

**INVESTIGATION OF THE JAMAICA PUBLIC SERVICE COMPANY LTD (JPS)
BILLING AND METERING SYSTEM FOR ELECTRICITY CONSUMPTION**

**PRESS CONFERENCE
Friday, October 21 2011
Statement by J Paul Morgan
Independent Investigator**

First of all I should like to recognise the members of the team and to thank them for the tremendous effort which they put into this exercise – which they did, by the way, in addition to their regular “day job” at the OUR. The team was Ms Marsha Minott, Chenee Riley and Cheryl Lewis and Messrs Leighton Hamilton, Wayne McGregor, Andrew Lewis, Winston Robotham, Garfield Bryan and Peter Johnson. and keeping us all together was Ms Carlene Dunbar. The work could not have been successfully completed without the support that we received from the team at the Bureau of Standards led by Messrs Garfield Morgan and James Samuels.

You will recall that the Office of Utilities Regulation initiated this Investigation at the end of August last and had set October 7 as the deadline for completion. It became evident that we would not meet the deadline after we received the responses to our data requests and, about a third of the way into the investigation, I requested a 10 day extension of the Office which it very kindly granted.

The Terms of Reference asked us to

1. Assess the legitimacy of the high consumption billing complaints as a consequence of the replacement of old (electro-mechanical) meters with new “digital” meters using appropriate sampling techniques;
2. Assess the legitimacy of the high consumption billing complaints against JPS by using appropriate sampling techniques;
3. Assess the appropriateness of JPS’ current Back Billing Policies and Procedures;
4. Assess JPS’ current Meter Inspection and Audit practices and procedures;
5. From a historical and current perspective, assess the extent to which the billing practices are in compliance with the existing quality control procedures (including meter reading and exceptions processing) and Directives;
6. From a historical and current perspective, assess the extent to which the design of the quality control measures (including meter reading and exceptions processing) reliably and consistently identifies and treat with legitimate/genuine billing anomalies.

The investigation relied on data provided by JPS which was extracted from its current and historical business records and also reviewed established policies and processes documentation provided by the company. Let me also state that we received full and unquestioned cooperation from JPS.

The thrust of the investigation was forensic and fact based rather than qualitative, thus the investigation was about an assessment of facts and analysis of data rather than opinions proffered by interested parties. Being mindful of the perception of bias, we were careful to employ the best efforts of cross referencing, peer reviews team collaboration and tempered by my own sensitivity to the issue to ensure impartial assessment of the facts and therefore the independence of this Report.

The requests that we made of JPS yielded data on (i) some 60,163 accounts for which new digital meters were changed since 2008; (ii) 5,994 billing complaints since 2008; (iii) 20,534 records of high billings ($\pm 30\%$); and (iv) 22,084 records of complaints that have been the subject of back billing adjustments since January 2010, analysis of which formed the core around which the subsequent investigations and analyses were conducted

We used rigorous statistical techniques to determine sample sizes as we drilled down to address the particular issues asked for in the terms of reference.

It would be fair to say that the Office initiated this investigation because of the public outcry over the high levels of JPS billing that was being experienced by customers and as this was happening concomitantly with an ongoing programme where JPS has been replacing the electromechanical meters on its system with new electronic meters. So the connection has been made that the high bills are a consequence of the new meters being inaccurate. We spent a lot of time on the question of the accuracy of the electronic meters. We also did extensive research on experiences in other jurisdictions (some of which are captured in the report). What is interesting is that in all of the jurisdictions there have been issues with the transition to the electronic meters with the same concerns being raised as they have been here. Regulators have also had to step in and conduct independent investigations just as we have done here. The conclusions have been that the electronic meters are fine (they are just more accurate than the electromechanical type).

We have not found any evidence to suggest or substantiate any claim that the electronic meters being installed by JPS are inaccurate or faulty. The meters tested in the field and in the laboratory have passed with flying colours. Of The electromechanical meters that were removed from the field and tested 4 out of 24 or 17% failed the accuracy tests. Statistically, we would expect 2.5% of the accounts where the meters have been changed

to the electronic type to have issues directly related to the meter itself. Based on the analysis, we would also expect about 18% to experience high consumption – actually on the current programme where JPS is changing out 17000 meters we can expect about 3000 to have a problem; these problems could be due to reasons such as – (i) the new meter is over recording (ii) the old meter is under recording or (iii) there is an illegitimate connection or some form of meter tampering taking place. I would also say that we found an alarmingly high trend and actual physical evidence of meter tampering and other illicit activities.

But bottom line – the electronic meters are fine.

