THE PRIVATIZATION OF THE ELECTRICITY SECTOR: THE CASE OF THE JAMAICA PUBLIC SERVICE COMPANY (JPSCo.)

A Regulatory Governance Perspective

By

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ABSTRACT

The World Bank and the International Monetary Fund policy positions contend that privatization will result in economic growth and increased efficiencies, thereby leading to greater social good. To test this claim, this paper examines the implications of regulatory governance (including public policy) on electricity privatization, as it relates to the Jamaican case. This case was chosen, given Jamaica's unique experiment with privatization as a whole, and so adopts a public policy perspective to interrogate the problem.

This paper also seeks to explain the social, political, economic and ideological reasons behind the policy framework, and its impact on four players: the consumer, the investor, the government and the worker.

The central argument of this paper, however, is that the divestment of the electricity sector has the propensity to be a two-edged tool, whereby on the one hand, it has positive impacts such as increased efficiency, generation expansion, and national economic development. On the other hand, it has negative impacts such as unemployment (because of capital intensiveness), increased inequality, and inefficiencies in the provision of service.

The conclusion is that the divestment of the electricity sector (whether it is an unbundled or vertically integrated structure, and/or there is sound institutional framework), simultaneously provides benefits and losses to the aforementioned players, sometimes making the investor and the consumer victims of each other. The findings reveal that there is no one universal 'best fit' to electricity privatization (be it at the micro or macroeconomic levels). In essence, privatization as a whole is not a panacea in all countries, as it could lead to weakened systems of governance, which may be manifested where the public's interests are being ignored by the government during its efforts to meet the objectives of divestment.

Answers to such complexities, which encompasses the realm of privatization in the contemporary era is yet to be addressed, using the policy tools put forward in this paper.

Key words: Tazhmoye Crawford, Electricity Privatization, Jamaica Public Service Company, Jamaica, Regulation, Utility, Power, Energy, Reform, Governance, and Public Policy.

INTRODUCTION

Despite the pitfalls to electricity privatization, the electricity supply industry is at the centre of society's manufacturing, education and tourism sectors, and is therefore, essential for national development. However, governments (particularly in poor developing countries), often lack adequate resources to effectively manage this industry and to distribute public good efficiently and equitably. To address this dilemma, governments at times seek to privatize electricity service in order to maximize cost benefits and promote efficiency. This also creates tension between efficiency and socio-economic imperatives such as access to electricity by the poor. In some cases, ineffective public policy choices, such as putting the electricity sector in the 'wrong hands,' are to the detriment of the most disadvantaged in society. This could further undermine an already fragile economy, and negatively affect social cohesion and political stability.

Within this context, this paper argues that electricity privatization as a policy option can have far reaching implications at the micro and macro-economic levels. There is also no one universal best fit to its process. As a result, it might be safe to consider the following steps, prior to privatizing any electricity industry –

- what time frame should be allotted to the privatization process;
- how it will impact on citizen's welfare and at the same time meet other policy and ideological objectives;
- what players are likely to benefit or lose: the consumer, the investor, the Jamaican Government, and/or the worker;
- whether access to electricity resource should be publicly or privately owned;

In an effort to answer these probing questions, this hypothesis is advanced: "The shift from public ownership to private ownership of the electricity sector impacts on the consumer, the investor, the Government/role of the state, and the worker."

Methodology

One thousand (1,000) questionnaires were hand-administered to residents throughout the 14 parishes of Jamaica. In determining the number of questionnaires to be distributed to each parish, the parish population was divided by the island's population, and then multiplied by 1,000. The instruments used to conduct this research were survey methods (distribution of questionnaires); observation; interviews with the regulatory body and other policy advisors; and desk research/secondary data. The analysis of the data was done via the statistical package for social scientists (SPSS).

