



Jamaica Public Service Company Limited

CHANGING LIVES WITH OUR *e*NERGY

THE JAMAICA PUBLIC SERVICE CO. LTD.

**EXTRAORDINARY RATE REVIEW
SUBMISSION FOR 2016**

October 25, 2016

Preamble

This submission is made pursuant to Paragraph 59 of Schedule 3, which makes provision for JPS to request the OUR to conduct an Extraordinary Rate Review under exceptional circumstances which has significant impact on the Licensee and which were not factored in a previous Rate Determination.

“The Licensee or the Minister may request the Office to conduct an extra-ordinary Rate Review owing to exceptional circumstances that have a significant impact on the electricity sector and/or the Licensee, but were not factors considered or known when the Rate Review was undertaken. The Office is empowered, to review the rates for this purpose outside of the five yearly Rate Review periods. “

Changes introduced in the Electricity Licence 2016 (hereafter referred to as “the Licence”) have significant implications for JPS both from the cost and revenue recognition perspectives. In a submission to the OUR on September 3, 2016, JPS outlined pertinent changes in the Licence with significant implications for the business and which it believed, should be treated as exceptional circumstances that are sufficient for the OUR’s consideration in an Extraordinary Rate Review. These impacts range from significant asset impairment adjustments on the cost side, to the establishment of an avenue to recover prudently incurred costs which are not currently included in the approved revenue requirement. In a subsequent letter date September 30, 2016 JPS emphasised that there were two (2) matters of particular urgency for which JPS is requesting the Office’s clearly defined position before the end of 2016. JPS noted that the clarity it sought should be in the form of, or bearing the authority of a Determination Notice that would clearly confirm JPS’ claim to cost recovery under the Licence with JPS and the Office to agree on the staging of recovery.

The two (2) matters that were referenced in the aforementioned letter were:

1. The impairment adjustment cost of US\$11.3M resulting from the application of the depreciation rates delineated in Schedule 4 of Electricity Licence 2016.
2. The incremental increase in depreciation expense of US\$2.1M for 2016 and an average of approximately \$4M for 2017 and 2018 inclusive or per annum.

JPS’ submission at this time is to outline the case for the recovery of costs associated with items (1) and (2). The Company’s position is informed by the new Licence, with due consideration to past precedence established by Determinations of the OUR, as well as consideration for the impact on our customers and the energy sector at large.

Glossary

CPLTD	-	Current Portion of Long Term Debt
GOJ	-	Government of Jamaica
JMD	-	Jamaican Dollar
Licence	-	Electricity Licence 2016
ROE	-	Return on Equity
USD	-	United States Dollar
WACC	-	Weighted Average Cost of Capital
PBRM	-	Performance-Based Ratemaking Mechanism

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1 Request for Extraordinary Rate Review

1.1 Overview

The Electricity Licence 2016 dated January 27, 2016 was gazetted in February, 2016. It includes several amendments to the Amended and Restated All Island Electric Licence (2011) and replaces the Price Cap with a Revenue Cap Regime under the PBRM. The amended Licence shall hereafter be cited as the Electricity Licence.

The Electricity Licence includes several changes which impact the calculation of the non-fuel rates. Of these, the most impactful include:

1. Significant changes to the 5-year Rate Review Process (which is now fundamentally a forward looking process);
2. Changes to the rates of depreciation for property, plant and equipment as detailed in Schedule 4;
3. The recognition and inclusion of the current portion of long term debt (CPLTD) in the rate base (and therefore in the revenue requirement);
4. Formalisation of JPS' role as the implementer of the Smart Street Light programme
5. A mechanism for independently determining the ROE for JPS, which shall be used by the Office to calculate the regulatory approved WACC;
6. An expanded Z-factor clause (to allow for recovery of asset impairment adjustments, among other things); and
7. The accommodation of Extraordinary Rate filings.

Paragraph 59 of Schedule 3 of the Electricity Licence states:

“The Licensee or the Minister may request the Office to conduct an extra-ordinary Rate Review owing to exceptional circumstances that have a significant impact on the electricity sector and/or the Licensee, but were not factors considered or known when the Rate Review was undertaken. The Office is empowered, to review the rates for this purpose outside of the five yearly Rate Review periods.”

