includes mainly low-income families will receive an average tariff increase of **17%**. The number of residential customers affected by this increase is about 220,000 customers, representing 41% of the residential class.¹

Class	Billing	Proposed Rate Billing (JMD/month)	Variation (%)
RT 10 LV Res. Service < 100 kWh	2,041	2,381	17%
RT 10 LV Res. Service 100-500 kWh	7,891	9,567	21%
RT 10 LV Res. Service > 500 kWh	40,385	49,874	23%

	Custome	rs by tier	r Typical Customer's Billing Determinants and Billing				
Class	Quantity	%	Customer	Energy (kWh/month)	Current Rate Billing (USD/month)	Proposed Rate Billing (USD/month)	Variation (%)
RT 10 LV Res. Service < 100 kWh	222,531	41%	1	54	18	21	17%
RT 10 LV Res. Service 100-500 kWh	301,954	56%	1	196	70	85	21%
RT 10 LV Res. Service > 500 kWh	14,116	3%	1	927	361	445	23%

¹ Given the interest in showing the total average tariff variation, a fuel charge needs to be considered in the analysis. For JPS purposes, a fuel charge is added to current non-fuel rates (0.239 USD/kWh). This fuel charge is based on the same data used to determine the February 2014 fuel charge, but relies on the proposed losses target of 21.5%, and excludes the FCRA component that will end in June 2014. The resulting fuel charge is 0.232 USD/kWh.

II. General Service (Rate 20)

JPS is proposing an **increase** of **15%** on average for customers with consumption below 7,500 kWh per month. This impacts approximately 98% of the Rate 20 customers who comprise 70% of the total energy sales for that rate class.

In line with the results of the cost of service study and taking into consideration the Best Alternative Option (BAO) for customers with monthly consumption > 7,500, JPS is recommending an amendment to the tariffs that results in a **6% decrease** on average. This impacts 2% of the R20 customers who comprise 30% of the total energy sales for that rate class.

Class	Billing	Proposed Rate Billing (JMD/month)	Variation (%)
RT 20 LV Gen. Service < 100 kWh	3,103	3,514	13%
RT 20 LV Gen. Service 100-1000 kW	17,712	20,838	18%
RT 20 LV Gen. Service 1000-7500 k	124,458	141,963	14%
RT 20 LV Gen. Service > 7500 kWh	710,091	667,063	-6%

III. Commercial and Industrial (Rate 40 and Rate 50)

JPS is proposing to **reduce** the overall cost to this customer class by on the average **1.50%**

Class	Billing	Proposed Rate Billing (JMD/month)	Variation (%)
RT 40 LV Power Service (Std)	1,205,440	1,220,296	1%
RT 40 LV Power Service (TOU)	2,780,941	2,716,646	-2%
RT 50 MV Power Service (Std)	4,157,327	4,075,079	-2%
RT 50 MV Power Service (TOU)	3,717,202	3,684,224	-1%