THE DECISION TO PRIVATIZE IN 1996

The Government's objectives, in privatizing JPSCo., were as follows:

- to relieve the central budget of the financial burden of the expansion of the power sector; [1]
- to obtain direct cash flows to the Treasury in respect of the sales price;[2] and
- to secure the lowest possible prices for electricity, which are consistent with available commercial financing and establish the system reliability at its economically efficient level; [3]
- to enhance revenue collections;[4]
- to maximize fuel efficiency;[5]
- to purchase directly and improve fuel storage capability;[6]
- to improve in productive efficiency such as high levels of systems losses.[7]

These objectives were dependent on the evaluation criteria of the National Investment Bank of Jamaica (NIBJ), taking into consideration, the purchase price, as well as macro-economic consideration.[8] The criteria were (i) offer price; (2) tariff path (cost of electricity to the consumer); (3) proposed development plan (offers would be evaluated on the feasibility and acceptability of their proposed development plans); (4) acquisition financing (offers would be evaluated on their financing plans for the acquisition and their experience of similar transactions); (5) technical capability and relevant experience; (6) human resources policies and transfer of knowledge and technology; (7) consideration was given to the proportion of local equity participation in their consortium; (8) commitment to establishment of linkage industries (offers were evaluated on the credibility of any proposals they may have to develop other industries in Jamaica, whether by way of linkages with a co-generation host, or other arrangements with such industries.[9]

Applicants were invited by the NIBJ[10] to submit detailed proposals for the operation and expansion of the integrated company and they would be required to acquire at least 56 percent of the company's shares. The sales agreement also called for 5 percent of the shares to be reserved for the establishment of an employee share ownership plan (ESOP). On the due date (January 5, 1996) for submission of proposal, two proposals were

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[1] Patterson, P. "The Privatization of the Jamaica Public Service" Statement to the House of Representatives. (October 22, 1996). p. 10

[2] Sampson, C. (Interview), May 26, 2005.

[3] Patterson, P. October 22, 1996. (loc. cit.).

[4] Ibid

[5] Ibid

[6] Ibid (p. 12)

[7] Sampson, C. (Interview) May, 26, 2005.

[8] An enterprise team operating under the aegis of the NIBJ was appointed by the Government as a critical first step towards implementing the decision to privatize the operations of the JPSCo. The team was charged with the responsibility for directing the process and making appropriate recommendations through a Cabinet Sub-Committee which the Prime Minister had chaired. (pp. 8, 9)

[9] Ibid (pp. 8, 9)

[10] An enterprise team operating under the aegis of the NIBJ (op. cit), p. 5.

received from Houston Industries Energy and Southern Electric International.[11] Both bidders for the privatization of JPSCo., stated to the Government that the Government would have to continue sovereign guarantee to the Independent Power Producers (IPPs). The government had rejected this, because this condition would have resulted in the Government, (as minority shareholder), continuing to guarantee all of the company's obligations to the IPPs rather than those who control and manage the operations of the JPSCo. [12]

While the proposals of Houston Industries and Southern Electric were the most likely to be chosen, a careful analysis of proposals, as well as the JPSCo business plan, led the Government to believe that the two proposals were not sufficiently attractive to form a basis for final negotiations.[13] They were inadequate because the

- price offer was too low[14] (the sales price for the company tenders was too low);
- tariff path was too high[15] (the tariff which would prevail after diversification would be higher than JPSCo's existing tariff structure);
- dividend policy was unacceptable;[16] and
- unwillingness to guarantee JPSCo's payment obligations to the IPPs[17] (this would be in reference to part of the purchase).

Management Contract

Having withdrawn from the decision to divest, both offers were rejected in 1996. The Government then decided that new governance and controlling regime were required, making it mandatory for the management of JPSCo to operate under an efficient and cost competitive environment, as well as an 'arm's length' approach from the Government. A memorandum of understanding was signed between the management of JPSCo., the NIBJ and the Ministry of Mining and Energy.[18] This partial divestment was to enable the company's expansion programme over time (this means, approaching the capital markets for financing on its own account).[19] It was further noted that JPSCo would be charged to implement projects for system reliability improvement, customer service improvement and cost and revenue improvement, to facilitate an eventual lowering of electricity prices to the consumer in real terms.[20] In the meanwhile, the Government would continue to access bilateral financing agreements which benefit the country.[21]