JPS is of the view that the implementation of the amendments to the Electricity Licence has introduced an “exceptional” circumstance for the Licensee which justifies the Office’s consideration of an Extraordinary Rate Review as these changes were not factored into the 2014 – 2019 Rate Review but have a significant impact on JPS both from a revenue and cost perspective.

Without prejudice to any further filings to address other pertinent changes also with significant impact to JPS, there are two (2) matters of particular urgency for which we are requesting the Office’s clearly defined position by December 20, 2016, as the outcome is very material to the Company’s financial performance.

1. The impairment adjustment cost of US\$11.3M resulting from the application of the depreciation rates delineated in Schedule 4 of Electricity Licence 2016.

2. The incremental increase in depreciation expense of US\$2.1M for 2016 and an average of approximately \$4M in each year for 2017 and 2018.

JPS recognizes that the impairment adjustment may have alternatively been addressed through a Z-factor clause application but would not take account of the incremental depreciation expense, at least not until after the cost has been incurred. To make a Z-factor filing at the end of each year to recover costs that are already have a clear definition is unwieldy and inefficient. Therefore, JPS believes that both matters are best addressed through an Extraordinary Rate Filing primarily due to the recurring nature of the incremental depreciation expense, but secondarily for the efficiency of addressing the recovery of both costs in a single Determination.

1.2 Impact of the Depreciation Adjustment

The implementation of the depreciation rates delineated in Schedule 4 of Electricity Licence 2016 which was done in accordance with the rules stipulated in IAS 8, with the new useful lives being applied to the respective asset categories as of July 2016 to coincide with the application of the revenue cap mechanism, had significant implications for the carrying values of assets in 2016 (i.e. an asset impairment adjustment) and the amount of depreciation JPS will recognize on an annual basis thereafter (i.e. the ongoing impact on depreciation rates). As required by IAS 8 - Accounting Policies, Changes in Accounting Estimates and Errors, the determination of "... the useful lives of, or expected pattern of consumption of the future economic benefits embodied in, depreciable asset..." are considered to be an accounting estimate (Paragraph 32). As a result of the amendments to the Licence, the impact of these amended rates should be applied prospectively in the period of the change and in future periods (Paragraph 36). The implementation has had the effect of an immediate asset impairment adjustment of US\$11.3M in 2016 and a further US\$2.1M in incremental depreciation costs for the six months from July 1 to December 31, 2016. Our financial forecast therefore suggests that the ROE for 2016 will be lower than 7% while the amount for 2017 would likely be lower than 8%, both being substantially lower than the regulatory approved target of 12.25%.

1.2.1 Calculation of Impairment Adjustment Cost and Accelerated Depreciation

The analysis of the changes arising from the depreciation rate adjustments was conducted by categorising the assets into two (2) categories:

- Category A - those assets whose useful lives would already have expired as at the date of application and which are no longer in service, and
- Category B - those assets whose useful lives would not have passed as of the date of application.

Given that the Category A assets are no longer in service and should have already been fully depreciated, the accelerated depreciation to write the net book value (NBV) of these assets down to Nil was immediately recognised and taken to the Profit or Loss. This depreciation which is the asset impairment cost was calculated to be approximately US\$11.3 million.

For Category B assets, the depreciation which would have to be accelerated and applied prospectively is approximately \$17.1 million. The estimated impact of the depreciation adjustment is shown in Table 1-1. The detailed analysis outlining the calculations that were done to compute

the impairment adjustment cost and the accelerated depreciation expense is included in a separate appendix to this document.

Table 1-1: Breakdown of Depreciation Adjustment

<u><i>Analysis of Adjustment</i></u>	<u><i>Total Adjustment</i></u> <u><i>US\$'000</i></u>	<u><i>2016 Adjustment</i></u> <u><i>US\$,000</i></u>
Accelerated depreciation on assets whose useful life expired prior to June 2016 (<i>To be recognised immediately</i>)	11,324	11,324
Accelerated depreciation on assets whose useful life will expire subsequent to June 2016		
2016	2,102	2,102
2017	4,203	
2018	3,787	
2019	2,262	
2020	1,154	
2021	1,154	
2022	794	
2023	434	
2024 - 2028	1,234	
	17,127	
	28,451	13,426

A summary of depreciation adjustments that were made on JPS asset categories and the impact on accelerated depreciation and asset impairment costs is shown in Table 1-2 below:

1.2.2 Treatment of Specific Assets

In general, the depreciation schedules presented in Schedule 4 of the Electricity Licence is similar to those presented in the Amended and Restated All Island Electric Licence (2011). In a few instances the depreciation schedule outlined in the Electricity Licence was less detailed than it was in the All Island Electricity Licence (2011) and as such JPS was guided by its internal depreciation policy, informed by operational experience, manufacturers recommendations and judgement in relation to the rate at which these assets are consumed by the business, in determining the specific rates for these categories of assets. In other cases, JPS' operational experience indicates a different economic life for particular asset categories than that specified in the Electricity Licence. This section provides an exposition on JPS' treatment of these specific assets. It should be noted that where JPS applied a change which differed from the Licence, it was to the benefit of the customer as in these circumstances longer useful lives (lower depreciation rates) was assigned to the assets.

Table 1-2: Summary of Depreciation Adjustments on Asset Categories

	Depreciable Lives (Yrs)		Accelerated depreciation on assets whose useful life expired prior to June 2016	Accelerated depreciation on assets whose useful life will expire subsequent to June 2016	Total
	Old	New			
Steam production Plant	25	25			
Hydraulic Production Plant:					
Civil Works	50	50			
Mechanical and Electrical Equipment	35	35			
Roads and Bridges	40	40			
Other Production Plant (incl Wind and Solar):					
Civil Works	40	40			
Gas Turbine	24	24			
Other Generating Equipment	25	20 25 or 25		405,305.89	405,305.89
Mechanical , Electrical and Accessory Equipment	25 or 20	20			-
Transmission Plant:					
Control/Switch Gear and Transformers	25	25			-
Distribution Plant:					
Overhead and Underground Lines	30	30			-
Poles and HPS and MV Streetlights (Streetlights)	30	20	-	1,439,545.43	1,439,545.43
LED Streetlights		15			-
Test Equipment and Meters (Electromechanical)	25	20		4,318,562.08	4,318,562.08
Test Equipment and Meters	25	15		2,648,062.20	2,648,062.20
Supervisory Control and Other Equipment	0	25			-
Demand Side Management Systems and Battery Storage	0	5			-
General Plant:					
Structure and Leaseholds	50	50			-
Transport Equipment	7	7			-
Tools and Laboratory Equipment	25	10	1,803,071.00	1,144,604.22	2,947,675.22
Office and Stores furniture equipment	20	10	636,225.00	885,976.99	1,522,201.99
Communication and other Equipment	15	5	3,580,192.00	1,664,675.67	5,244,867.67
Computer Equipment	15	6	5,304,470.00	4,620,369.01	9,924,839.01
			11,323,958.00	17,127,101.48	28,451,059.48

Poles

The economic life of electricity poles was reduced from 30 to 20 years in Electricity Licence 2016. Based on the operational experience in the company, however, poles are expected to last an average of 25 to 30 years. This assessment was made in the Asset Impairment Review conducted annually, the most recent being at the end of 2015 for the transmission and distribution assets. The review considered the expected useful life of the poles within the network, the primary deteriorating characteristics, observed causes of failures and the existing maintenance programme undertaken by the company. Based on the results of the review, the report concluded that “the assigned useful life of the transmission poles and towers (i.e. 25 to 30 years) is expected to be achieved once conformance to the established technical standards for transmission line design and construction and the execution of the maintenance programs is adhered to.”

On that basis, JPS concluded that the 20 year depreciation period which has been suggested in the Electricity Licence would not appropriately reflect the true useful life of this category of assets and would therefore result in an inaccurate reflection of their Net Book Value. As a result, no modification has been made to the useful life of the poles. Further discussions will be held with the Office of Utilities Regulation (OUR) and the Ministry of Science, Energy and Technology (MSET) regarding the incorporation of a more appropriate rate within the Licence.

Electromechanical Meters

In relation to meters, the Licence has recommended a useful life of 15 years as opposed to a useful life of 25 to 30 years which was previously in force.

As at 30 June 2016, the meters installed by JPS, can be classified into two main categories; (a) electromechanical meters and (b) electronic meters (including Smart meters). Electromechanical meters have been utilised by the company for several years and operational experience has indicated that generally, the meters typically have a life of approximately 25 years, based on normal wear and tear and existing maintenance practices. In 2009/2010, the company ceased acquiring electromechanical meters with an overall objective of eventually replacing all electromechanical meters with the more modern electronic meters (including smart meters) to assist in its theft reduction strategies, facilitate the provision of additional services to customers and to generally upgrade its metering infrastructure over time.