I cannot go into the details of all our findings, you can read the Report (all 100 pages of it) but what is clear is that JPS has serious issues in its Customer Service and customer relationships areas. The company really has to recognise that its customers are important and when issues such as a spurious high bill arise, then there is a problem and the customer is probably right. We find that the company's default approach is basically to terrorise the customer, wave the big stick of disconnection and say pay up. We have made some recommendations on this area where we hope, if implemented, the JPS/customer interaction will be more equitable. The concern is that circumstances such as that related in the WESTERN Mirror on October 3 were 82 year old Byron Seymour received a \$72,000.00 electricity should not happen, just so. We also had a conversation with one customer who came in to see us and the treatment meted out to him belongs to another era. There is absolutely no excuse for the company to issue a high bill without an accompanying explanation or some other proactive intervention.

On the question of back billing, the company has been operating in line with its policies...we found however that policies which were agreed with the Office some 10 years ago are now passé and need review. We have provided some examples of the practices in other jurisdictions which we could well adapt to our circumstances here in Jamaica.

One of the major areas of concern for us is the manner in which JPS treats with customers who are suspected of meter tampering – we find that the company does not apply a rigorous enough test to determine guilt but uses the doctrine that the customer benefitted from the service and therefore must pay the adjusted amount. One of the problems of course is, as we have found, that it is really not possible to establish exactly when a meter was interfered with and even whether the current customer tampered with it and therefore any assessment would be really speculative. This is a problem that will be around for some time but what we have recommended is that whenever a new account is established the company should either install a new meter or test the meter that's already installed thus establishing the conditions of the meter at day one. Make no mistake about it though, the company has a right to expect payment for the product it delivers but also the customer should not be disadvantaged because of errors by or the inefficiency of the company. The policies must reflect these principles.

With respect to the Billing System we find a major issue in that the Office had directed JPS to revise what is called the Hi/Low limits to $\pm 30\%$; i.e. if a bill is produced which is $\pm 30\%$ of the average over the previous three months it should produce an exception report and the account investigated. The procedure that the Office instructed is that in such cases the company would pull the bill and examine it and if it was found to be correct it would be issued with an explanation. Well the company has adjusted this procedure unilaterally, where the exception is noted at the meter reading stage while, at the billing stage the criteria was changed to $\pm 99\%$. Our own analysis of this scenario confirms that in a situation of prolonged estimation or billing excessively high bills could be produced and issued without detection. We suspect this might be a significant part of the problems that are now unfolding. The company, in our view, must be instructed to return to the original regime.

Now, all of these recommendations call for the Office to give the company Directives - the age old problem of the OUR's teeth or lack thereof is an important issue in this situation as the OUR can issue all the Directives it likes it can't enforce them. There is absolutely no point in blaming the Office for its inaction when the laws are inadequate the remedy for which is at the policy level. The report speaks to these constraints on the Office. The antiquity of the Electric Lighting has led to an imperfect Licence and the shortcomings in the OUR Act itself promotes a regulator that cannot enforce the law. These are issues that have been talked about, consultants been hired to advise on, but for some reason they do not seem to excite those who make laws.

In the final analysis, the issue not really about the accuracy of meters, it is about high bills and we can investigate billing systems until we are blue in the face, the issue wont go away until the problem of the efficiency of generation and the reliance on oil as the fuel is fixed. This is really where our attention should be focused!

The Report is 100 plus pages, the summary is 22, I invite you to read it - it is full of exciting facts and figures and should be on the OUR website about now. For ease of reference I have attached the summary of the recommendations which are structured into the six general areas (i) Legal and Regulatory Frameworks, (ii) Tariff Regime; (iii) Customer Service. (iv) Billing; (v) Metering and (vi) The Metering Protocol, which is working very well by the way and which actually should provide customers with the confidence that the electricity meters are fine.

One final comment the budget for this investigation was \$3,600,000.00. All the bills are not yet in but based on the commitments made we should be well within the budget,

