outage data can cause problems in the data and induce errors in the calculation of the reliability indices

Customer Count

• The total number of customers served at the time of an interruption, which is fundamental to the computation of the relevant reliability indices was not provided.

Recalibration of Outage Data

It appeared that JPS has made significant alteration to the raw outage data by adjusting and disaggregating the data into categories denoted as "reportable outage data" and "non-reportable outage data".

Outages with Negative Durations

It was observed that twenty-five (25) outage events were found with outage durations ranging from -21,818 minutes to -1 minute. There was no explanation of why outages with negative duration were included in the dataset but it is clear that these values will impact the accuracy of the calculated indices.

Annex A - OMS Raw Outage data

Annex A appears to contain raw outage data as generated by the OMS. The data categories include: Record Id; Outage Number; Sustained/ Momentary; Outage Class; Outage Type; Circuit level; Service Parish; Event Day Type; Restoration Stages; Stage Id; Time Started; Time Restored; Duration Mins; Customers Affected; CML, which is largely consistent with the reporting format recommended by KEMA in the Reliability Manual which resulted from the Q-Factor audit in 2012.

The following observations were made regarding the data contained in Annex A:

1. Total number of outage events recorded was 65,385 with 931, 457 and 63,997 related to the generation, transmission and distribution systems respectively.

These outages were classified as follows:

- Momentary Outage Events: 8,263
- Sustained Outage Events: 57,122
- Planned Outage Events: 263
- Forced Outage Events: 65,122
- "Normal Day" Outage Events: 64,255
- "Major Event Day" Outage Events: 1,130
- 2. Maximum outage duration: 126,834.22 minutes or approximately 88 days.
- 3. Minimum outage duration greater than zero: 0.4 minutes or 24 seconds.

- 4. Maximum number of customers affected during a single outage event: 148,395
- 5. Minimum number of customers affected during a single outage event: zero (0)
- 6. Maximum customer minutes lost (CML) during a single outage event: 55,933,549
- 7. Minimum customer minutes lost (CML) during a single outage event greater than zero minutes in duration: one (1)

Annex B – Summary OMS Raw data

This element of the dataset contains the following summary data set out in Table 4.2, showing reliability indices calculated by JPS based on the raw OMS data provided in Annex A.

Table 4.2: JPS 2014 Reliability Performance Based on Unaltered Outage Data

SUMMARY OF 2014 RELIABILITY PERFORMANCE (Ventyx OMS Application - All Outages)

Indicator	Unit	Category	Generation	Transmission	Distribution	Force Majeure	Total
		Forced	159.764	174.097	5,314.731	0.000	5,648.592
SAIDI	Minutes/Customer	Planned	0.048	7.012	168.831	0.000	175.891
		Total	159.811	181.110	5,483.562	0.000	5,824.483
		Forced	4.439	1.146	22.179	0.000	27.763
SAIFI	Interruptions/Customer	Planned	0.005	0.014	0.274	0.000	0.294
		Total	1.141	1.160	22.453	0.000	28.057
	and sulfra	Forced	35.991	151.982	239.629	0.000	203.454
CAIDI	Minutes/Customer	Planned	9.000	486.475	616.609	0.000	599.265
	er element it d	Total	35.959	156.139	244.226	0.000	207.595
	termine villated	Forced	6.664	1.594	33.705	0.000	41.963
MAIFI	Interruptions/Customer	Planned	0.000	0.008	0.129	0.000	0.138
		Total	6.664	1.603	33.835	0.000	42,101

The actual calculation procedures used to obtain the above indices was not given and appear to have been done in a separate MS Excel file which was not submitted. Some information impacting on the calculated indices, was therefore unknown and include:

- The total number of customers used in JPS' calculation and whether or not a single annual value was used or multiple customer count values since customer count changes throughout the year.
- Whether or not outages with negative duration were accounted for.
- Whether or not outage events occurring during days referred to as "Major Event Days" were accounted for.

Annex C -Reportable Outage Data

Section 3.2.2 of JPS' 2015 Annual Tariff Adjustment filing indicates that adjustments were made to the base OMS data to account for process inefficiencies in the use of the Ventyx OMS and the accuracy of the base GIS data.

According to JPS, the outage data captured by the OMS was recalibrated to address the following issues:

- "1. There were instances in which there were indications that a large number of customers on a single transformer were affected in an outage when this did not actually occur. This error was due to inaccuracies in the customer to transformer mapping in the GIS system. To remove the inaccuracy, the number of customers affected by a transformer outage was normalized based on the KVA rating of the transformer.
- 2. The removal of inaccurate outage records where OMS data inappropriately reflected outages due to inaccurate processing of switching events such as live load transfers, use of mobile transformer, etc.
- 3. Adjustment of outage start time and restoration time due to the following reasons:
 - a. The outage restoration time shown in OMS was significantly later than the crew's reported completion time due to inefficiencies in closing work orders arising from the manual recording system that was being used at the time. Subsequently, a system of electronically closing work orders in the field by technicians was implemented.
 - b. There were cases in which the outage start time in OMS was before the time reported by SCADA due to OMS merging upstream outages with the earlier downstream outages. The outage start time was taken by the system as the earliest outage that already existed on the feeder. This was corrected to use the time reported by the SCADA system.
 - c. In other cases, outage start time in OMS was before the reported device operation time. Again this arose due to OMS merging upstream outages with the earlier downstream outages. The outage start time was corrected to reflect the operation time of the device that the outage occurred on."

JPS also indicated that the recalibrated outage data from the OMS was used as the basis for estimating its reliability performance as shown in Table 4.3 below.

The need to recalibrate or adjust the outage data collected by the OMS for the reasons cited by JPS is clear evidence that there are still major problems and defects associated with the system and other related data recording facilitates. The reported persistent troubles with the OMS is not characteristic of an efficient system implementation. Moreover, the need to alter the OMS data by means of approximations and adjustments without any clear process as to how this is done can only serve to nullify or negate the very purpose of having an OMS to reduce inaccuracies and irregularities in the data reporting and collection system. This need for recalibrating the outage data suggests that JPS has reverted to the approach it

employed in estimating outage data prior to the implementation of the OMS, even with the OMS in operation.

Against this background, it is important to underscore that the main drive behind the OMS implementation was the imperative to move from inaccurate and unreliable outage data collection and recording approach to a strategy that assures efficient and accurate data collection that can facilitate the establishment of a credible Q-Factor baseline. From the OUR's review, it does not appear that this objective is being accomplished.

Table 4.3: Summary of 2014 JPS Reliability Performance Based Recalibrated Outage Data

SUMMARY OF 2014 RELIABILITY PERFORMANCE (Ventyx OMS Calibrated data)

Indicator	Unit	Category	Generation	Transmission	Distribution	Force Majeuro	Total
		Forced	86.411				2,404.408
SAIDI	Minutes/Customer	Planned	0.050	6.077	90.294	0.000	96.422
	the face was ting	Total	86.461	106.617	2,307.752	0.000	2,500.830
		Forced	3.439	0.862	17.473	0.000	21.774
SAIFI	Interruptions/Customer	Planned	0.005	0.013	0.292	0.000	0.310
		Total	3,444	0.875	17.766	0.000	22.084
	a Louis acted as	Forced	25.130	116.639	126.905	0.000	110.426
CAIDÍ	Minutes/Customer	Planned	9.500	483.547	309.054	0.000	311.016
		Total	25.106	121.912	129.901	0.000	113.242
	STATE WILLIAM	Forced	4.394	1.052	28.595	0.000	34.041
MAIFI	Interruptions/Customer	Planned	0.000	0.008	0.126	0.000	0.134
		Total	4.394	1.060	28.721	0.000	34.175

Source: Annex G - (Calibrated Summary) of Outage Dataset

The review of the dataset revealed that the data provided in Annex C actually represented the outage data in Annex A subject to adjustment due to the data reporting and collection issues described by JPS. In that regard, the outage event data and reliability performance indicators included in the "Reportable Outage Data" were largely similar to those contained in "Annex A - OMS Raw Outage data" of the dataset with the caveat that "Reportable" refers to outage data collected by the OMS which were either initially deemed to be suitable or recalibrated to eliminate recording errors and processing inaccuracies before being used to calculate reliability performance indices.

Observations made from the review of Annex C – Reportable Outage Data include:

- 1. Number of Reportable Outage Events: 65,229
- 2. Number of Non-Reportable Outage Events: 156 According to JPS these are due to data and outage processing inaccuracies

- 3. A number of outage events with negative outage durations were observed. Thirty-six (36) such outage events were found with outage durations ranging from -21,818 minutes to -0.07 minutes. It is not clear why these negative duration outage events are in the dataset.
- 4. The percentage of customer supplies restored within 24 hours of forced outages: 99.91% which was in conformance with Overall Standard EOS9. However, given the alteration to the outage data by JPS, the accuracy of this result is questionable.
- 5. While it was expected that all Record IDs would be the same in Annex C as they were in Annex A, it was observed that there were two Record ID's in Annex C that were not in Annex A. While this number is very small and likely has negligible impact on reliability indices calculated, the discrepancy still requires explanation.
- 6. Number of outage events to which adjustments to raw data were made was found to be 13,645 or 20.9% of all outage events. The following observations are relevant:
 - a. Of the 13,645 events, the total number of data changes were 40,964, broken down as follows:

 Event Day 	1,935
 Restoration Stages 	2
 Time Started 	7,646
 Time Restored 	6,977
 Duration Mins 	10,136
 Customers Affected 	2,264
• CML	12,004

Notably, primary adjustments would be made to Restoration Stages, Time started, Time Restored and Customers Affected. All other changes would simply result from primary adjustments being made and can be considered secondary changes. For example, an adjustment to Time Started would automatically result in a change to Duration Mins and CML.

b. Adjustments were made to outage events right throughout the year, with a noticeable increase in the number of adjustments made per month in the second half of the year, as shown in Figure 4.1 below. This could suggest that the issues causing the need for adjustments were still largely unresolved up to December 31, 2014.

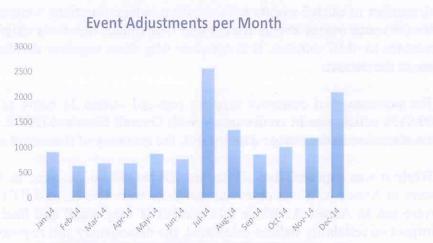


Figure 4.1: Event Adjustments per Month

c. There is uncertainty as to whether or not adjustments are made according to a standardized process and also if they are automated or manually done for each event.

A breakdown of all outage events classified as reportable, "Normal Day" and non-negative in Annex C are shown in Table 4.4 below.