A depreciation rate study was conducted by KPMG in 2013. This study was based on a survey of the useful lives used by utility companies in a variety of territories. Based on the study, the longer useful lives observed in relation to meters were generally applied to the existing non-smart electromechanical meters which is reflective of the experience of JPS (mentioned above). As a result, JPS considers it appropriate for the shorter useful lives recommended in the Licence (15 years) be applied to the electronic (and smart) meters while the electromechanical meters remain in the 25 year useful life category.

JPS however recognises that given the company’s overall intention to replace the older meters over time, the existing useful life for these meters should be reduced to reflect their diminished utility as the company upgrades its network and service offerings. As a result, these meters shall be reduced to a useful life of 20 years.

Diesel Generators

Within the “Other Production Plant” category, the new sub category of “Other Power Generation Equipment” with a depreciation rate of 20 years was included in Electricity Licence 2016. The diesel plants which were previously depreciated over 10 to 30 years are the only assets that were associated with this sub-category. The components of those diesel plants with depreciation rates greater than 20 years, were identified and their depreciation accelerated so as to reflect the new rate stipulated in the Licence.

1.3 JPS’ Proposal for Recovery of Costs

JPS’ proposal is for the recovery of the costs incurred in each year to be recovered over the succeeding two year period commencing at the effective date of the 2017/2018 Annual Tariff Adjustment Determination and proceeding according to the schedule outlined in Table 1-3 below. The schedule was designed to ameliorate the impact on the customers while minimizing the financial impact to the company.

The schedule indicates that the incremental cost incurred by JPS in 2016 is US\$13.4M which represents the impairment adjustment cost of US\$11.3M and the incremental depreciation expense of US\$2.1M for 2016. The amounts related to 2017 and 2018 represents the incremental depreciation expenses for those years. The annual incremental depreciation expenses for 2018 and beyond would be accounted for at the Rate Review in 2019.

Table 1-3: Recovery Schedule

Year	Costs incurred (US\$’M)	Number of Years to full Recovery
2016	13.426	2
2017	4.203	2
2018	3.787	2

Table 1-4 shows the schedule of payments that would allow JPS to fully recover the costs identified in Table 1-3. Note that where a cost is spread over two years, the amount to be recovered in the second year is inflated by the pre-tax WACC to allow recovery of JPS’ opportunity cost. JPS proposes that annual costs for 2016 – 2017 be recovered through annual tariff adjustments in 2017 and 2018 and that unrecovered amounts of US4.52M for that period are factored in the revenue requirements that will be set in the 2019 rate determination along with the costs related to the period post 2018.

Table 1-4: Amount Recovered

Actual Recovery in 2017 (US\$'M)	6.713
Actual Recovery in 2018 (US\$'M)	9.702

2 Potential Bill Impact

2.1 Average Bill Impact

In its 2016/2017 Annual Tariff Adjustment Determination Notice, the OUR approved a non-fuel revenue requirement of JMD\$45,028,110,780. Not accounting for the impact of inflation, foreign exchange and other adjustments, the Z factor adjustment of US\$6.713M in the 2017/2018 annual tariff adjustment represents an average increase of 1.83% in the non-fuel tariffs and approximately 1% increase in overall tariffs. In the year when the highest amount is to be recovered, that is, in 2018/2019, assuming the same revenue requirement level as that approved for 2016/2017, the bill impact would be approximately a 2.64% increase on average non-fuel tariffs.

2.2 Impact on Customer Bills

Using the 2016/2017 approved non-fuel tariff and the October 2016 fuel rates as the base, a detailed analysis of the total bill impact for the typical JPS customer in each rate class was conducted. The analysis indicates that the total bill impact of the proposed recovery of the impairment and accelerated depreciation costs as indicated in Table 1-4 would result in an increase of approximately 1% for the typical residential customer. Additionally, it shows that for commercial and industrial customers there will be a range of adjustments from an increase of 0.8% for Rate 50 customers to an increase of 1.1% for Rate 20 customers.

The Bill Impact Analysis is shown in Appendix 1.