1. Proposed Non-fuel Rate Schedule in JMD

			Demand Charge JMD/kVA			Stand	lby Rate (JMD	/kVA)
	Network Access Charge USD/Month	Energy Charge JMD/kWh	STD and On-Peak	Partial-Peak	Off-Peak	STD and On-Peak	Partial-Peak	Off-Peak
RT 10 Prepaid Rate		25.56						
RT 10 Community Renewal Program	0.00	7.75						
RT 10 LV Res. Service < 100 kWh	672.00	10.64						
RT 10 LV Res. Service 100-500 kWh	1,344.00	24.86						
RT 10 LV Res. Service > 500 kWh	2,016.00	35.44						
RT 10 LV Res. Service - Net Billing	2,016.00	0.00	7,840.00					
RT 20 LV Gen. Service < 100 kWh	1,008.00	23.07						
RT 20 LV Gen. Service 100-1000 kWh	1,680.00	22.38						
RT 20 LV Gen. Service 1000-7500 kWh	2,800.00	21.71						
RT 20 LV Gen. Service > 7500 kWh	4,480.00	13.46						
RT 20 LV Gen. Service - Net Billing	2,800.00	0.00	8,960.00					
RT 60 LV Street Lighting	4,480.00	23.52						
RT 40 (Std)< 1 MVA	8,960.00	0.00	3,192.00					
RT 40 (Std)- From 1 MVA to 2 MVA	8,960.00	0.00	3,096.24					
RT 40 (Std)- From 2 MVA to 3 MVA	8,960.00	0.00	3,000.48					
RT 40 (Std)- From 3 MVA to 4 MVA	8,960.00	0.00	2,904.72					
RT 40 (Std)> 4 MVA	8,960.00	0.00	2,808.96					
RT 40 (Std) - Net Billing	8,960.00	0.00	3,136.00					
RT 40 (Std) - Wheeling	8,960.00	0.00	1,636.94			1,459.30		
RT 40 (TOU)< 1 MVA	8,960.00	0.00	1,797.15	1,404.50	135.49			
RT 40 (TOU)- From 1 MVA to 2 MVA	8,960.00	0.00	1,743.23	1,362.36	131.42			
RT 40 (TOU)- From 2 MVA to 3 MVA	8,960.00	0.00	1,689.32	1,320.23	127.36			
RT 40 (TOU)- From 3 MVA to 4 MVA	8,960.00	0.00	1,635.41	1,278.09	123.29			
RT 40 (TOU)> 4 MVA	8,960.00	0.00	1,581.49	1,235.96	119.23			
RT 40 (TOU) - Wheeling	8,960.00	0.00	921.63	720.26	69.48	875.52	684.23	66.00
RT 50 (Std)< 1 MVA	8,960.00	0.00	2,930.28					
RT 50 (Std)- From 1 MVA to 2 MVA	8,960.00	0.00	2,842.37					
RT 50 (Std)- From 2 MVA to 3 MVA	8,960.00	0.00	2,754.47					
RT 50 (Std)- From 3 MVA to 4 MVA	8,960.00	0.00	2,666.56					
RT 50 (Std)> 4 MVA	8,960.00	0.00	2,578.65					
RT 50 (Std) - Net Billing	8,960.00	0.00	3,024.00					
RT 50 (Std) - Wheeling	8,960.00	0.00	1,502.73			1,339.65		
RT 50 (TOU)< 1 MVA	8,960.00	0.00	1,627.92	1,269.78	130.22			
RT 50 (TOU)- From 1 MVA to 2 MVA	8,960.00	0.00	1,579.08	1,231.69	126.32			
RT 50 (TOU)- From 2 MVA to 3 MVA	8,960.00	0.00	1,530.24	1,193.60	122.41			
RT 50 (TOU)- From 3 MVA to 4 MVA	8,960.00	0.00	1,481.41	1,155.50	118.50			
RT 50 (TOU)> 4 MVA	8,960.00	0.00	1,432.57	1,117.41	114.60			
RT 50 (TOU) - Wheeling	8,960.00	0.00	834.84	651.18	66.78	793.08	618.60	63.44

2. Proposed Revenue Cap

JPS is proposing a Revenue Cap approach to replace the Price Cap which is now in place. The company states that this will allow for the flexibility to rebalance the tariff baskets at the annual adjustment for variation in sales mix and sales growth. JPS further states that the revenue cap approach will minimise demand risk, avoids a tariff restructuring in relation to the mismatch between fixed costs and fixed charges, and enables JPS to become a full partner in Jamaica's energy policy goals of generation choice and energy efficiency.

JPS is currently regulated by a price cap framework. That is, its real tariff basket is fixed for the duration of a five-year regulatory period. This protects consumers from imprudent costs, and

provides incentives for JPS to operate efficiently. JPS is however making that case that the price cap regime has exposed the utility to demand risk that is damaging and unnecessary.

Where a revenue cap differs from a price cap is when actual demand varies from expected demand. Under a price cap, if demand is higher than expected, the utility earns more revenue than expected, and so makes higher profits than expected (because it over-recovers fixed costs). If demand is lower than expected, the utility makes less revenue than it expects, and so its profits fall below a reasonable rate of return.

In contrast, under a revenue cap, revenue does not vary with changes in demand. If demand rises above expected level so that revenue is over-recovered in one year, the extra revenue is put into an account and rebated to customers in lower charges the following year. Conversely, if demand drops, leading to under-recovery of fixed costs, the shortfall in revenue is tracked and recovered through higher per unit charges the following year.