[11] Ibid (p. 7)
[12] Recommendations through a Cabinet Sub-Committee which the Prime Minister chaired. (op. cit). p. 12
[13] Ibid (p. 13)
[14] Ibid
[15] Ibid
[16] Ibid
[17] Ibid
[18] Higgins, H. (Interview), May 17, 2005.
[19] An enterprise team operating under the aegis of the NIBJ. (op. cit), pp. 14, 15
[20] Ibid (p. 15)
[21] Ibid

The Government had also stated that 20 percent of the sector was to be placed on local stock market. This led to the management contract approach. The management undertook to operate the company as efficiently as private entrepreneurs, and was required to meet certain operational and financial targets.[22] These targets were to (1) keep the non-fuel tariffs constant in US dollar terms for three years; (2) adjust the fuel charges in consumer bills to the fuel price adjustment clause, but with increased fuel efficiency standards for the generating plants; (3) return the Company to financial profitability in the first year (the Company would be expected to pay an agreed dividend to its shareholders (the government) in each fiscal year; (4) finance the investment programme without government guarantees or any other form of tangible government support, except in facilitating access to multilateral and bilateral funding; and (5) improve the reliability of power supply and the delivery of customer service to levels above the merely acceptable.[23]

The Regulatory Provision

In the preparation of the planned privatization, the Parliament had promulgated an Office of Utilities Regulation (OUR) Act in **1995** to regulate the provision of utility services in the electricity, telecommunications, water and transportation sectors. This legislation had repealed the Public Utility Commission Act, and the OUR was vested with the responsibility of ensuring that approved utility organizations (which has been granted a licence) operate efficiently, meet the communities' needs, afford to its customers economical and reliable service, and to preserve the environment.[24] In addition, this legislation empowered the OUR to issue and revoke licences to supply electricity, to fix tariffs for electricity supply, to set performance standards for licensed suppliers, and to regulate the industry in such a way that would safeguard the interests of the Jamaican consumers.[25] While the Government was owner of JPSCo, it had given the OUR autonomy to regulate the electric utility.[26] Unlike the 2000 OUR (amended) legislation, the 1995 Act gives credence to the Minister's decision. This 2000 amendment provides for an independent regulatory body which regulates the operations of the utilities, without much scope for political interference. Its independence allows it to grant licence to relevant service providers, prescribe standards, conduct investigation, and protect both the interests of the utility companies and the consumer.

[22] Hay, W. "The Privatization of the Jamaica Public Service Company Limited." CBI's 2nd Annual Caribbean Energy. Miami, Florida. (January, 2002). p. 4
[23] Ibid
[24] The Office of Utilities Regulation Act, 1995. (p. 3, subsection 2(a-e).
[25] Patterson, P. (1996), op. cit. (p. 17)
[26] Ibid

THE PRIVATIZATION OF JPSCo. IN 2001 AND BEYOND

In September 2000, the Government signed a memorandum of understanding with Southern Electric, and undertook to negotiate exclusively, for the sale of shares. Sometime after the memorandum was signed, Allied Energy System, Americas Incorporated (AES) had expressed interest in investing in the integrated company, but the commitment to Southern did not allow the Government to follow up on AES' interest.[27] Later, the name Southern Energy International was changed to Mirant, and Mirant was spun off as an independently traded company in which Southern Electric retained majority shares.

In March 2001, the terms of agreement for transfer of controlling shares from the Government to Mirant was signed, following the drafting of a new Licence. The Government undertook to absorb the long term debt of the company in the amount of approximately US$200 million in exchange for an increase in its equity.[28] This debt was comprised primarily of foreign exchange loans provided by multilateral lenders. The short term debt, being US$200 million, comprised mostly in local currency, remained on the company's books.[29] Upon the signing of the agreement, the payment was made, the shares transferred and the new license issued. Mirant received 80 percent of the ordinary shares for a price of US$201 million, with the Government retaining the remaining 20 percent. Neither party is allowed to sell any of their shares for the first three years of the agreement.[30] Prior to the divestment, the Government had decided that JPSCo would remain vertically integrated, despite the numerous advice by a number of entities and the regulatory agency[31] to politically and hurriedly unbundled, prior to privatization, so as to accommodate competition in the future.[32] During this time, the Government had also decided to exclude JPSCo from the Fair Trade Commission (FTC) Act of 1993, as part of the divestment package. It should be noted that it is the intervention of the FTC, which secures initial competition in the telecommunication sector. According to Henry, consumers are left to the mercy of the discretion of Mirant Corporation despite the Jamaica Labour Party's (JLP) objection.[33] The Office of Utilities Regulation (OUR 2000 Act) is however, given the mandate to represent and regulate the interest of the consumers and the investor.