Summary of Key Recommendations

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|---|---|
| <p>Legal and Regulatory Frameworks</p> | <p>The legislative and regulatory framework to be reviewed as matter of urgency and (i) a modern sector Act enacted (ii) the OUR Act amended so as to be aligned with the new Sector Act as well as providing the OUR with enforcement powers and (iii) the Licence be renegotiated and amended to be aligned with the sector Act.</p> <p>The Office to issue rules to prevent JPS from benefiting when it breaches Directives issued by the Office – these would prevent the company from back-billing customers when there is under recovery and commensurately to reimburse customers when there is over recovery.</p> |
| <p>Tariff regime</p> | <p>The expected efficiency gains and other benefits that will arise from the installation of electronic meters and Smart metering systems must be examined and taken into account at the next tariff review in 2014</p> |
| <p>Customer Service</p> | <p>In its current review of the Company’s Draft Code of Practice for customer complaints handling, the Office to have regard to the findings of this Investigation in order to procure a modern and customer centered Code of Practice. To be completed within 6 Months.</p> |
| <p>Billing</p> | <p>The Office to issue a Directive that JPS is not to retroactively adjust accounts of customers that show changed consumption patterns (high or low) after a meter change.</p> <p>JPS is to adhere to the OUR Directive and synchronize the exception reporting to +/- 30%.</p> <p>The Office to issue a Directive requiring that the variance in the meter reading be averaged over 12 months consumption rather than the three months that presently obtains.</p> <p>JPS be required to revisit its back-billing policy and reformulate it to be in line with best practice, particularly with regard to back-billing on the grounds of fraud, alleged meter tampering and illicit abstraction. The period for which the company can back bill an account must reflect the principle that the customer ought not to be disadvantaged because of an error by or the inefficiency of JPS. The current minimum period</p> |

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|------------------------|--|
| | <p>where stipulated as four (4) months should be changed to reflect the original intent – 2 billing periods or 2 months. In the case of the upper limits best practice suggest that these should be 1 year.</p> <p>In the event that meter tampering is alleged, the company be restricted to a maximum back billing period of 2 years, subject to clear evidence that the customer has liability for a lesser period. Should this conclusion in any specific case be unsatisfactory to either party, either is free to refer the matter to the Office, in the first instance, or the courts, at any time, for adjudication. If fraud is suspected, the company has to prove “deliberate” and “willful” actions of customers if it is to successfully apply the full period of retroactivity provided for in the statutes, or alternatively, routinely cause these matters to come before the courts</p> <p>The company be required to issue its back billing policy and related issues as a Code of Practice to be publicly available.</p> <p>The Office to issue rules to prevent JPS from benefiting when it breaches Directives issued by the Office – these would prevent the company from back-billing customers when there is under recovery and commensurately to reimburse customers when there is over recovery.</p> <p>JPS review its quality control measures at the meter reading stage at the district office level with a view to strengthening the quality controls at the meter reading stage of process.</p> |
| <p>Metering</p> | <p>The Company’s policy documents are to provide that all new accounts (including those where a meter is already installed) should have the appurtenant meter checked and, if necessary, a new meter installed on the premises prior to activation of the said new account.</p> <p>JPS be required to check meters more frequently than the company does at present, (presently every 5 years) but the appropriate time should be determined after consultation between the Office and JPS).</p> <p>JPS review its quality control measures at the meter reading stage at the district office level with a view to strengthening the quality controls at the meter reading stage of process.</p> |

Metering Protocol

The Protocol provides that it should be reviewed every two years – such a review is long overdue. The Office must embark on this review as a matter of urgency and in doing so consideration must be given, to the aligning of the standards prescribed for the new technologies e.g. ANSI C12.20 which specifies more stringent accuracy tolerances for electronic meters should now be included. The Office must without any further delay conclude the review of, with a view to approving, JPS' proposal for the National Meter Sampling Map.

Concomitant with the review the Protocol, the Office should consider the introduction of "Independent meter testers" employed by the OUR who would be empowered to respond to customer requests for meter investigation/testing. In reviewing and updating the Protocol, the role of the Jamaica National Association for Accreditation (JANAAC) to be formally recognised

'HOW COME, JPS?'