3. Proposed Tariff Design

JPS is proposing a new **three-tiered rate class** structure for residential (Rate10) and **four-tiered rate class** for small commercial (rate 20) customers. Different service/ customer charges and energy charges will apply to the tiers. The redesign is said to be a more cost reflective tariff structure that applies a minimal increase to customers consuming at the lowest levels in Rate 10 and Rate 20 classes. JPS states that with this structure the company is attempting to keep electricity prices affordable to marginal and vulnerable customers.

JPS states that the proposed new structure will introduce three tiers of service/customer charge for rate 10 customers and four tiers for rate 20 customers. Notably, the customer charge is being replaced with a network access charge to ensure a more appropriate allocation of capacity charges for rate 10 and 20 customers who before paid little or no capacity charge.

4. Proposed Wholesale Tariff

JPS is proposing to introduce a wholesale rate for its largest customers based on the cost of service study to encourage the largest customers with demand in excess of 1 MVA to remain on the JPS network as a full service customer. The Company says that this is in the interest of all customers on the grid as large customers leaving the grid will apply upward pressure on electricity rates.

JPS is also proposing to introduce Power Wheeling rates for customers who wish to selfgenerate. These rates will include Standby rates to ensure there is service available for the Wheeling customers if the Wheeling customer's operating units are not operational due to scheduled maintenance or forced outages.

The proposed new Wholesale Tariff shall have four declining blocks in recognition of the lower Best Alternative Option (BAO) for larger generation equipment.

		Proposed Regular Customers' Rates - Power Demands > 1 MVA						
Class	Power Demand Block	Network Access Charge (USD/Cust./ month)	Energy Charge (USD/kWh)	Demand Charge STD and On-Peak (USD/kVA)	Demand Charge STD and Partial-Peak (USD/kVA)	Demand Charge STD and Off-Peak (USD/kVA)		
RT 40 LV Power Service (Std)	1 MVA to 2 MVA	80.000	0.000	27.645				
	2 MVA to 3 MVA	80.000	0.000	26.790				
	3 MVA to 4 MVA	80.000	0.000	25.935				
	Above 4 MVA	80.000	0.000	25.080				
RT 40 LV Power Service (TOU)	1 MVA to 2 MVA	80.000	0.000	15.565	12.164	1.173		
	2 MVA to 3 MVA	80.000	0.000	15.083	11.788	1.137		
	3 MVA to 4 MVA	80.000	0.000	14.602	11.412	1.101		
	Above 4 MVA	80.000	0.000	14.120	11.035	1.065		
RT 50 MV Power Service (Std)	1 MVA to 2 MVA	80.000	0.000	25.378				
	2 MVA to 3 MVA	80.000	0.000	24.593				
	3 MVA to 4 MVA	80.000	0.000	23.809				
	Above 4 MVA	80.000	0.000	23.024				
RT 50 MV Power Service (TOU)	1 MVA to 2 MVA	80.000	0.000	14.099	10.997	1.128		
	2 MVA to 3 MVA	80.000	0.000	13.663	10.657	1.093		
	3 MVA to 4 MVA	80.000	0.000	13.227	10.317	1.058		
	Above 4 MVA	80.000	0.000	12.791	9.977	1.023		

Proposed Wholesale Tariff Rate Schedule (RT40 and Rate50)

Proposed Wheeling Rate Schedule (Rate 40 and Rate 50)

	Proposed Wheeling Customers' Rates						
Class	Network Access	Energy	Demand Charge	Demand Charge	Demand Charge		
Class	Charge	Charge	STD and On-Peak	STD and Partial-Peak	STD and Off-Peak		
	(USD/Cust./ month)	(USD/kWh)	(USD/kVA)	(USD/kVA)	(USD/kVA)		
RT 40 LV Power Service (Std)	80.000	0.000	14.541	(050/КТА)			
RT 40 LV Power Service (TOU)	80.000	0.000	8.187	6.398	0.617		
RT 50 MV Power Service (Std)	80.000	0.000	13.348				
RT 50 MV Power Service (TOU)	80.000	0.000	7.416	5.784	0.593		
		Proposed F	Regular Custon	ners' Rates			
	Network		Demand	Demand	Demand		
Class	Access Charge	Energy Charge	Charge STD and	Charge STD and	Charge STD and		
	(USD/Cust./	(USD/kWh)	On-Peak	Partial-Peak	Off-Peak		
	month)	,	(USD/kVA)	(USD/kVA)	(USD/kVA)		
RT 40 LV Power Service (Std)	80.000	0.000	28.500				
RT 40 LV Power Service (TOU)	80.000	0.000	16.046	12.540	1.210		
RT 50 MV Power Service (Std)	80.000	0.000	26.163				
RT 50 MV Power Service (TOU)	80.000	0.000	14.535	11.337	1.163		
			Variation %				
			Vallation 70				
Class	Network Access Charge	Energy Charge	Demand Charge STD and On-Peak	Demand Charge Partial-Peak	Demand Charge Off-Peak		
Class RT 40 LV Power Service (Std)	Access	- · ·	Demand Charge STD and	Charge	Charge		
	Access Charge		Demand Charge STD and On-Peak	Charge	Charge		
RT 40 LV Power Service (Std)	Access Charge 0%		Demand Charge STD and On-Peak -49%	Charge Partial-Peak	Charge Off-Peak		