[27] Hay, W. (2002). op. cit (p. 5).
[28] Hay, W (2002) op. cit (p. 6)
[29] Ibid
[30] Ibid
[31] Ibid
[32] Sampson, C. (Interview), May 21, 2005
[33] Henry, B. (2001). "Disclosure of JLP, JPSCo Talks Prompt Stormy Debate." The Gleaner. (2001:March 14).

AN EVALUATION OF THE PERFORMANCE OF JPSCo.:
A Regulatory Governance Perspective

In addressing the issue of regulatory governance, this section will take into consideration, the various gaps, as they relate to the level of transparency in the privatization of JPSCo., the issue of a safety net, pricing mechanism, Government's objectives for privatizing the sector, and the effect of the transfer from public to private ownership, as it relates to the respondents' perspectives.

1. Transparency

1.1 The question as to whether there was transparency in the privatization process of JPSCo., remains a major concern. The haste to privatize the sector, did not give credence to a wider opportunity for more bidders. Failure to acknowledge the fiscal/debt problems of Mirant Corporation, led to the company being selected as the most suitable bidder. The company, having filed for Chapter 11 bankruptcy, shortly afterwards, bears such indication. Part of the stipulations for private participation was that the bidders meet the criteria of the NIBJ. The effort to privatize in 1996 did not realize or meet such criteria, hence a postponement in the process. In 2001, these were also not met in totality, yet privatization took place because of the Government's desperate need to relieve the country's debt burden.

1.2 For the first time on March 9, 2004, Dr. Omar Davies, Minister of Finance, disclosed to the Standing Finance Committee of Parliament that part of the sales agreement of JPSCo to Mirant was for taxpayers to pay approximately $900M. This raises the issue of whether the true reflection of the selling price for JPSCo was $201M.

1.3 An increase in electricity, which was applied for by the company was in an effort to recover cost for damage to transmission and distribution lines, as well as the equipment at Bogue Plant during hurricane Ivan on September 10, 2005. This equipment was shipped to Italy for repair, costing approximately $1 billion. This point is put forward to indicate that consumers were not aware that part of the privatization contractual agreement between the Government and Mirant Corporation, was that where there happens to be damage to equipment because of a natural disaster, then the cost incurred should be offset to the consumers. The public was made aware of this on September 6, 2005, when the Opposition Leader, Jamaica Labour Party, Bruce Golding, made this announcement at a press conference. This conference was as a result of an all-island demonstration, sanctioned by the Jamaica Labour Party, because of the simultaneous increase in utility and other facilities, at a time when school fees were due to be paid.

1.4 Restructuring did not take place prior to privatization. This resulted in issues such as (a) human resources, which publicly brought the attention of the Unions); and (b) the removal of the safety net (FTC) for consumer's protection.

1.5 There is also non-transparency in billing computation/charges. Too often, customers, without the acquisition of additional appliances, experience drastic fluctuation in consumption charges. A similar situation escalated at the occurrence of hurricane Ivan, which led the OUR to be conducting investigation of 21,000 accounts that are under the suspicion of anomaly. In the meanwhile, payments reflected on these accounts were put on hold pending investigation. The electricity company, however, proceeded to making disconnections to some of these accounts, as they seek to maintain their slogan "pay or disconnect."