Table 4.4: Breakdown of "Normal Day", Non-Negative, Reportable Outage Events in Annex

			FORCED			PLANNED			TOTAL	
		Sustained	Momentary	Other	Sustained	Momentary	Other	Sustained	Momentary	Other
Generation	Reportable	458	463	0	1	0	0	459	463	0
Transmission	Reportable	258	187	0	3	2	0	261	189	0
Distribution	Reportable	55,311	7,443	2	229	21	0	55,540	7,464	2

Annex D-Non-Reportable Outage

This element of the dataset replicates all 156 outage events from Annex C designated as "Non reportable". This designation appears to be given to outage events which have data and outage processing inaccuracies and which are therefore not considered in calculating reliability indices. No details are given by JPS as to how this determination is made.

Annex E – Major Event Day and Daily SAIDI

This element of the dataset is concerned with identifying the Major Event Days based on a calculation of the Major Event Day Threshold (T_{MED}) according to Section 3.5 of IEEE Standard 1366 – 2012. The standard recommends that five years of data be used to calculate T_{MED} but suggests that less data can be used if a full five years data is not available. JPS uses one year's data to calculate T_{MED} .

The calculation of T_{MED} involved the calculation of SAIDI figures for each day. While the results of the daily SAIDI calculations were given, the actual calculations done could not be determined directly from the data provided in the dataset as the relevant parameters were not included. To verify the accuracy of JPS' T_{MED} calculation, daily SAIDI figures were calculated using the outage data given in Annex C and monthly customer count figures given in JPS' 2014 Annual Data Set. Although the daily SAIDI figures calculated by the OUR were slightly different from those calculated by JPS, the T_{MED} calculated by the OUR identified the same Major Event Day as JPS determined in their calculations, that is, July 31, 2014. Additionally, the outage events in Annex C which were identified as occurring on a Major Event Day were checked and all were correctly identified.

Annex G - Calibrated Summary

This element of the dataset contained the reliability performance summary shown in Table 4.3 above based on the "calibrated" OMS data contained in Annex C.

To validate the reliability indices, SAIFI, SAIDI, CAIDI and MAFI calculated by JPS, the OUR performed its own calculations using the outage data in Annex C subject to the following conditions:

- Outage events with negative duration were excluded from calculations
- Outage events occurring on a Major Event Day were excluded
- Outage data designated as "Non-reportable Outage Data" by JPS were excluded
- The monthly customer counts used for calculating the indices were taken from the "2014 JPS Annual Data Set" and are shown in Table 4.5 below:

Table 4.5: JPS Customer for the Period January 2014 - December 2014

Month/	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
Year	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
No. of Customer	608,159	607,763	608,470	609,760	610,013	611,111	611,674	598,814	602,239	597,994	598,654	594,430

OUR's Derivation of the Reliability Indices

Taking into account the outage data related issues, the reliability indices for 2014 were computed by the OUR and presented in Table 4.6.

Table 4.6: Reliability Indices Computed by the OUR

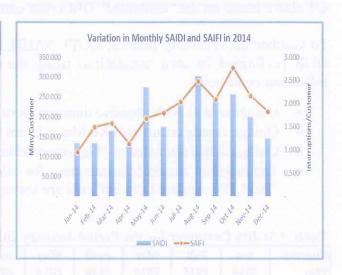
Indicator	Unit	Category	Generation	Transmission	Distribution	Total
SAIDI	Minutes/customer	Forced	87.032	100.892	2,223.574	2,411.498
SAFI	Interruptions/Customer	Forced	3.504	0.868	17.659	22.030
CAIDI	Minutes/customer	Forced	24.837	116.294	125.919	267.051
MAIFI	Interruptions/Customer	Forced	4.412	1.048	27.942	33.402

As shown in Table 4.6, the OUR calculated indices were not significantly different from those calculated by JPS (refer to Table 4.3) with deviations in the range of just +/- 1%. These differences were likely attributed to issues identified in the dataset.

The outage data used by the OUR to calculate SAIDI and SAIFI were also segmented to derive their respective values for each month in 2014. This is a means of showing the variability in these indices over the course of 2014. This is shown in Table 4.7 and on the related plot.

Table 4.7: Monthly SAIDI and SAIFI

Mth-Yr	SAIDI	SAIFI	Customer
			Count
Jan-14	133.794	0.954	608,159
Feb-14	133.586	1.497	607,763
Mar-14	163.788	1.579	608,470
Apr-14	140.598	1.141	609,760
May-14	274.475	1.681	610,013
Jun-14	174.532	1.800	611,111
Jul-14	239.641	2.034	611,674
Aug-14	302.320	2.482	598,814
Sep-14	247.890	2.087	602,239
Oct-14	256.177	2.774	597,994
Nov-14	199.307	2.170	598,654
Dec-14	145.393	1.830	594,430



OUR's Position on the Q-Factor

One of the objectives of the PBRM, is to provide JPS with an incentive to become more cost efficient over the regulatory period (price cap period). However, there is the potential for this framework to have perverse incentives in that the company may encourage cost reductions at the expense of service quality and reliability. In recognition of these risks, the regulator tries to monitor the performance of the company to ensure that it is providing acceptable levels of service to customers.

In JPS' price regime, the Q-Factor is considered to be the mechanism to provide financial incentives to encourage the company to meet target levels of service by way of the intended Q-Factor incentive mechanism. Notably, the purpose of a quality of service performance incentive scheme is to balance the incentive to reduce expenditure with the need to maintain and improve service quality to customers by means of establishing a

direct financial relationship between revenue and service quality (this should involve reward or penalty).

This imperative has been the fundamental basis for seeking to establish a Q-Factor baseline and the implementation of JPS' Q-Factor adjustment mechanism as required by the Licence for more than ten (10) years.

With respect to the implementation of the Q-Factor, the position is set out as follows:

- The OUR's review and evaluation of JPS' Q-Factor details and dataset revealed that the outage data being collected and recorded by the company for momentary and sustained interruptions is not accurate and reliable.
- JPS' approach to recalibrate and adjust the outage data captured by the OMS due to
 issues it described as process inefficiencies and system errors will serve to induce
 other errors in the process and further compromise the integrity of the data
 collected. It is instructive in this regard that, more than 20% of the outage data was
 adjusted over the entire range of the dataset.
- The methodology used by JPS to recalibrate and adjust the outage data collected by the OMS is not clear and in some cases it appears to be based on approximations which were employed prior to the implementation of the OMS.
- The OUR considers it inappropriate for JPS, cognizant of the various problems with the OMS which have impacted the integrity of the outage data and which were underscored in the 2015 Annual Tariff Adjustment, to have still included the 2014 outage dataset for the OUR' review and subsequent establishment of the Q-Factor baseline.
- Considering the outage data collection issues reported by JPS, as expected, the OUR's evaluation of the 2014 dataset confirmed that the outage data does not have the quality and accuracy to facilitate the establishment of a credible Q-Factor baseline.
- According to JPS, the OMS is still experiencing problems that are unresolved. As indicated in the 2015 Annual Tariff Adjust filing, some of the measures that JPS intends to employ to resolve some of the data inaccuracy issues may not be implemented until September 2015 and these will come with their own implementation issues. This implies that a reliable outage dataset may not be available for 2015 dismissing the possibility of having a baseline in 2016 or even 2017.
- Given all the factors impacting the Q-Factor, the OUR is not convinced that the
 present strategy is effective and is likely to result in the establishment of a credible
 baseline and eventually the implementation of the Q-Factor mechanism for the
 remaining price cap period. Therefore, in fulfilment of the requirements of the

Licence, the OUR intends to explore the possibility of implementing an alternative performance mechanism for the Q-Factor. The OUR proposes to initiate discussions with JPS on this issue post the issuance of this Determination Notice.

• In the absence of a credible baseline and the Q-factor adjustment mechanism as required by the Licence, there will be no application of a price adjustment to reflect changes in quality of service to customers at this time.

DETERMINATION 3

Consistent with the 2014-2019 Determination Notice, the Q-Factor for the 2015 Annual Tariff Adjustment shall be 0% (zero percent).

4.6. Z-Factor Component of PBRM

The *Z-Factor* is the allowed rate of price adjustment for special reasons not captured by the other components of the PBRM. The Office is not aware of any such qualifying event and JPS has made no such submission regarding the *Z-Factor*.

DETERMINATION 4

The Z-Factor applicable for this review period is 0%.

4.7. Pre-Paid Rates

4.7.1. Residential Customers Prepaid Rates (Rate 10)

JPS stated that the approved 2014/2015 pre-paid tariff was computed on the basis of consumption bands that were obtained from the 2013 billing determinant data and states that there will be adverse financial impact that this tariff could have on JPS if all customers were to switch from post-paid to pre-paid customers. JPS argued that if all customers consuming less than 100 kWh switched to the pre-paid service, JPS stands to lose J\$399M in non-fuel revenues per annum. JPS further contended that if all Rate 10 customers switched to prepaid service, the revenue loss faced by JPS would be reduced to J\$255M per annum. JPS further stated that the probability of the latter scenario occurring is low as the incentive to switch only exists for customers consuming between 0 to 100 kWh. It argued that by any measure, this exposure is significant and further increases the risk profile of the company especially given the challenges in meeting certain financial covenants.

Consistent with the 2014 – 2019 Determination Notice, the OUR maintains that the benefit of the lifeline rate must be accrued to all customers using the prepaid metering service. In this regard, the tiered structure similar to that which currently exists under post-paid metering and approved in the 2014 -2019 Determination Notice remains. Table 4.2 and Table 4.3 below show the comparison between the prepaid rate and the postpaid rate on the aggregate non-fuel billing for both the 2014-2015 and 2015-2015 tariff periods.