5. Proposed FX Adjustment Factor

JPS recovers revenues through tariffs set on an assumed Base Exchange rate. JPS states that the company is exposed to high currency risk and settlement risk as a large proportion of its expenses are incurred in US dollars. Consequently, the Licence permits the company to adjust billing rates each month to account for movements in the exchange rate between the US dollar and Jamaican dollar.

The current foreign exchange adjustment factor has not been reset since 2004. In this submission JPS is asking that the US component of costs included in the formula be adjusted upwards from 76% to 80% based on the composition of costs in the 2013 revenue requirement.

6. Foreign Exchange Losses

Among other things JPS is seeking the following:

- Allowance for an annual review of the non-fuel foreign exchange adjustment factor to reflect changes in JPS' currency composition of non-fuel costs.
- Allowance for foreign exchange losses as a recoverable expense in the revenue requirement
- The implementation of an annual "true-up" mechanism between rate reviews to reconcile the amount incurred for FX losses for the previous calendar year with the amount allowed in the revenue requirement. If FX losses incurred are less than the amount allowed then JPS must effectively refund the difference to customers. Conversely, if FX losses incurred is more than the amount allowed then the company should be allowed to recover the difference from customers.

7. Interest on Accounts Receivables for Commercial Customers

Currently, JPS' accounts receivable is collected on average over a 52 day period. This occurs primarily on account of a uniform mix of customers in all rate classes paying their bills well after they become due. As a result of this, JPS is claiming that it is suffering significant interest costs on the additional working capital requirement to fund the business, and FX losses on the outstanding balances due from those customers especially during periods of rapid devaluation of the Jamaican dollar against the US Dollar.

JPS' proposal is to charge a rate of interest on outstanding debt to be set at 15% for commercial customers. JPS claims that by setting the rate at this level, 7% increment over and above the 8% debt financing rate, it will act as an FX recovery proxy. This will be used at the end of each financial year as a contribution to the FX recovery proposed.

JPS further proposes that customers be given five (5) days grace period during which no interest will apply to the outstanding balance on the customer's account. The grace period will commence the day following the due date on the customer's bill and will terminate on day five following the due date. Interest accrual will therefore commence on the sixth day following the due date on the customer's bill.

8. Community Renewal Programme

JPS has outlined an integrated Community Renewal Programme in which JPS, NWC, and Government agencies are planning to come together to improve services to low-income communities island-wide, in an integrated way that emphasizes community responsibility and payment as the *quid pro quo* for service upliftment. JPS position is that Jamaica needs to move

beyond an 'enforcement' approach to the problem of service theft and non-payment, to one which emphasizes a social dimension in addressing a problem that is primarily socioeconomic in nature.

The proposed programme is geared towards low income communities that can reasonably be grouped into the following three types:

- Rural villages
- Squatter settlements
- Inner-city areas

JPS states that these communities have key features in common such as:

- Almost everyone receives electricity from JPS' network
- In many communities, almost no one is paying for electricity
- JPS' traditional approaches to controlling unauthorized connections are not working.

JPS is proposing to:

1. Offer lower tariffs

Rates will be less than the full cost of providing service. JPS is of the view that charging lower tariffs can increase collection rates and overall revenues from these communities. It also allows communities to establish a habit of paying utility bills, which they will continue as tariffs rise.