2. Safety Net

The Government of Jamaica realized that successful divestment meant effective regulation, hence an amendment of the OUR in 2000. The OUR Act (Amendment) 2000 has the power and autonomy to act independently in the interest of both the consumer and the utility companies. Unlike the previous OUR legislation of 1995, the current Act of 2000 does not give credence to interference by the Minister or any other political affiliate. Nevertheless, there is an inherent conflict in having the same entity represent both the interest of the consumers and the utility companies together. The findings of this study indicate that this does not resonate well with consumers. Consumers reiterate that the regulatory body acts only in the interest of the utility company. The salient point is that, the removal of the FTC has weakened consumer's protection, and that the OUR, despite its legislative provisions, cannot adequately serve the interest of both the consumer and the utility company **without being accused of bias by either the consumer or the utility company**. This concept of the ideal 'love triangle' goes against the regulatory framework which seeks to strike a sound balance in its guidelines and procedures. The OUR's efforts (through public meetings, press media, internet and one-to-one consultations with consumers) to educate the public on its role and functions, and to encourage the submission of claim/complaints where there is a breach, has many times not being fulfilled, as consumers stick to their stereotype notion that the OUR only serves the interest of the utility companies.

3. Pricing mechanism

The moving away from the use of the rate-of-return and the adaptation of the price cap mechanism has proven to be more useful, owing to

- it being indexed to inflation;
- its potential for greater scope for profit;
- the ability of prices to be adjusted over a base price which is fixed ahead of time (5 years);
- its incentives for efficiency.
- its less likely vulnerability to capture, and not being easily manipulated by regulated firms.

Amidst these pointers, this paper is not in agreement with the licence condition of a ±Q that is applied in the case of JPSCo. Where there is '+Q' this means that if JPSCo happens to exceed the minimum standards set by the regulatory body, they would be compensated. In the case of the '–Q', should JPSCo fall below such standards, a penalty would be imposed. It is only feasible for the latter (-Q) to be applied. Already, the company is subjected to increase in efficiency and quality performance, stipulated by the legislation, being part of the divestment agreement. An incentive for performance that exceeds the minimum standards is not warranted.

4. Have Government's objectives been met?

The Government's objectives for privatizing JPSCo., have somewhat been met, especially in areas of fuel efficiency/megawatt expansion. The absence of these, prior to privatization, led to frequent blackouts throughout the island. After privatization, the installation of an additional 120MW capacity (Bogue Plant), addressed the blackout situation significantly. Today, megawatt capacity continues to increase. The Bogue Plant stands at 217.5MW;[34] the gas turbines have since been improved; and there is an existing wind farm of expected 20MW. While the aforementioned objective has been met, the Government's additional objective of providing electricity at the lowest price is still not taken place. This stand to question whether or not this objective is realistic, taking into consideration the various challenges that the company faces (illegal connections; the constant increase in fuel rate; the growth of inflation). However, should natural gas be provided, and a tax holiday be granted, this could contribute to a more reasonable rate.

Another objective that was not met is with respect to the relieving of the financial constraints on the part of the Government. Up until October 2004, the Government owes JPSCo. $1.5 billion; from which $600 million is for street light.[35]

5. The Effects of the Transfer from Public to Private Ownership: *The Respondent's Perspective*.

The respondents, were asked to rate JPSCo. based on 5 factors that were mentioned on the questionnaire; namely, (1) JPSCo was the same today as it was prior to privatization; (2) JPSCo's performance is poorer now compared to then; (3) the company is performing better than when it was operating under the Government; (4) The company needs to be improved; and (5) not sure of what opinion to make. This was noted in table 1.0 below, and shows that the majority of the respondents believed that the company needs improvement in its provision of service to consumers. There were individuals who rated more than one options.

[34] Stamp, D. (Interview), August 18, 2005)
[35] Davidson, V. "Government Owes JPSCo. $1.5B, $600M for Street Light." The Jamaica Observer, (2004: October 10). p. 5.

Table 1.0 – Respondent's Ratings on JPSCo's Performance

jpsco customer * rate jpsco Crosstabulation

			rate jpsco					
			the same	poorer	better	needs improvement	not sure	Total
jpsco customer	yes	Count	166	112	148	226	50	702
		% within jpsco customer	23.6%	16.0%	21.1%	32.2%	7.1%	100.0%
	no	Count	11	36	8	18	9	82
		% within jpsco customer	13.4%	43.9%	9.8%	22.0%	11.0%	100.0%
Total		Count	177	148	156	244	59	784
		% within jpsco customer	22.6%	18.9%	19.9%	31.1%	7.5%	100.0%

It was realized that the Government's decision to privatize JPSCo. would have been viewed more favourably by consumers if the Government had sought to

- harness the power of the public's opinion;[36]
- make regulation more flexible;[37]
- apply self-regulatory mechanisms;[38]
- choose effective market-based instruments;[39]
- apply regulatory tools that fits well with the policy agenda;
- follow through on its commitment to the country (welfare interest, investment sustainability, effective and transparent policies, economic growth, capacity building and institutional strengthening).