3 Appendix 1 Rate 10 Bill Impact

		Before October 2016 Bill		After October 2016 Bill		Change October 2016 Bill	
Description	Usage	Rate	Charges (\$)	Usage	Rate	Charges (\$)	%
Base/Exchange Rate	122.5	128.2704		122.50	128.2704		
Non-Fuel Charges							
Energy 1st	100	9.13	912.94	100	9.30	929.62	1.8%
Energy Next	58.82	21.26	1,250.49	58.82	21.65	1,273.33	1.8%
Customer Charge		429.31	429.31		437.15	7.84	1.8%
EIF Charges	158.82	0.2499	39.69	158.82	0.2499	-	0.0%
Sub Total			2,632.43			2,679.78	1.8%
F/E Adjustment			99.20			100.99	
Total Non-Fuel Bill			2,731.63			2,780.77	1.8%
Fuel & IPP Charges							
Early Payment Incentive	158.82	13.282	2,109.51	158.82	13.282	2,109.51	0.0%
			-			-	0.0%
Bill Total			4,841.14			4,890.28	1.0%

Rate 20 Bill Impact

		Before October 2016 Bill		After October 2016 Bill		Change October 2016 Bill	
Description	Usage	Rate	Charges (\$)	Usage	Rate	Charges (\$)	%
Base/Exchange Rate	122.5	128.2704		122.50	128.2704		
Non-Fuel Charges							
Energy	835.7992862	17.61	14,718.43	835.7992862	17.93	14,989.01	1.8%
Customer Charge		956.42	956.42		973.89	17.47	1.8%
EIF Charges	835.7992862	0.2499	208.87	835.7992862	0.2499	208.87	0.0%
Sub Total			15,883.71			16,171.76	1.8%
F/E Adjustment			598.57			609.42	
Total Non-Fuel Bill			16,482.28			16,781.18	1.8%
Fuel & IPP Charges							
	835.80	13.282	11,101.42	835.80	13.282	11,101.42	0.0%
Bill Total			27,583.70			27,882.60	1.1%

Rate 40 STD Bill Impact

October 2016 Bill		October 2016 Bill		Change				
Description	Usage	Rate	Charges (J\$)	Usage	Rate	Charges (J\$)	Charges (J\$)	%
Base/Exchange Rate	122.50	128.2704		122.50	128.2704			
Non-Fuel Charges								
Demand	116	1,720.68	199,598.88	116	1,752.11	203,244.56	3,646	1.8%
Energy	33,135	5.49	181,911.75	33,135	5.59	185,318.79	3,407	1.9%
Customer Charge		6,738.40	6,738.40		6,861.46	6,861.46	123	1.8%
EIF Charges	33,135	0.2499	8,280.46	33,135	0.2499	8,280.46	-	0.0%
Sub Total			396,529.49			403,705.28	7,176	1.8%
F/E Adjustment			14,942.91			15,213.33	270	
Total Non-Fuel Bill			411,472.41			418,918.61	7,446.20	1.8%

Fuel & IPP Charges	33135.10932	12.751	422,509.22	33135.10932	12.751	422,509.22	-	0.0%
Bill Total (J\$)			833,981.63			841,427.83	7,446	0.9%

Rate 50 STD Bill Impact

February 2016 Bill		February 2016 Bill		Change				
Description	Usage	Rate	Charges (J\$)	Usage	Rate	Charges (J\$)	Charges (J\$)	%
Base/Exchange Rate	122.50	128.2704		122.50	128.2704			
Non-Fuel Charges								
Demand	751	1,541.51	1,157,049.33	751	1,569.66	1,178,179.56	21,130	1.8%
Energy	270,899	5.29	1,433,053.86	270,899	5.39	1,459,515.39	26,462	1.8%
Customer Charge		6,738.40	6,738.40		6,861.46	6,861.46	123	1.8%
EIF Charges	270,899	0.2499	67,697.57	270,899	0.2499	67,697.57	-	0.0%
Sub Total			2,664,539.16			2,712,253.99	47,715	1.8%
F/E Adjustment			100,411.15			102,209.24	1,798	
Total Non-Fuel Bill			2,764,950.30			2,814,463.24	49,513	1.8%

Fuel & IPP Charges	270,899	12.751	3,454,256.84	270,899	12.751	3,454,256.84	-	0.0%
Bill Total (J\$)			6,219,207.14			6,268,720.07	49,513	0.8%