Table 4.2 Comparison of prepaid and postpaid non-fuel bills for average consumption in intervals (2014 – 2015)

ustomers (#)	Consumption		Postpaid	Bill	Pre no	id Bill	Postpaid vs P	re paid	Postpaid Bill	Prepaid Bill
()	Intervals	Avg. Cons	Postpaid Bill Ef			Effective Rate	Difference	%	Tostpaid Diff	rrepaid Din
222,543	0-100	46.38	808.18	17.43	596.45	12.86	- 211.73	-35%	179,855,084	132,735,060
110,419	101-150	124.88	1,785.66	14.30	1,793.05	14.36	7.39	0%	197,171,869	197,987,871
79,428	151-200	173.23	2,756.95	15.91	2,778.43	16.04	21.48	1%	218,977,501	220,683,542
48,159	201-250	221.37	3,724.01	16.82	3,759.52	16,98	35.51	1%	179,344,450	181,054,439
27,623	251-300	270.64	4,713.78	17.42	4,763.64	17.60	49.86	1%	130,206,352	131,583,734
16,221	301-350	319.82	5,701.74	17.83	5,765.93	18.03	64.20	1%	92,487,385	93,528,696
9,816	351-400	368.68	6,683.27	18.13	6,761.70	18.34	78.43	1%	65,600,145	66,370,014
6,228	401-450	418.32	7,680.46	18.36	7,773.36	18.58	92.90	1%	47,837,125	48,415,735
4,166	451-500	467.38	8,666.01	18.54	8,773.20	18.77	107.19	1%	36,106,208	36,552,825
14,136	>500	516.69	9,656.58	18.69	9,778.14	18.92	121.56	1%	136,505,397	138,223,818
538,739									1,284,091,517	1,247,135,730

Table 4.3 Comparison of prepaid and postpaid non-fuel bills for average consumption in intervals (2015-2016)

	Postpaid vs Prepaid Non Fuel Revenue & Rates - Including EEIF (JS)									
Te	st Year Weights			Avera	age Monthly Bi	l/Customer				
# of Customers	Consur	nption	Postpaid Bill		Bill Prepaid Bill Postpaid vs Prepa		epaid	Postpaid Bill	Prepaid Bill	
	Intervals	Avg. Cons	Postpaid Bill	Effective Rate	Prepaid Amt	Effective Rate	Difference	%		
222,543	0-100	46.38	827.39	17.84	611.56	13.19	215.84	-35%	184,130,414	136,097,613
110,419	101-150	124.88	1,827.14	14.63	1,837.29	14.71	10.16	1%	201,751,473	202,872,85
79,428	151-200	173.23	2,820.72	16.28	2,845.33	16.43	24.61	1%	224,042,885	225,997,54
48,159	201-250	221.37	3,809.99	17.21	3,848.99	17.39	39.00	1%	183,484,954	185,363,168
27,623	251-300	270.64	4,822.48	17.82	4,876.21	18.02	53.73	1%	133,208,895	134,693,02
16,221	301-350	319.82	5,833.12	18.24	5,901.55	18.45	68.43	1%	94,618,505	95,728,51
9,816	351-400	368.68	6,837.18	18.55	6,920.22	18.77	83.04	1%	67,110,913	67,925,97
6,228	401-450	418.32	7,857.27	18.78	7,955.15	19.02	97.88	1%	48,938,366	49,547,98
4,166	451-500	467.38	8,865.45	18.97	8,977.99	19.21	112.54	1%	36,937,140	37,406,03
14,136	>500	516.69	9,878.76	19.12	10,006.04	19.37	127.28	1%	139,646,097	141,445,37
538,739									1,313,869,642	1,277,078,09
			Г	ifference should	all customers	witch from post	paid to prepaid	service		(36,791,55

A postpaid customer consuming 125kWh/month non-fuel bill would be approximately J\$1827.14 compares to the prepaid customer's bill of approximately J\$1837.29 (difference \$10.15). The customer would be indifferent to the price as a deciding factor in switching to the prepaid service. The difference is insignificant and would not be a deterrent to the benefits to be derived from the prepaid service.

The benefits of the lifeline rate is maintained with the prepaid metering service. A customer consuming 46kWh would pay approximately J\$827.39 using the postpaid service and J\$611.56 using the prepaid service. A benefit of J\$215.83 to the prepaid customer.

DETERMINATION 5

The approved non-fuel rate to be charged for Rate 10 prepaid service is as follows: J\$13.19/kWh for the first 100 kWh within a thirty (30) day consumption cycle J\$20.85/kWh for each additional kWh thereafter within that thirty (30)-day consumption cycle.

The pre-paid rates shall be subject to review at the next Annual Tariff Adjustment.

4.7.2. Small Commercial Customers Prepaid Rates (Rate 20)

At the request of the JPS, the OUR in March 2015 gave a no objection to JPS introducing the pre-paid metering service to its Rate 20 customers providing that JPS adheres to the terms and conditions as outlined for Rate 10 pre-paid customers in the 2014 -2019 price cap period.

The non-fuel tariff to be charged for Rate 20 pre-paid service shall be revenue neutral when compared to the existing post-paid rates for Rate 20 customers. The rates are now adjusted accordingly.

DETERMINATION 6

The approved non-fuel rate to be charged for Rate 20 prepaid service shall be revenue neutral when compared to the existing postpaid rates for Rate 20 customers and shall be applied as follows:

First 10kWh J\$107.31/kWh Additional kWhs J\$17.11/kWh.

The prepaid rates shall be subject to review at the next Annual Tariff Adjustment.

4.8. Community Renewal Programme (CRP)

The OUR in the 2014 - 2019 Determination Notice did not approve the JPS proposed tariffs for the Community Renewal Programme (CRP) on the grounds that JPS had not provided sufficient details about the programme for the OUR to make a determination.

4.8.1. Community Renewal Rate

JPS has proposed that the CRP tariff be set at the Rate 10 lifeline level for up to 150kWh. This JPS claimed is to improve affordability and that consequently it is willing to forego the customer charges for participants in the programme. JPS' proposed for the CRP tariff a flat rate for consumption up to 150kWh. JPS claim this tariff would be the same under the pre-paid or post-paid programme. Persons consuming more than 150kWh per month will pay the regular prepaid or post-paid rate, whichever is applicable, for incremental consumption.

The OUR does not object to JPS' methodology in the setting of the rates for new customers who will be signing onto the CRP.

The Community Renewal Rate as proposed is an incentive for the on-boarding of new customers who otherwise are consuming electricity without paying. This rate does not form a part of the JPS tariff basket of rates and ultimately the expected revenue gains from these consumers were not factored into the JPS revenue requirement approved in the 2014 – 2019 Determination Notice.

Condition 14(1) of the Licence under the heading Charges and Terms and Conditions for the Supply of Electricity states as follows:

"The Licensee shall, save where it enters into special contracts with customers for the Supply of electricity pursuant to Section 14 of the OUR Act, charge its customers for such a Supply according to published tariffs, approved by the Office, as updated from time to time. Such published tariffs shall be cost-reflective, unless otherwise directed by the Office. Each tariff category will apply uniformly across the Island and there will be no discrimination to customers on the tariff charged based on location."

Given that there should be no discrimination in the tariff charged in each rate category, JPS will be required to apply the same rate to consumers who will be regularized during this price 2014 - 2019 price-cap period which is the rate that will be charged to the residential customers (Rate 10) at the next rate reset.

DETERMINATION 7

The approved Community Renewal Rate to be charged for Rate 10 service is a flat rate of J\$8.61/kWh for consumption up to 150kWh.

Customers consuming more than 150kWh per month will pay the regular prepaid or post-paid rate, whichever is applicable, for the incremental consumption above 150kWh per month. The Community Renewal Rate and conditions shall be subject to review at the next Annual Tariff Adjustment.

4.9. Fuel Efficiency Mechanism

4.9.1. System Losses Target

In accordance with the Licence and the 2014-2019 Determination Notice, the OUR has reviewed JPS' System Losses performance and determined that the targets previously set shall remain. Therefore, the OUR has determined the following:

DETERMINATION 8

JPS' technical losses target for the adjustment period shall be 8.4%

JPS' non-technical loss target for the adjustment shall be 10.8%

The aggregate System losses target to be used in the approved Fuel Cost Adjustment Mechanism (FCAM) for the adjustment period shall be 19.20%.

4.9.2. Heat Rate Target

According to data supplied by JPS, JPS' generating heat rate is expected to remain well below the current heat rate target of 12,010 kJ/kWh over the period September 2015 to June 2016 as shown in the Figure 4.2 below.

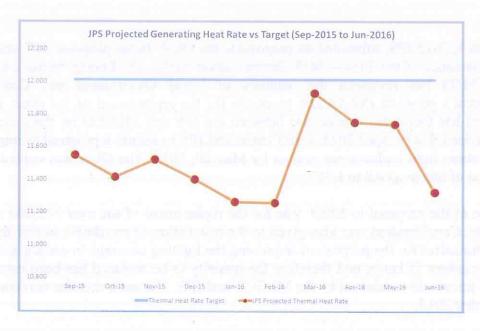


Figure 4.2: JPS' Projected Generating Heat Rate vs Target (Sep-2015 to Jun-2016)

In accordance with the Licence and the 2014-2019 Determination Notice, the OUR has reviewed JPS' generating heat rate performance and determined the following:

DETERMINATION 9

JPS' generating heat rate target to be used in the approved Fuel Cost Adjustment Mechanism for the adjustment period shall be 12,010 kJ/kWh.

4.10. Replacement of Installed Streetlights with LED Luminaires

The Office in the 2014 - 2019 Determination Notice did not set a tariff for LED lights. JPS was however mandated to obtain and provide to the Office the necessary information, in order to ascertain the capital and O&M components and all the relevant systems that are required to put in place a tariff for LED lights, within six (6) months of the effective date of the 2014 - 2019 Determination Notice.

By way of letter dated June 1, 2015, JPS submitted a draft proposal offering a technical, economic and tariff evaluation of replacing the current inventory of installed streetlights with LED luminaires. Subsequently, JPS met with the OUR for discussions on its approach in order to finalize its proposal to the Office. JPS missed the July 7, 2015 target submission date and on July 08, 2015 sought accommodation to reschedule the submission to on or before August 7, 2015.

On August 7, 2015 JPS, submitted its proposal to the OUR. In the proposal, JPS stated that since the issuance of the 2014 – 2019 Determination Notice, the Energy Sector Enterprise Team (ESET) has reviewed the Ministry of Local Government and Community Development's proposal (MLGCD's proposal) for the replacement of the street lighting system and has facilitated discussions between the JPS and MLGCD on the matter. JPS further advised that in April 2015, ESET mandated JPS to submit a proposal to implement the LED street light replacement project by May 20, 2015. The OUR was copied on the submission of this proposal to ESET.

The scope of the proposal to ESET was for the replacement of the over 105,000 existing streetlights. Consideration was also given to the installation of an additional five thousand (5,000) luminaires for the purpose of improving the lighting coverage in certain areas. The current inventory of lamps and therefore the quantity to be replaced has been established through a joint audit conducted by the MLGCD and JPS. The audit exercise was completed in September 2013.

JPS claims the primary objective of the project from the viewpoint of the Government of Jamaica (GOJ) is to reduce the monthly cost of street lighting service. The company also asserts that it supports more efficient and cost effective lighting as a strategy to assist the GOJ in managing the cost of public lighting.

JPS states that the project outline was endorsed by ESET on April 19, on which date JPS was requested to make a formal project proposal. The proposal covered:

- financing,
- procurement,
- installation, which requires the replacement of existing infrastructure,
- maintenance, and
- tariff impact

ESET requested that the replacement project be executed over a 12-month period. They also recommended that the final project proposal be based on an agreement between JPS and MLGCD on matters such as project scope, customer requirements and the management of the proposed LED street lighting infrastructure post implementation. JPS claimed these considerations were addressed in consultations with the MLGCD and informed the proposal that was submitted to ESET.