LESSONS LEARNT

The following are the lessons learnt, that may be used to develop further research and policy framework.

i. Policy failure in utility sometimes stems from various factors: (i) a blurred definition between ownership and control; (ii) an over or under expansion of the sector, causing bankruptcy; too much clientelism; (iii) an over-capitalization and (iv) a lack of realistic profit motive. In this sense, skillful regulation may be applied – this would help societies influence market outcome to achieve public purpose; reduce information asymmetry; and win trust and acceptance through fairness and legitimacy of market outcome.

ii. Regulation is not always in the public's interest. There are instances when
    - it makes competition so rigid, thus limiting consumer's choice;
    - it could increase uncertainty cost because of its level of complexity.

    Irrespective of how regulation is designed, if the laws and contracts are inappropriately installed; or if market design is inadequate; and/or regulation is

[36] World Development Report (1997). The State in a Changing World. Oxford: Oxford University Press. (p. 4).
[37] Ibid
[38] Ibid
[39] Ibid

incomplete, this could foster dispute in the privatization process (non-transparency; anomaly in negotiations; and loopholes in trade policy).

iii. Whether or not the electricity sector is privatized, there are issues that contribute to the complexities of rates, quality, social obligations, and financial and administrative operations. Some of these issues are constant increase in fuel/oil prices; aggressive movements in foreign exchange; political intervention; bureaucratic interest; poor governance and anomaly in public policy.

iv. If privatization occurs too quickly, this could harm policy; it could ignore areas for socio-economic development; and increase transaction cost, causing the government to pay more in the long term. This is seen in the loopholes that exists in the privatization policy of JPSCo., resulting in the issues at hand today. On the other hand, should privatization be implemented at a slow pace, any form of opposition to privatization may gain momentum and thwart future gains.

CONCLUSION

The success or failure of electricity privatization is heavily dependent on the legal and political ramifications and transparency between privatization and the changing role of the state. It is also dependent on government's commitment to policies; and conditions for certain social implications. This research has shown that there is tension between efforts to foster efficiency and socio-economic objectives, as these goals are not always readily achievable. They are fashioned from the various ideologies which speak to enhancement in efficiency and improvement in productivity and employment. Sometimes, however, in a haste to achieve the relevant objectives, the government may ignore social obligations (for example safety net) that need to be achieved in light of privatization. While it is expected that privatization should benefit the public, especially through operational efficiency and equity (Shirley and Nellis, 1991; Ramanadham, 1989), this is not always the case because of the size of the State; the culture of the consumers and investor; the technological capabilities; and the financial and operational feasibility of the company.

With regard to the Jamaican situation, the system of a vertical integrated monopoly is not working, and should be reviewed. This research has realized that the current system is not reaping adequate economies of scale, neither is it keep pace with global technological advancement. Based on the foregoing, along with the privatization experiences of other countries, privatization is not always a panacea. It does not always achieve economic efficiency and improve standards of living among consumers. While it has the propensity to yield socio-economic benefits, it sometimes affects the national savings rate, and social welfare. These factors thus lead to question how effective can the government, the investor and the regulator represent the interest of the consumer without possible conflict? Can the consumers' interests always be satisfied regardless of the legislative/institutional framework in place?

Various schools of thought (Neoclassical, Neoliberal, World Bank) speak to privatization resulting in increase in productivity, employment, and efficiency. Efficiency in social welfare cannot always be achieved, owing to the diversity of citizens' needs; availability of resources; and economic feasibility, on the part of the investor. The Government's decision to privatize JPSCo was one of feasibility and opportunity cost. This move results in a panacea in some communities (more access, less blackouts, meeting demand, and megawatt expansion), but at the same time, cannot meet the demand for a universal service obligation and public good.