2. Payment

The programme would offer improved payment options. First, it would offer transitional "community upliftment tariffs." These tariffs would be discounted and gradually increased as services levels increase and customers' ability to pay increases. Additionally, there would not be any initial connection charge. Instead, customers would be able to pay for the cost of connection in instalments, added on to their monthly bills. Customers that cannot make payments will not be disconnected automatically. Instead, they will be offered credit arrangements with interest. Secondly, prepayment meters can be provided as a means of helping persons to manage their budget more efficiently and to "pay as they go" avoiding large monthly bills at the end of each month which they did not properly budget to address.

9. Prepaid Metering

JPS is proposing to fully introduce prepaid meters in order to make it easier for customers to pay for a small amount of electricity at a time and avoid a large bill at the end of the month.

Some expected benefits to be derived by consumers are:

- Control over their energy usage and budget. Customers can determine the maximum amount of electricity they wish to purchase monthly and the frequency of purchases.
- Point of Payment Flexibility to purchase top-up supplies.
- Potential for Energy Savings Studies shows that prepay customers consume less energy and have lower monthly bills than their post-paid counterparts.
- Avoid the payment of a security deposit.
- Avoid the payment of certain fees. -Prepay customers will not be charged for disconnection or reconnection fees, nor will they ever have to pay a late payment fee.

10. Proposed System Losses & Heat Rate Targets

Current system losses target is set at 17.50%. JPS is requesting an increase in the target to 22.95% in 2014. The proposed targets for 2014 and the remaining years up to 2018 are outlined in table below.

JPS is requesting that the heat rate target of 10,200kJ/kWh that is now in effect should remain in force and new targets set on the commissioning of the expected 381 MW base load generation facility.

	Actual		Forecast			
	2013	2014	2015	2016	2017	2018
System Losses - 3 Yr Rolling Average	23.34%	24.95%	25.98%	26.22%	25.63%	22.88%
Stretch Target		2.00%	2.00%	2.00%	2.00%	2.00%
Proposed System Losses Target		22.95%	23.98%	24.22%	26.63%	22.88%

11. Quality of Service Standards

Proposed Modifications to Guaranteed Standards

Among other things JPS is requesting that they should not be obliged to make Guaranteed Standard payments in the following circumstances. The company contends that these are normal exemptions in other jurisdictions with established Guaranteed Standards regimes:

- The customer informs JPS before the Standards contravention period that they do not want JPS to take any action or further action in regard to the matter
- The customer agrees with JPS the action already taken by JPS meets the requirement of the standard. But in the event JPS has promised to take further action, the action must be completed without delay, or in the agreed timeline, for this exemption to be invoked.

- Where information is required from the customer and it is not given to the appropriate telephone number, address or email account as indicated by JPS or is done at a time outside the reasonable hours established by JPS.
 - It was not reasonably practicable for JPS to perform the necessary standard due to:
 - Severe weather, as agreed by the OUR.
 - Industrial action by JPS' employees.
 - The act or default of a person not working directly for, or as an agent for JPS to the premise.
 - The existence of circumstances, which would cause JPS to break the law by following the Standards
 - Circumstances of an exceptional nature beyond the control of JPS, and JPS had in each case taken all reasonable steps to both prevent the circumstances from occurring and from having an effect.
- Belief on the part of JPS that the information provided is of a frivolous or vexatious nature
- The breach occurs during a period when the customer has failed to pay charges due after receiving a disconnection notice.

12. Three Year Rate Review Request

JPS is requesting a three-year rate review, which will initially be triggered by the successful commissioning of the 381 MW LNG fired facility being developed by Energy World International (EWI). Upon completion of this facility, over half of JPS's generation will have been replaced and more than 70% of generation will be IPPs. Furthermore, there will be a substantial amount of renewables added to the JPS system in the interim. These variable resources may require system improvements to accommodate the operational dynamics of wind and solar resources. Also, as discussed above, JPS will then need to retire and decommission the Old Harbour and Hunt's Bay plants. The decommissioning costs are material and JPS needs to be compensated for these mandated retirements. JPS believes the most prudent approach is to file a notice with the OUR, at the commercial operation date of the EWI plant for a rate review to address all of the issues discussed above. The three-year rate review would be filed in March of 2017, contingent upon a successful start-up of the EWI plant.