JPS asserted that the company has not yet received a feedback from the ESET on its proposal to implement the street lighting replacement project and as such, there is still some uncertainty on how the project will be implemented.

In response to Determination 22 of the 2014 -2015 Determination Notice, JPS presented three revenue requirement scenarios for the LED Streetlight Replacement Project. The incremental revenue requirements were computed on the basis of the latest proposed revision to the tariff, being the 2015 Annual Tariff Adjustment filing. The three options presented were:

<u>Scenario 1</u> – LED Streetlight Replacement Project implemented by the MLGCD with the lamps owned by MLGCD but maintained by JPS.

<u>Scenario 2</u> – LED Streetlight Replacement Project implemented by JPS in accordance with ESET's proposed 12-month timeline. In this scenario the lamps are owned and maintained by JPS.

<u>Scenario 3</u> - LED Streetlight Replacement Project implemented by JPS over a five year period. In this scenario the lamps are owned and maintained by JPS.

JPS indicated that for each scenario, two technology options were considered a) the basic LED solution; and b) a Smart LED solution. JPS also noted that at this stage the prices for material, labor and disposal were only indicative and represents JPS' best estimate given the data that is available to JPS. JPS further indicated that once the project financing terms and ownership structure are finalized, it would be able to recast the computations presented in its proposal in order to generate a proposal which is truly cost reflective.

For this 2015 Annual Tariff Adjustment, JPS applied the full test year consumption for Rate 60 and stated that this does not take into account the impact of the replacement of street lighting with LED fixtures. JPS explained that given the level of uncertainty in the timing and final outcome of the programme, it considered it prudent to wait until the LED replacement proposal is finalized before incorporating the resultant changes in the tariff.

The OUR recognizes JPS' efforts in putting together a proposal for the replacement of HPS streetlights with LED's. The proposal however, still reflects significant disagreements between the JPS and its customer, the MLGCD, in respect of matters that are not entirely within OUR's purview. It is necessary to resolve these issues before the OUR can pronounce on a tariff. In the circumstances, the OUR is prepared to allow no more than sixty (60) days to allow for the further negotiation between the parties by the end of which period, JPS is mandated to meet with all stakeholders with a view to agreeing on the terms and conditions of the replacement and presenting definitive tariff proposal for LED street lighting to the OUR.

The OUR also proposes to lend its assistance to facilitating and expediting the discussion and or negotiation between the relevant stakeholders, to the extent that it deems necessary.

5. Tariff Basket Compliance

JPS is required to increase the weighted average of prices by less than or equal to the increase in the electricity price escalation index PCI. The PCI sets the limits for movements in the base tariffs. On a monthly basis, adjustments are made for the effects of movements in the Foreign Exchange rate. The effective change in the non-fuel rates is the dPCI less the cumulative movements due to Foreign Exchange rate changes.

The weights used are the 2014-2015 revenue shares.

The tariff basket compliance must satisfy the following formulae:

PCI≥API; where

API is the weighted average price of the actual tariff basket prices

The annual adjustment factor for the non-fuel base rate of 2.30% [derived from dPCI = (dI = 3.40%) - $(X = 1.10\%) \pm (Q = 0\%) \pm (Z = 0\%)$] is applied to the total basket. The adjustment in each tariff is weighted and hence the adjustment across rates is dependent on the relative weights in relation to the total tariff basket as shown in Table 5.1 below.

Table 5.1 Total Non-Fuel Tariff Basket Weights

						Demai	nd-KVA		
Class		Block Rate Option			Std.	Off-Peak	Part Peak	On-Peak	Total Weights
Rate 10	LV	≤ 100	2.68%	10.11%	0.00%	0.00%	0.00%	0.00%	12.79%
Rate 10	LV	> 100	3.66%	23.62%	0.00%	0.00%	0.00%	0.00%	27.28%
Rate 20	LV		1.61%	23.91%	0.00%	0.00%	0.00%	0.00%	25.52%
Rate 40	LV - Std		0.30%	8.02%	8.83%	0.00%	0.00%	0.00%	17.15%
Rate 40	LV - TOU	Laboratory of the Control of the Con	0.02%	1.46%	0.00%	0.06%	0.56%	0.57%	2.67%
Rate 50	MV - Std	THE THE T	0.02%	4.82%	3.89%	0.00%	0.00%	0.00%	8.73%
Rate 50	MV - TOU		0.00%	1.10%	0.00%	0.05%	0.48%	0.47%	2.10%
Rate 60	LV		0.02%	3.72%	0.00%	0.00%	0.00%	0.00%	3.74%
TOTAL			8.31%	76.76%	12.72%	0.11%	1.04%	1.04%	100.0%

Table 5.2 shows the OUR approved annual adjustment factor to be applied to each rate class and category.

Table 5.2 Annual Non-Fuel Inflation Adjustment per Tariff, net of (dI-X)

			March Land		Demand	d Charge	Live
Class	Block Rate Option	Customer Charge	Energy Charge	Std.	Off-Peak	Part Peak	On-Peak
Rate 10 LV	≤ 100	2.500%	2.300%				
Rate 10 LV	> 100	2.500%	2.300%				
Rate 20 LV		2.500%	2.300%				
Rate 40 LV - Std		2.500%	2.300%	2.250%	-		
Rate 40 LV - TOU		2.500%	2.300%		2.250%	2.250%	2.250%
Rate 50 MV - Std		2.500%	2.300%	2.250%			
Rate 50 MV - TOL		2.500%	2.300%		2.250%	2.250%	2.250%
Rate 60 LV		2.500%	2.300%				

It is a requirement that when aggregated, the weighted adjustment proposed by JPS should equate to the annual adjustment factor (2.30%). Confirmation of this is shown in Table 5.3 below.

Table 5.3 Weighted Non-Fuel Inflation Adjustment (dI – X)

					Demand	I-J\$/KVA		
Class	Block Rate Option	Customer Charge	Energy Charge	Std.	Off-Peak	Part Peak	On-Peak	
			Weighted increase					TOTAL
Rate 10 LV	≤ 100	0.07%	0.23%	0.00%	0.00%	0.00%	0.00%	0.30%
Rate 10 LV	> 100	0.09%	0.54%	0.00%	0.00%	0.00%	0.00%	0.63%
Rate 20 LV		0.04%	0.55%	0.00%	0.00%	0.00%	0.00%	0.59%
		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rate 40 LV - Std		0.01%	0.18%	0.20%	0.00%	0.00%	0.00%	0.39%
Rate 40 LV - TOU		0.00%	0.03%	0.00%	0.00%	0.01%	0.01%	0.05%
Rate 50 MV - Std		0.00%	0.11%	0.09%	0.00%	0.00%	0.00%	0.20%
Rate 50 MV - TOU		0.00%	0.03%	0.00%	0.00%	0.01%	0.01%	0.05%
Rate 60 LV		0.00%	0.09%	0.00%	0.00%	0.00%	0.00%	0.09%
TOTAL		0.21%	1.76%	0.29%	0.00%	0.02%	0.02%	2.30%

The non-fuel base rates approved by the Office in the 2014 -2019 Determination Notice, which were used to derive the 2015 - 2016 non-fuel basket, are shown in Table 5.4 below.

Table 5.4 Current Non-Fuel Tariffs approved in February 2015

						Demand Char	ge (JS/KVA)	
Class		Block/ Rate Option (kWh)	Customer Charge JS/Mth	Energy Charge JS/kWh	Std.	Off-Peak	Part Peak	On-Pe ak
New Rat	es			Total Control				
Rate 10	LV	-100	395	8.42				
Rate 10	LV	> 100	395	19.60				
Rate 20	LV		880	16.24				
Rate 40	LV - Std		6,200	5.06	1,587.07			
Rate 40	LV - TOU		6,200	5.06		66.92	698.32	894.12
Rate 50	MV - Std		6,200	4.88	1,421.81			
Rate 50	MV - TOU		6,200	4.88		63.40	618.68	793.78
Rate 60	LV		2,500	21.50				

Table 5.5 below shows the inflation and X-factor adjusted rates after applying the individual tariff increases determined by the tariff basket weights. This essentially captures the annual inflationary and efficiency change (dI - X) in the non-fuel electricity prices.

Table 5.5 Approved Non-Fuel Tariffs for 2015-2016

					Demand Cha	irge - J\$/KVA	
Class	Block Rate Option	Customer Charge J\$/Mth	Energy Charge J\$/kWh	Std.	Off-Peak	Part Peak	On-Peak
Rate 10 LV	≤ 100	404.88	8.61	-	_	:=:	
Rate 10 LV	> 100	404.88	20.05	-	-	-	-
Rate 20 LV		902.00	16.61				1 (4)
Rate 40 LV - Std		6,355.0	5.18	1,622.78	2	_	
Rate 40 LV - TOL	J	6,355.0	5.18	B)	68.43	714.03	914.24
Rate 50 MV - Std		6,355.0	4.99	1,453.80	-	:50	
Rate 50 MV - TO	J	6,355.0	4.99	-	64.83	632.60	811.64
Rate 60 LV		2,562.5	21.99	20	2 1	-	

The rates shown in Table 5.5 above are consistent with the price cap tariff compliance constraint and represent the maximum allowed under the cap, that is, the weighted average increase of the tariff basket is exactly equal to the price adjustment factor, (1+ dPCI), and hence there is no unused portion of the adjustment to be carried forward to the following year.

Table 5.6 Summary of Non-Fuel Tariff Basket Revenue for 2014- 2015

	1111				2014 - 20	15 Revenue - 1	2 Months (J\$)			
						Demand	Charge			
	lass	Block Rate Option	Customer Charge	Energy Charge	Std.	Off-Peak	Part Peak	On-Peak	Total Revenue	Total Revenue
Rate 10	LV	≤ 100		4,125,008,023					-	5,217,573,283
Rate 10 Rate 20	LV	> 100	1,493,877,360	9,636,828,256						11,130,705,616
Nate 20	LV		033,312,000	8,735,751,817						10,403,243,317
Rate 40	LV - Std		120,974,400	3,271,453,200	3,603,017,100				3,603,017,100	6,995,444,700
Rate 40	LV - TOU		8,704,800	596,688,872		23,082,849	230,416,271	233,928,616	487,427,736	1,092,821,408
Rate 50 Rate 50	MV - Std MV - TOU		9,225,600 1,785,600	1,967,114,292 450,179,951	1,587,998,262	20,948,057	194,169,006	190,821,537	1,587,998,262 405,938,600	3,564,338,154 857,904,151
Rate 60	LV		9,240,000	1,517,324,983				W. W.	-	1,526,564,983
TOTAL			3,391,885,020	31,318,329,494	5,191,015,362	44,030,906	424,585,277	424,750,153	6,084,381,698	40,794,596,212
TOTAL E	EIF		P. H. B.	1,423,074,617				a chillian		
TOTAL			3,391,885,020	32,741,404,111	5,191,015,362	44,030,906	424,585,277	424,750,153	6,084,381,698	42,217,670,829

Table 5.6 above is derived using the 2014 - 2015 billing determinants and the approved non-fuel tariffs arising out of Addendum 1. The application of the weighted annual adjustment factor of 2.30% to each tariff yields the increased non-fuel revenue in Table 5.7 below.