| Transaction Date | Description | Kwh Consumption | Transaction Amount | Balance |
|------------------|-------------------------|-----------------|--------------------|------------|
| | Beginning Balance | | | 8,345.41 |
| 13-JAN-2011 | Payment | | 8,000.00 | 345.41 |
| 28-JAN-2011 | Electric Charge | 335 A | 10,005.61 | 10,351.02 |
| 28-JAN-2011 | General Consumption Tax | | 424.29 | 10,775.31 |
| 16-FEB-2011 | Payment | | 10,400.00 | 375.31 |
| 24-FEB-2011 | Electric Charge | 377 A | 11,475.58 | 11,850.89 |
| 24-FEB-2011 | General Consumption Tax | | 563.30 | 12,414.19 |
| 27-MAR-2011 | Electric Charge | 365 A | 12,165.67 | 24,579.86 |
| 27-MAR-2011 | General Consumption Tax | | 573.59 | 25,153.45 |
| 02-APR-2011 | Payment | | 12,000.00 | 13,153.45 |
| 21-APR-2011 | Payment | | 13,000.00 | 153.45 |
| 27-APR-2011 | Electric Charge | 323 A | 10,503.08 | 10,656.53 |
| 27-APR-2011 | General Consumption Tax | | 419.87 | 11,076.40 |
| 17-MAY-2011 | Payment | | 23,000.00 | -11,923.60 |
| 25-MAY-2011 | General Consumption Tax | | 150.00 | -11,773.60 |
| 25-MAY-2011 | Reconnection Fee | | 1,500.00 | -10,273.60 |
| 27-MAY-2011 | Electric Charge | 301 A | 10,164.73 | -108.87 |
| 27-MAY-2011 | General Consumption Tax | | 358.62 | 249.75 |
| 17-MAY-2011 | Payment | | 12,726.40 | -12,476.65 |
| 02-JUN-2011 | Payment | | -23,000.00 | 10,523.35 |
| 15-JUN-2011 | Payment | | 10,500.00 | 23.35 |
| 27-JUN-2011 | Electric Charge | 657 A | 23,667.26 | 23,690.61 |
| 27-JUN-2011 | General Consumption Tax | | 1,682.62 | 25,373.23 |
| 27-JUL-2011 | Electric Charge | 596 A | 21,419.46 | 46,792.69 |
| 27-JUL-2011 | General Consumption Tax | | 1,456.75 | 48,249.44 |
| 27-AUG-2011 | Electric Charge | 621 A | 21,249.54 | 69,498.98 |
| 27-AUG-2011 | General Consumption Tax | | 1,474.93 | 70,973.91 |
| 23-SEP-2011 | Electric Charge | 0 A | 299.02 | 71,272.93 |
| 23-SEP-2011 | General Consumption Tax | | 0.00 | 71,272.93 |
| 23-SEP-2011 | Deposit Applied | | -3,547.10 | 67,725.83 |
| | Ending Balance | | | 67,725.83 |

A print-out of Senior's payment schedule since January 2011.

82-yr-old shocked by \$70,000 electricity bill

By Volney Barrett

Byron Senior is barely able to stand without the aid of a walking stick. And when he received his last light bill he was shocked out of his wits.

The feeble 82-year-old retired auctioneer's light bill has him asking, "how come my light bill has soared from an average \$10,000 to over \$70,000 per month in just nine months?"

Senior, of Ramble Hill, St. James, is crying foul. The Jamaica Public Service (JPS) is demanding that he pays close to \$70,000 to clear the balance on his electricity bill for September 2011 before his power is reconnected.

Senior's electricity was disconnected in early September and up to last weekend, he remained in the dark.

With the help of his walking stick and the support of a neighbour, a determined Senior made his way to the Western Mirror's offices in Montego Bay to highlight his plight as he searches for "some answers."

Senior owns a two-storey complex in which he has rented apartments to tenants. Now the senior citizen is distressed that despite desperate efforts, he has not been getting any redress from the light and power provider.

"Everything was fine" as Senior's bills were "quite manageable" when they averaged between \$10,000 to \$12,000 per month. But, earlier this year, the JPS installed digital meters at his premises in Ramble Hill. "Now the bills dem gone to \$70,000... and I can't pay that," he lamented.

A JPS printout of his payments confirmed that "at the start of the year, things were quite manageable." Now he is "very frustrated."

At the end of December last year, Senior's bill amounted to \$8,345. It inched up to \$10,351 in January.

That trend continued into March with slight increases but jumped to \$13,153 in April.

Though a bit concerned, he paid, always making an effort to arrears. There were instances when the balances brought forward were just over \$100.

NEW METERS

The new digital meters were installed on the premises on May 17, 2011 and almost immediately, with no additional electrical appliances installed or excessive use of energy, the bill shot up to \$23,000 with a balance of \$11,773. He was disconnected around that time, but was reconnected subsequently.

Things were about to get worse. The light bill skyrocketed even further for the remaining months of June and July, averaging in the region of \$23,000 per month.

Due to challenges he experienced in paying this bill, the August balance jumped to \$71,973 and, in September, the balance went up to \$71,272. "I don't have a lot of things in my house, I don't understand this at all," Senior, who has hearing challenges, continued.

The neighbour, who asked not to be identified, said that nobody was at the house in the days, so the bills could not be correct. She too believes that the digital meters are at the heart of the problem.

To further add to Senior's plight, since this second disconnection, two tenants, who lived there for over six years, have since moved out.

A JPS representative said she "could not comment unless she had seen the account." The Western Mirror was referred to another representative, who was unavailable at the time we called.

The previous representative, however, said that she needed to ensure that the matter was reported to the company so that it could be addressed. Senior said he had made several reports to the JPS.

The Western Mirror also spoke with the Director of Consumer and Public Affairs at the Office of Utilities Regulations (OUR), Michael Bryce, who said there was nothing that they could do until "the complainant has fully exhausted all channels at the utility company."



A frail 82-year-old Byron Senior. - Volney Barrett Photo