Table 5.7 Non-Fuel Tariff Basket 2015-2016 (Revenue from new Tariff)

					2015 - 20	16 Revenue - 1	2 Months (J\$)			
						Demand	Charge			7777-13
С	lass	Block Rate Option Rate	Customer Charge	Energy Charge	Std.	Off-Peak	Part Peak	On-Peak	Total Demand	Total Revenue
Rate 10	LV	≤ 100	1,119,893,221	4,218,090,152					-	5,337,983,373
Rate 10	LV	> 100	1,531,243,204	9,858,081,966					-	11,389,325,170
Rate 20	LV		671,899,800	9,975,953,642					-	10,647,853,442
Rate 40	LV - Std	101-1	123,998,760	3,349,037,071	3,684,087,085				3,684,087,085	7,157,122,916
Rate 40 Rate 50	LV - TOU MV - Std		8,922,420 9,456,240	610,839,596 2,011,454,983	1,623,727,413	23,603,697	235,599,911	239,192,611	498,396,219 1,623,727,413	1,118,158,235 3,644,638,636
Rate 50	MV - TOU	i lenë	1,830,240	460,327,450	1,020,727,410	21,420,545	198,537,714	195,115,009	415,073,268	877,230,958
Rate 60	LV		9,471,000	1,551,905,877						1,561,376,877
TOTAL			3,476,714,885	32,035,690,737	5,307,814,498	45,024,242	434,137,625	434,307,620	6,221,283,985	41,733,689,607
TOTAL E	EIF			1,455,695,238						
TOTAL		_ = 1	3,476,714,885	33,491,385,975	5,307,814,498	45,024,242	434,137,625	434,307,620	6,221,283,985	43,189,384,845

Table 5.8 Estimated Bill Impact of JPS Proposed Annual Tariff Adjustment

		overall Bill Imp	oact of the JPS Prop	osal	
Customer Class	Typical Usage (kWh)	Demand (kVA)	Total Bill Impact (%)	Average Change (%)	
RT 10 LV Res. Service < 100 kWh	90	n/a	0.4%		
RT 10 LV Res. Service 101- 350 kWh	349	n/a	0.1%	0.2%	
RT 10 LV Res. Service > 350 kWh	350	n/a	0.1%	And official 1 had	
RT 20 LV Gen. Service < 100 kWh	90	n/a	0.5%		
RT 20 LV Gen. Service 100-1000 kWh	1,000	n/a	0.0%	0.10/	
RT 20 LV Gen. Service 1000-7500 kWh	5,000	n/a	0.0%	0.1%	
RT 20 LV Gen. Service > 7500 kWh	8,000	n/a	0.0%		
RT 40 LV Power Service (Std)	35,000	100	-0.1%		
RT 50 MV Power Service (Std)	500,000	1,500	-0.3%	-0.2%	
RT 50 MV Power Service (TOU-Partial Peak)	500,000	1,500	-0.3%		
Efficiency Targets:	System Loss	es Target	JPS Thermal H	eat Rate Target	
Efficiency rangers:	19.20	%	12,010 kJ/kWh		

Table 5.8 above shows the average bill impact across rate classes for the average customer in each rate class.

Table 5.9 Estimated Bill Impact of OUR Determined Annual Tariff Adjustment

	Overa	ill Bill Impact o	of the OUR Approve	ed Rates		
Customer Class	Typical Usage (kWh)	Demand (kVA)	Total Bill Impact (%)	Average Change (%)		
RT 10 LV Res. Service < 100 kWh	90	n/a	0.0%			
RT 10 LV Res. Service 101-350 kWh	349	n/a	-0.1%	-0.1%		
RT 10 LV Res. Service > 350 kWh	350	n/a	-0.1%			
RT 20 LV Gen. Service < 100 kWh	90	n/a	-0.1%			
RT 20 LV Gen. Service 100-1000 kWh	1,000	n/a	-0.1%	0.10/		
RT 20 LV Gen. Service 1000-7500 kWh	5,000	n/a	-0.1%	-0.1%		
RT 20 LV Gen. Service > 7500 kWh	8,000	n/a	-0.1%			
RT 40 LV Power Service (Std)	35,000	100	0.0%			
RT 50 MV Power Service (Std)	500,000	1,500	0.0%	0.0%		
RT 50 MV Power Service (TOU-Partial Peak)	500,000	1,500	0.0%			
Efficiency Targets:	System Loss	es Target	JPS Thermal Heat Rate Target			
Efficiency Targets.	19.20	1%	12,010 kJ/kWh			

Table 5.9 above shows the average bill impact across rate classes.

The OUR Summary Determinations are as follows:

- 1. The annual inflation adjustment applicable to the base rate is 0.77%
- 2. The productivity/efficiency factor(X-Factor) is 1.10%
- 3. A foreign exchange adjustment of 2.50% is now incorporated into the base rates
- 4. JPS thermal heat rate target remains at 12,010 kJ/kWh and;
- 5. System losses target remains at 19.20%

6. Appendix

6.1 Appendix 1: U.S. and Jamaican Consumer Price Indices

6.1.1 U.S. Consumer Price Index

Area: Item:	sonally Ad	y averag	e	The Cons upon a 19 The com Index fro	982 Base monly quo	of 100. / oted infla	Consun	ner Price	Index of	168 indi	cates 68°	% inflation	on since	1982.	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2
2000	168.8	169.8	171.2	171.3	171.5	172.4	172.8	172.8	173.7	174.0	174.1	174.0	172.2	170.8	173.6
2001	175.1	175.8	176.2	176.9	177.7	178.0	177.5	177.5	178.3	177.7	177.4	176.7	177.1	176.6	177.5
2002	177.1	177.8	178.8	179.8	179.8	179.9	180.1	180.7	181.0	181.3	181.3	180.9	179.9	178.9	180.9
2003	181.7	183.1	184.2	183.8	183.5	183.7	183.9	184.6	185.2	185.0	184.5	184.3	184.0	183.3	184.6
2004	185.2	186.2	187.4	188.0	189.1	189.7	189.4	189.5	189.9	190.9	191.0	190.3	188.9	187.6	190.2
2005	190.7	191.8	193.3	194.6	194.4	194.5	195.4	196.4	198.8	199.2	197.6	196.8	195.3	193.2	197.4
2006	198.3	198.7	199.8	201.5	202.5	202.9	203.5	203.9	202.9	201.8	201.5	201.8	201.6	200.6	202.6
2007	202.4	203.5	205.4	206.7	207.9	208.4	208.3	207.9	208.5	208.9	210.2	210.0	207.3	205.7	209.0
2008	211.1	211.7	213.5	214.8	216.6	218.8	220.0	219.1	218.8	216.6	212.4	210.2	215.3	214.4	216.2
2009	211.1	212.2	212.7	213.2	213.9	215.7	215.4	215.8	216.0	216.2	216.3	215.9	214.5	213.1	215.9
2010	216.7	216.7	217.6	218.0	218.2	218.0	218.0	218.3	218.4	218.7	218.8	219.2	218.1	217.5	218.6
2011	220.2	221.3	223.5	224.9	226.0	225.7	225.9	226.5	226.9	226.4	226.2	225.7	224.9	223.6	226.3
2012	226.7	227.7	229.4	230.1	229.8	229.5	229.1	230.4	231.4	231.3	230.2	229.6	229.6	228.8	230.3
2013	230.3	232.2	232.8	232.5	232.9	233.5	233.6	233.9	234.1	233.5	233.1	233.0	233.0	232.4	233.5
2014	233.9	234.8	236.3	237.1	237.9	238.3	238.3	237.9	238.0	237.4	236.2	234.8	236.7	236.4	237.1
2015	233.7	234.7	236.1	236.6	237.8										

6.1.2 Jamaican Consumer Price Index

Ja. Consumer Price Index

The Index numbers listed in the table: Consumer Price Index for 2007-2015, are based on the revised calculations using the new series that have been derived by using data from the HES conducted between June 2004 and March 2005. For the years prior to 2007 the data is linked to the 1988 series of the CPI using a link factor.

These index numbers provide an historical series of the CPI on a monthly basis. The monthly indexes are given for the 12 months of the calendar year while the arithmetic mean of the data for the 12 months is used to arrive at an annual average index. The Percentage Changes calculated from these averages represent average annual changes for the year.

Consumer Price Index for 2003-2015

Month	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
January	64.80	74.60	84.10	94.70	101.00	119.40	136.00	152.60	167.80	178.90	193.80	211.80	223.00
February	64.40	75.00	84.50	94.80	101.30	121.50	137.10	155.90	167.10	180.30	195.00	211.90	221.50
March	64.70	75.40	85.30	94.90	102.50	122.90	138.20	156.60	168.90	181.20	197.70	214.20	222.70
April	65.70	75.70	86.90	96.00	102.90	124.80	138.80	158.70	169.70	181.90	198.50	213.60	223.10
May	66.80	76.20	88.70	96.30	104.30	127.80	140.00	159.70	171.00	182.80	199.60	215.70	224.20
June	68.50	76.80	90.00	97.60	105.10	130.30	142.00	160.70	172.30	183.80	199.90	215.90	
July	69.50	77.60	91.40	98.90	106.10	134.00	143.30	161.30	173.60	183.20	200.90	218.90	
August	70.40	78.60	91.50	99.20	107.20	135.60	143.90	162.00	174.60	184.10	201.60	221.30	
September	71.50	79.00	93.80	99.90	108.90	136.50	146.30	162.80	175.91	187.60	207.20	225.90	
October	72.70	81.60	94.30	99.80	110.40	136.90	147.50	164.00	176.70	189.40	209.00	226.10	
November	73.40	83.60	94.60	99.60	114.00	136.40	148.70	165.70	177.50	190.60	209.50	224.90	
December	73.90	84.10	94.60	100.00	116.80	136.50	150.40	168.10	178.20	192.50	210.70	224.10	
Annual Average	68.90	78.20	90.00	97.60	106.70	130.20	142.70	160.68	172.78	184.69	201.95	218.69	222.90
Annual Inflation Rate	13.80	13.70	12.60	5.70	16.80	16.80	10.20	11.80	6.00	8.00	9.45	6.36	-100,00

The Consumer Price Index (CPI) is one in a series of economic indicators produced by the Statistical Institute of Jamaica as part of its objective to provide an integrated set of statistical information on the social and economic conditions of the people of Jamaica.

Source: Statistical Institute of Jamaica

6.2 Appendix 2: Estimated Bill Impact of OUR Approved Annual Tariff Adjustment

6.2.1 Bill Comparison for a Typical Rate 10 Consumer with consumption < 100 kWh

Usage 90 kWh

Rate 10		Before	2			After				
Below 100kWh	2	014 - 2015 R	ates J\$		2	015 - 2016 R	ates J\$		Change	
Description	Base F/X Rate	Billing F/X F	Rate		Base F/X Rate	Billing F/X F	Rate		J\$	%
	112.00	116.12			115.50	116.12				
	Usage kWh	Rate (J\$)			Usage kWh	Rate (J\$)				
Energy 1st	90	8.42		757.80	90	8.61		774.90	17.10	2.26%
Energy 2nd	0	19.60		4	0	20.05			-	
Customer Charge				395.00				404.88	9.88	2.50%
Sub Total				1,152.80				1,179.78	26.98	2.34%
EEIF	90	0.4886		43.97	90	0.4998		44.98		
F/E Adjust		0.029		33.94		0.004		5.09		
Fuel & IPP	90	16.499		1,484.88	90	16.499		1,484.88		
Bill Total		196	J\$	2,715.60			J\$	2,714.73	0.87	-0.03%

$6.2.2 \quad Bill \ Comparison \ for \ a \ Typical \ Rate \ 10 \ Consumer \ with \ consumption \ 101kWh < 350kWh$

Usage 349 kWh

Rate 10		Before			After				
101 < 350kWh	2	014 - 2015 Rates J	\$	2	015 - 2016 R	ates J	\$	Change	
Description	Base F/X Rate	Billing F/X Rate		Base F/X Rate	Billing F/X F	Rate		J\$	%
	112.00	116.12		115.50	116.12				
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)				
Energy 1st	100	8.42	842.00	100	8.61		861.00	19.00	2.26%
Energy 2nd	249	19.60	4,880.40	249	20.05		4,992.45	112.05	2.30%
Customer Charge			395.00				404.88	9.88	2.50%
Sub Total			6,117.40				6,258.33	140.93	2.30%
EEIF	349	0.4886	170.52	349	0.4998		174.43		
F/E Adjust		0.029	180.13		0.004		26.98		
Fuel & IPP	349	16.499	5,758.03	349	16.499		5,758.03		
Bill Total		J\$	12,226.08			J\$	12,217.77 -	8.31	-0.07%

6.2.3 Bill Comparison for a Typical Rate 10 Consumer with consumption 350kWh and above

Usage 350 kWh

Rate 10		Before			After			
Above 350kWh	2	014 - 2015 Ra	ites J\$	2	015 - 2016 R	ates J\$	Change	
Description	Base F/X Rate	Billing F/X R	ate	Base F/X Rate	Billing F/X F	late	J\$	%
	112.00	116.12		115.50	116.12			
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)			
Energy 1st	100	8.42	842.00	100	8.61	861.00	19.00	2.26%
Energy 2nd	250	19.60	4,900.00	250	20.05	5,012.50	112.50	2.30%
Customer Charge		11.01	395.00			404.88	9.88	2.50%
Sub Total			6,137.00			6,278.38	141.38	2.30%
EEIF	350	0.4886	171.01	350	0.4998	174.93		
F/E Adjust		0.029	180.70	1114.	0.004	27.06		
Fuel & IPP	350	16.499	5,774.53	350	16.499	5,774.53		
Bill Sub-Total			12,263.24	Bill Sub-Total		12,254.90		
GCT @16.5%		0.165	2,023.44	GCT @16.5%	0.165	2,022.06		
Bill Total			J\$ 14,286.68			J\$ 14,276.96	- 9.72	-0.07%

6.2.4 Bill Comparison for a Typical Rate 20 Consumer with consumption \leq 100 kWh

Usage 90 kWh

Rate 20		Before			After				
Below 100kWh	2	014 - 2015 Ra	ates J\$	2	015 - 2016 R	ates J\$		Change	
Description	Base F/X Rate	Billing F/X R	ate	Base F/X Rate	Billing F/X F	Rate		J\$	%
	112.00	116.12		115.50	116.12				I
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)				
Energy	90	16.24	1,461.60	90	16.61		1,494.90	33.30	2.28%
Customer Charge			880.00				902.00	22.00	2.50%
Sub Total			2,341.60				2,396.90	55.30	2.36%
EEIF		0.4886	43.97	90	0.4998		44.98		
F/E Adjust		0.029	68.95		0.004	7	10.33		
Fuel & IPP	90	16.499	1,484.88	90	16.499		1,484.88		
Bill Sub-Total			3,939.40				3,937.09 -	2.31	-0.06%
GCT @16.5%		0.165	650.00		0.165		649.62		
Bill Total			J\$ 4,589.40			J\$	4,586.71 -	2.69	-0.06%

6.2.5 Bill Comparison for a Typical Rate 20 Consumer with consumption 101kWh - 1000kWh

Usage 1000 kWh

Rate 20		Before			After					
101 - 1000kWh	2	014 - 2015 Ra	ates J\$	2	015 - 2016 R	ates J\$	Change	Change		
Description	Base F/X Rate	Billing F/X R	ate	Base F/X Rate	Billing F/X R	ate	J\$	%		
	112.00	116.12		115.50	116.12	1111 121				
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)					
Energy	1000	16.24	16,240.00	1000	16.61	16,610.00	370.00	2.28%		
Customer Charge			880.00			902.00	22.00	2.50%		
Sub Total			17,120.00			17,512.00	392.00	2.29%		
EEIF		0.4886	488.60	1000	0.4998	499.80				
F/E Adjust		0.029	504.10		0.004	75.48	- 428.62			
Fuel & IPP	1000	16.499	16,498.66	1000	16.499	16,498.66	-	0.00%		
Bill Sub-Total			34,611.35			34,585.94	- 25.42	-0.07%		
GCT @16.5%		0.165	5,710.87		0.165	5,706.68	- 4.19	-0.07%		
Bill Total	- Elian		J\$ 40,322.23			J\$ 40,292.62	- 29.61	-0.07%		

6.2.6 Bill Comparison for a Typical Rate 20 Consumer with consumption 1001kWh - 7500kWh

Usage 5000 kWh

Rate 20		Before			After				
1001 - 7500kWh	20	014 - 2015 Ra	ites J\$	2	015 - 2016 R	ates J\$	Change		
Description	Base F/X Rate	Billing F/X R	ate	Base F/X Rate	Billing F/X R	ate	J\$	%	
	112.00	116.12		115.50	116.12				
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)				
Energy	5000	16.24	81,200.00	5000	16.61	83,050.00	1,850.00	2.28%	
Customer Charge			880.00			902.00	22.00	2.50%	
Sub Total			82,080.00			83,952.00	1,872.00	2.28%	
EEIF		0.4886	2,443.00	5000	0.4998	2,499.00			
F/E Adjust		0.029	2,416.85		0.004	361.86	- 2,054.99		
Fuel & IPP	5000	16.499	82,493.28	5000	16.499	82,493.28		0.00%	
Bill Sub-Total			169,433.13			169,306.14	- 126.99	-0.07%	
GCT @16.5%		0.165	27,956.47		0.165	27,935.51	- 20.95	-0.07%	
Bill Total			J\$ 197,389.59			J\$ 197,241.65	- 147.94	-0.07%	

6.2.7 Bill Comparison for a Typical Rate 20 Consumer with consumption above 7500kWh

Usage above 7500 kWh

Rate 20		Before			After			
Above 7500kWh	2	014 - 2015 R	ates J\$	2	015 - 2016 R	Change		
Description	Base F/X Rate	Billing F/X R	late	Base F/X Rate	Billing F/X F	Rate	J\$	%
	112.00	116.12		115.50	116.12			
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)			
Energy	8000		129,920.00	8000	The second secon	132,880.00	2,960.00	2.28%
Customer Charge			880.00			902.00	22.00	2.50%
Sub Total			130,800.00			133,782.00	2,982.00	2.28%
EEIF		0.4886	3,908.80	8000	0.4998	3,998.40		
F/E Adjust		0.029	3,851.41		0.004	576.64	- 3,274.77	
Fuel & IPP	8000	16.499	131,989.25	8000	16.499	131,989.25		0.00%
Bill Sub-Total		1.0	270,549.46			270,346.29	- 203.17	-0.08%
GCT @16.5%		0.165	44,640.66		0.165	44,607.14	- 33.52	-0.08%
Bill Total			J\$ 315,190.12			J\$ 314,953.43	- 236.69	-0.08%

6.2.8 Bill Comparison for a Typical Rate 40 Consumer

Usage 35,000 kWh

Demand 100 kVA

Rate 40		Before			After				
Standard	2	014 - 2015 Ra	ites J\$	2	015 - 2016 Ra	ites J\$	Change		
Description	Base F/X Rate	Billing F/X Ra	ate	Base F/X Rate	Billing F/X R	ate	J\$	%	
	112.00	116.12		115.50	116.12				
	Usage	Rate (J\$)		Usage	Rate (J\$)				
Energy kWh	35000	5.06	177,100.00	35000	5.18	181,300.00	4,200.00	2.37%	
Demand kVA	100	1587.07	158,707.00	100	1622.78	162,278.00	3,571.00		
Customer Charge			6,200.00			6,355.00	155.00	2.50%	
Sub Total			342,007.00			349,933.00	7,926.00	2.32%	
EEIF		0.4886	17,101.00	35000	0.4998	17,493.00			
F/E Adjust		0.029	10,070.40		0.004	1,508.32	- 8,562.08		
Fuel & IPP	35000	15.839	554,354.85	35000	15.839	554,354.85	-	0.00%	
Bill Sub-Total			923,533.25			923,289.17	- 244.08	-0.03%	
GCT @16.5%		0.165	152,382.99		0.165	152,342.71	- 40.27	-0.03%	
Bill Total			J\$ 1,075,916.24			J\$ 1,075,631.89	- 284.35	-0.03%	

6.2.9 Bill Comparison for a Typical Rate 50 Customer

Usage 500,000 kWh

Demand 1,500 kVA

Rate 50		Before			After				
Standard	20	14 - 2015 Ra	ites J\$	20	015 - 2016 Ra	ates J\$	Change		
Description	Base F/X Rate	Billing F/X R	ate	Base F/X Rate	Billing F/X R	ate	J\$	%	
	112.00	116.12		115.50	116.12				
						10			
	Usage	Rate (J\$)		Usage	Rate (J\$)				
Energy kWh	500000	4.88	2,440,000.00	500000	4.99	2,495,000.00	55,000.00	2.25%	
Demand kVA	1500	1421.81	2,132,715.00	1500	1453.80	2,180,700.00	47,985.00	2.25%	
Customer Charge	The same		6,200.00			6,355.00	155.00	2.50%	
Sub Total			4,578,915.00			4,682,055.00	103,140.00	2.25%	
EEIF		0.4886	244,300.00	500000	0.4998	249,900.00			
F/E Adjust		0.029	134,826.15		0.004	20,181.08	- 114,645.08		
Fuel & IPP	500000	15.839	7,919,355.06	500000	15.839	7,919,355.06	-	0.00%	
Bill Sub-Total			12,877,396.22			12,871,491.14	- 5,905.08	-0.05%	
GCT @16.5%	_	0.165	2,124,770.38	Mr-sympt	0.165	2,123,796.04	- 974.34	-0.05%	
Bill Total			J\$ 15,002,166.59	= =		J\$ 14,995,287.18	- 6,879.41	-0.05%	

6.2.10 Bill Comparison for a Typical Rate 50 TOU Customer (Partial Peak)

Usage 500,000 kWh

Demand 1,500 kVA

Rate 50		Before			After	Mary Table		
TOU (Partial Peak)	20	014 - 2015 Ra	tes J\$	20	015 - 2016 Ra	ites J\$	Change	
Description	Base F/X Rate	Billing F/X Ra	ate	Base F/X Rate	Billing F/X Ra	ate	J\$	%
	112.00	116.12		115.50	116.12			
	Usage	Rate (J\$)		Usage	Rate (J\$)			
Energy kWh	500000	4.88	2,440,000.00	500000	4.99	2,495,000.00	55,000.00	2.25%
Demand kVA	1500	618.68	928,020.00	1500	632.60	948,900.00	20,880.00	2.25%
Customer Charge			6,200.00			6,355.00	155.00	2.50%
Sub Total			3,374,220.00	1 14.3		3,450,255.00	76,035.00	2.25%
EEIF		0.4886	244,300.00	500000	0.4998	249,900.00		
F/E Adjust		0.029	99,353.91		0.004	20,181.08	- 79,172.83	
Fuel & IPP	500000	15.215	7,607,550.97	500000	15.215	7,607,550.97		0.00%
Bill Sub-Total			11,325,424.88			11,327,887.05	2,462.17	0.02%
GCT @16.5%		0.165	1,868,695.11		0.165	1,869,101.36	406.26	0.02%
Bill Total			J\$ 13,194,119.99			J\$ 13,196,988.41	2,868.43	0.02%

6.3 Appendix 3: Estimated Bill Impact of JPS Proposed Annual Tariff Adjustment

6.3.1 Bill Comparison for a Typical Rate 10 Consumer with consumption < 100 kWh

Usage 90 kWh

Rate 10		Before				After				
Below 100kWh	2	014 - 2015 R	ates J\$		2	015 - 2016 R	ates J\$		Change	
Description	Base F/X Rate	Billing F/X R	late		Base F/X Rate	Billing F/X F	Rate		J\$	%
	112.00	116.12			115.50	116.12				
	Usage kWh	Rate (J\$)			Usage kWh	Rate (J\$)				
Energy 1st	90	8.42		757.80	90	8.62		775.80	18.00	2.38%
Energy 2nd		19.60		4	C	20.07				
Customer Charge				395.00				414.63	19.63	4.97%
Sub Total			7	1,152.80	Diam'r.			1,190.43	37.63	3.26%
EEIF	90	0.4886		43.97	90	0.4998		44.98		
F/E Adjust		0.029	*	33.94		0.004	,	5.13	- 11	
Fuel & IPP	90	16.499		1,484.88	90	16.499		1,484.88		
Bill Total			J\$	2,715.60			J\$	2,725.42	9.82	0.36%

6.3.2~ Bill Comparison for a Typical Rate 10 Consumer with consumption $101kWh \leq 350kWh$

Usage 349 kWh

Rate 10		Before				Afte	er			
101 < 350kWh	2	014 - 2015 R	ates J\$		2	015 - 2016	J\$	Change	al ja a	
Description	Base F/X Rate	Billing F/X Rate			Base F/X Rate	Billing F/	(Rate		J\$	%
	112.00	116.12			115.50	116.1	.2			
	Usage kWh	Rate (J\$)			Usage kWh	Rate (J\$)				
Energy 1st	100	8.42		842.00	100	8.6	52	862.00	20.00	2.38%
Energy 2nd	249	19.60		4,880.40	249	20.0	7	4,997.43	117.03	2.40%
Customer Charge				395.00				414.63	19.63	4.97%
Sub Total				6,117.40				6,274.06	156.66	2.56%
EEIF	349	0.4886		170.52	349	0.499	8	174.43		
F/E Adjust		0.029		180.13		0.00)4	27.04		
Fuel & IPP	349	16.499		5,758.03	349	16.49	9	5,758.03		
Bill Total			J\$	12,226.08			J\$	12,233.56	7.49	0.06%

6.3.3 Bill Comparison for a Typical Rate 10 Consumer with consumption 350kWh and above

Usage 350 kWh

Rate 10		Before			After				
Above 350kWh	2	014 - 2015 R	ates J\$	2	015 - 2016 R	lates J\$		Change	
Description	Base F/X Rate	Billing F/X R	late	Base F/X Rate	Billing F/X F	Rate		J\$	%
	112.00	116.12		115.50	116.12				
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)			Tiposti -	
Energy 1st	100	8.42	842.0	0 100	8.62		862.00	20.00	2.38%
Energy 2nd	250	19.60	4,900.0	0 250	20.07		5,017.50	117.50	2.40%
Customer Charge			395.0	0			414.63	19.63	4.97%
Sub Total			6,137.0	0			6,294.13	157.13	2.56%
EEIF	350	0.4886	171.0	350	0.4998		174.93		
F/E Adjust		0.029	180.7	0	0.004		27.13		
Fuel & IPP	350	16.499	5,774.5	3 350	16.499		5,774.53		
Bill Sub-Total			12,263.2	4 Bill Sub-Total			12,270.72		
GCT @16.5%		0.165	2,023.4	4 GCT @16.5%	0.165		2,024.67		
Bill Total			J\$ 14,286.6	8		J\$	14,295.39	8.71	0.06%

6.3.4 Bill Comparison for a Typical Rate 20 Consumer with consumption \leq 100 kWh

Usage 90 kWh

Rate 20		Before			After				
Below 100kWh	2	014 - 2015 R	ates J\$	2	015 - 2016 R	ates J\$		Change	
Description	Base F/X Rate	Billing F/X F	late	Base F/X Rate	Billing F/X F	F/X Rate J\$	J\$	%	
	112.00	116.12	dika mare	115.50	116.12				
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)				
Energy	90	16.24	1,461.60	90	16.62		1,495.80	34.20	2.34%
Customer Charge			880.00				923.74	43.74	4.97%
Sub Total			2,341.60				2,419.54	77.94	3.33%
EEIF		0.4886	43.97	90	0.4998		44.98		
F/E Adjust		0.029	68.95		0.004		10.43		
Fuel & IPP	90	16.499	1,484.88	90	16.499		1,484.88		
Bill Sub-Total			3,939.40				3,959.83	20.43	0.52%
GCT @16.5%		0.165	650.00		0.165		653.37		
Bill Total			J\$ 4,589.40			J\$	4,613.20	23.80	0.52%

6.3.5 Bill Comparison for a Typical Rate 20 Consumer with consumption 101kWh - 1000kWh

Usage 1000 kWh

Rate 20		Before				After					
101 - 1000kWh	2	014 - 2015 R	ates J\$		2	015 - 2016 R	ates J\$		Change		
Description	Base F/X Rate	Billing F/X R	late		Base F/X Rate	Billing F/X F	Rate		J\$	%	
	112.00	116.12			115.50	116.12	511			7	
	Usage kWh	Rate (J\$)			Usage kWh	Rate (J\$)					
Energy	1000	16.24		16,240.00	1000	16.62		16,620.00	380.00	2.34%	
Customer Charge				880.00				923.74	43.74	4.97%	
Sub Total	1 1 10			17,120.00				17,543.74	423.74	2.48%	
EEIF		0.4886		488.60	1000	0.4998		499.80			
F/E Adjust	N 1	0.029		504.10		0.004		75.62	- 428.48		
Fuel & IPP	1000	16.499		16,498.66	1000	16.499		16,498.66	-	0.00%	
Bill Sub-Total	4			34,611.35				34,617.82	6.46	0.02%	
GCT @16.5%		0.165		5,710.87		0.165	V. 7.1	5,711.94	1.07	0.02%	
Bill Total	111111111111111111111111111111111111111		J\$	40,322.23	90		J\$	40,329.75	7.53	0.02%	

6.3.6 Bill Comparison for a Typical Rate 20 Consumer with consumption 1001kWh - 7500kWh

Usage 5000 kWh

Rate 20		Before			After				
1001 - 7500kWh	2	014 - 2015 Ra	ates J\$	2	015 - 2016 R	ates J\$	Change		
Description	Base F/X Rate	Billing F/X R	ate	Base F/X Rate	Base F/X Rate Billing F/X Rate			%	
	112.00	116.12		115.50	116.12				
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)				
Energy	5000	16.24	81,200.00	5000	16.62	83,100.00	1,900.00	2.34%	
Customer Charge	4.11		880.00			923.74	43.74	4.97%	
Sub Total			82,080.00			84,023.74	1,943.74	2.37%	
EEIF		0.4886	2,443.00	5000	0.4998	2,499.00			
F/E Adjust		0.029	2,416.85		0.004	362.17	- 2,054.68		
Fuel & IPP	5000	16.499	82,493.28	5000	16.499	82,493.28	¥	0.00%	
Bill Sub-Total		- 1	169,433.13			169,378.19	- 54.94	-0.03%	
GCT @16.5%		0.165	27,956.47		0.165	27,947.40	- 9.06	-0.03%	
Bill Total			J\$ 197,389.59			J\$ 197,325.59	- 64.00	-0.03%	

6.3.7 Bill Comparison for a Typical Rate 20 Consumer with consumption above 7500kWh

Usage above 7500 kWh

Rate 20		Before			After			
Above 7500kWh	2	014 - 2015 Ra	ates J\$	2	015 - 2016 R	ates J\$	Change	8
Description	Base F/X Rate	Billing F/X R	late	Base F/X Rate	Billing F/X R	late	J\$	%
	112.00	116.12		115.50	116.12			
	Usage kWh	Rate (J\$)		Usage kWh	Rate (J\$)			
Energy	8000	16.24	129,920.00	8000	16.62	132,960.00	3,040.00	2.34%
Customer Charge			880.00			923.74	43.74	4.97%
Sub Total			130,800.00			133,883.74	3,083.74	2.36%
EEIF		0.4886	3,908.80	8000	0.4998	3,998.40		
F/E Adjust		0.029	3,851.41		0.004	577.08	- 3,274.33	
Fuel & IPP	8000	16.499	131,989.25	8000	16.499	131,989.25	-	0.00%
Bill Sub-Total	1.11		270,549.46			270,448.47	- 100.99	-0.04%
GCT @16.5%		0.165	44,640.66		0.165	44,624.00	- 16.66	-0.04%
Bill Total			J\$ 315,190.12	li su s	E III	J\$ 315,072.47	- 117.65	-0.04%

6.3.8 Bill Comparison for a Typical Rate 40 Consumer

Usage 35,000 kWh

Demand 100 kVA

Rate 40		Before			After			
Standard	20	014 - 2015 Ra	ites J\$	2	015 - 2016 R	ates J\$	Change	1
Description	Base F/X Rate	Billing F/X Ra	ate	Base F/X Rate	Billing F/X R	tate	J\$	%
	112.00	116.12		115.50	116.12			
	Usage	Rate (J\$)		Usage	Rate (J\$)			
Energy kWh	35000		177,100.00	35000	10,000	178,850.00	1,750.00	0.99%
Demand kVA	100	1587.07	158,707.00	100	1634.52	163,452.00	4,745.00	
Customer Charge	l m. r		6,200.00			6,508.10	308.10	4.97%
Sub Total			342,007.00			348,810.10	6,803.10	1.99%
EEIF		0.4886	17,101.00	35000	0.4998	17,493.00		
F/E Adjust		0.029	10,070.40		0.004	1,503.48	- 8,566.92	
Fuel & IPP	35000	15.839	554,354.85	35000	15.839	554,354.85	-	0.00%
Bill Sub-Total			923,533.25			922,161.43	- 1,371.82	-0.15%
GCT @16.5%		0.165	152,382.99		0.165	152,156.64	- 226.35	-0.15%
Bill Total			J\$ 1,075,916.24			J\$ 1,074,318.07	- 1,598.17	-0.15%

6.3.9 Bill Comparison for a Typical Rate 50 Customer

Usage 500,000 kWh

Demand 1,500 kVA

Rate 50		Before			After			
Standard	20	014 - 2015 Ra	tes J\$	20	015 - 2016 Rat	tes J\$	Change	
Description	Base F/X Rate	Billing F/X Ra	ate	Base F/X Rate	Billing F/X Ra	te	J\$	%
	112.00	116.12		115.50	116.12			
	Usage	Rate (J\$)		Usage	Rate (J\$)			
Energy kWh	500000	4.88	2,440,000.00	500000	4.90	2,450,000.00	10,000.00	0.41%
Demand kVA	1500	1421.81	2,132,715.00	1500	1464.32	2,196,480.00	63,765.00	2.99%
Customer Charge			6,200.00			6,508.10	308.10	4.97%
Sub Total			4,578,915.00			4,652,988.10	74,073.10	1.62%
EEIF		0.4886	244,300.00	500000	0.4998	249,900.00		
F/E Adjust		0.029	134,826.15		0.004	20,055.79	- 114,770.36	
Fuel & IPP	500000	15.839	7,919,355.06	500000	15.839	7,919,355.06		0.00%
Bill Sub-Total			12,877,396.22			12,842,298.95	- 35,097.26	-0.27%
GCT @16.5%		0.165	2,124,770.38		0.165	2,118,979.33	- 5,791.05	-0.27%
Bill Total			J\$ 15,002,166.59			\$ 14,961,278.28	- 40,888.31	-0.27%

6.3.10 Bill Comparison for a Typical Rate 50 TOU Customer (Partial Peak)

Usage 500,000 kWh

Demand 1,500 kVA

Rate 50		Before		THE T	After			
TOU (Partial Peak)	21	014 - 2015 Rat	es J\$	20	015 - 2016 Ra	tes J\$	Change	
Description	Base F/X Rate	Billing F/X Ra	te	Base F/X Rate	Billing F/X Ra	te	J\$	%
	112.00	116.12		115.50	116.12			
	Usage	Rate (J\$)		Usage	Rate (J\$)			
Energy kWh	500000	4.88	2,440,000.00	500000	4.90	2,450,000.00	10,000.00	0.41%
Demand kVA	1500	618.68	928,020.00	1500	637.18	955,770.00	27,750.00	2.99%
Customer Charge			6,200.00			6,508.10	308.10	4.97%
Sub Total			3,374,220.00			3,412,278.10	38,058.10	1.13%
EEIF		0.4886	244,300.00	500000	0.4998	249,900.00		
F/E Adjust		0.029	99,353.91		0.004	20,055.79	- 79,298.12	
Fuel & IPP	500000	15.215	7,607,550.97	500000	15.215	7,607,550.97	-	0.00%
Bill Sub-Total			11,325,424.88			11,289,784.86	- 35,640.02	-0.31%
GCT @16.5%		0.165	1,868,695.11		0.165	1,862,814.50	- 5,880.60	-0.31%
Bill Total			\$ 13,194,119.99			\$ 13,152,599.36	- 41,520.62	-0.31%

6.4 Appendix 4: Fuel Weights

6.4.1 Existing Weights

FUELX	IPP RATE S	UMMARY -	May 2015	
		ted in June	the same of the last of the la	11 11 11 11
BILLIN	G EXCHANGE			
	Fuel Weig	hts Applica	ble	di dalah
Class	Std.	Off Peak	Partial Peak	On Peak
Rate 10				
1st. 100 kWh	1.000		Mana 7	1 -
Over 100 kWh	1.000			
Rate 20	1.000			
Rate 40 LV	0.960	0.800	1.044	1.302
Rate 40A LV	0.960		n mes	
Rate 50 MV	0.960	0.800	1.044	1.302
Rate 60	0.960			***
Traffic Signal	0.960	NC MINST LESS	dan man mon	varjence s
Actual Fuel & IPP R	ate for May 2		/h]	
Traffic Signal Actual Fuel & IPP R Billing Exchange R	ate for May 2		/h]	
Actual Fuel & IPP R Billing Exchange R	ate for May 2 ate for May 2	015		14.208 116.12
Actual Fuel & IPP R Billing Exchange R	ate for May 2	015	ıy 2015	
Actual Fuel & IPP R Billing Exchange R F Class	ate for May 2 ate for May 2 uel & IPP R	o15 ates for Ma	ıy 2015	116.1
Actual Fuel & IPP R Billing Exchange R	ate for May 2 ate for May 2 uel & IPP R	o15 ates for Ma	ıy 2015	116.1
Actual Fuel & IPP R Billing Exchange R F Class Rate 10 1st. 100 kWh	ate for May 2 ate for May 2 uel & IPP R Std.	o15 ates for Ma	ıy 2015	116.1
Actual Fuel & IPP R Billing Exchange R F Class Rate 10 1st. 100 kWh Over 100 kWh	ate for May 2 ate for May 2 uel & IPP R Std.	o15 ates for Ma	ıy 2015	116.1
Actual Fuel & IPP R Billing Exchange R F Class Rate 10 1st. 100 kWh Over 100 kWh Rate 20	ate for May 2 ate for May 2 uel & IPP R Std. 16.499	o15 ates for Ma	ıy 2015	116.1
Actual Fuel & IPP R Billing Exchange R F Class Rate 10 1st. 100 kWh Over 100 kWh Rate 20 Rate 40 LV	ate for May 2 ate for May 2 Tuel & IPP R Std. 16.499 16.499	o15 ates for Ma Off Peak	Partial Peak	On Peak
Actual Fuel & IPP R Billing Exchange R F Class Rate 10	ate for May 2 ate for May 2 uel & IPP R Std. 16.499 16.499 15.839	o15 ates for Ma Off Peak	Partial Peak	On Peak
Actual Fuel & IPP R Billing Exchange R F Class Rate 10 1st. 100 kWh Over 100 kWh Rate 20 Rate 40 LV Rate 40A LV	ate for May 2 ate for May 2 Tuel & IPP R Std. 16.499 16.499 15.839	Off Peak 13.199	Partial Peak	0n Peak

6.4.2 Approved Weights

FUEL &	IPP RATE S	UMMARY -	May 2015	
		ited in June 2		-
BILLIN	NG EXCHANGE	RATE J\$116.12	23 = US\$1.00	
	Fuel Weig	hts Applica	ble	gi-qn
Class	Std.	Off Peak	Partial Peak	On Peak
Rate 10				
1st. 100 kWh	1.000			
Over 100 kWh	1.000			
Rate 20	1.000			
Rate 40 LV	0.960	0.800	1.044	1.302
Rate 40A LV	0.960			
Rate 50 MV	0.960	0.800	1.044	1.302
Rate 60	0.960			
- Articalas compres dels				
Traffic Signal	0.960			
Actual Fuel & IPP F	Rate for May 2		/h]	
	Rate for May 2		/h]	
Actual Fuel & IPP F Billing Exchange R	Rate for May 2	015		14.208 116.12
Actual Fuel & IPP F Billing Exchange R	Rate for May 2 Late for May 2	015		
Actual Fuel & IPP F Billing Exchange R I Class	Rate for May 2 Late for May 2 Fuel & IPP R	o15 ates for Ma	y 2015	116.12
Actual Fuel & IPP F Billing Exchange R I Class Rate 10	Rate for May 2 Late for May 2 Fuel & IPP R	o15 ates for Ma	y 2015	116.12
Actual Fuel & IPP F Billing Exchange R F Class Rate 10	Rate for May 2 tate for May 2 Fuel & IPP R Std.	o15 ates for Ma	y 2015	116.12
Actual Fuel & IPP F Billing Exchange R Class Rate 10 1st. 100 kWh	Rate for May 2 Rate f	o15 ates for Ma	y 2015	116.12
Actual Fuel & IPP F Billing Exchange R Class Rate 10 1st. 100 kWh	Rate for May 2 Late f	o15 ates for Ma	y 2015	116.12
Actual Fuel & IPP F Billing Exchange R Class Rate 10 1st. 100 kWh Over 100 kWh Rate 20	Rate for May 2 Rate for May 2 Fuel & IPP R Std. 16.499 16.499	otes for Ma Off Peak	y 2015 Partial Peak	On Peak
Actual Fuel & IPP F Billing Exchange R Class Rate 10 1st. 100 kWh Over 100 kWh Rate 20 Rate 40 LV	Rate for May 2 Rate f	otes for Ma Off Peak	y 2015 Partial Peak	On Peak
Actual Fuel & IPP F Billing Exchange R Class Rate 10 1st. 100 kWh Over 100 kWh Rate 20 Rate 40 LV Rate 40A LV	Rate for May 2 Rate f	o15 ates for Ma Off Peak 13.199	Partial Peak	0n Peak 21.475