Universal Service Obligation

The tenets governing a Universal Service Obligation (USO), incorporates the scope for the provision of access to everyone. It should be posited that neither the License Agreement (2001), the Jamaica Energy Sector Policy, the OUR Amendment Act (2000), nor the NIBJ Information Memorandum for Privatization of JPSCo gives any indication that it is compulsory for the utility company to make provision for a USO. The License stipulates that it shall not be obliged to undertake extension of distribution lines to rural towns or communities unless the OUR is satisfied that (i) the extension can be undertaken without disturbing the progress of the development programme; (ii) the finance is available to the licensee at a reasonable cost; (iii) the potential of the extension of services for producing revenues in relation to the capital outlay is involved; (iv) the service to be provided can be absorbed within the total revenues of the licensee produced by the level of electric rates then existing without reducing the rate of return which the licensee may receive after taking into account any limitation of prices which may be imposed by the OUR.[40] In looking back at the era of the dominance of the Morrisonian model, the statutes also did not make provision for a USO of monopoly. The injection of a USO would not necessarily eradicate illegal connections, but could possibly enhance social welfare, at the expense of the economy and the profit of the investor.

Public Good

Can privatization or the Government afford to deliver electricity as a public good in principle and practice? Despite the fact that electricity is used to enable and advance entrepreneurship, technology, education, good health, and environmental preservation, it is expensive and cannot always serve all, especially where it is not beneficial in economies of scale and economies of scope to the investor. This, however, does not give credence to the equality principle, that there should be equal distribution of goods and services.[41]

[40] Jamaica Ministry of Utility and Energy. The Jamaica Public Service Company Limited All-Island Electricity License (2001). (op. cit). Condition 26(6). p. 302M.
[41] Rawls, J. 'Justice and Fairness' in the Philosophical Review, 67 (1958). Cambridge: Havard University Press (p. 577).

Impact of the transition on the four players

1. **The consumer –** The frequent concerns of consumers regarding electricity are access, price, and quality service. On the point of quality service, the respondents who reside mainly in the rural vicinities of the island complained about blackouts, which result in damage to their appliances. In terms of access, although the Rural Electrification Programme (REP) makes additional provision for service in rural areas (resulting in 92 percent overall improvement in access), there were subjects who indicated various reasons for not having electricity available to them. These reasons are outlined in table 2.0. In addition, there are some communities/residence that have never experienced electricity. These include Aleous Valley in St. Thomas; Chesterfield in St. Mary; Chattau in St. Elizabeth; and Rosewell (not all) in Clarendon.

Table 2.0 – Cause for No Electricity Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unaffordability	68	6.8	60.7	60.7
	no need for service	13	1.3	11.6	72.3
	difficult access for JPSCo	17	1.7	15.2	87.5
	Others	14	1.4	12.5	100.0
	Total	112	11.2	100.0	
Missing	System	888	88.8		
Total		1000	100.0		

In adding to the aforementioned concerns, customers also face (especially under a monopoly regime) inefficient service, inequality, monopoly abuse. These are sometimes, effects from the government trying to streamline the state through private participation. In the case of JPSCo., the tremendous increase in electricity rate since divestment, is conflicting to the views of the Neo-Liberalist, and the Neo-Classicalists that privatization lowers prices, and improves efficiency and productivity. Zhang also postulates that electricity privatization, in particular, provides low prices.[42] However, a more realistic view point put forward by Tenenbaum (1995), and Laffont and Tirole (1993), is that the effects of regulation on electricity prices, or allocative efficiency is difficult to predict because different regulatory policies could be adopted by different countries, thus producing divergent results.[43] The first big task of new regulators in developing countries is to reduce or even remove subsidies to domestic users and align residential prices with supply costs.[44] Other social concerns expressed by consumer/customer during the collection of data were:

a) poor quality electricity service (power outage/a sudden fluctuation in the quality of electricity), resulting in damage to facilities;

[42] Zhang, Y., et al. (2002). Electricity Sector Reform in Developing Countries: An Econometric Assessment of the Effects of Privatization, Competition and Regulation. Working Paper Series, Paper No. 31. Manchester: Centre on Regulation and Competition (p. 8).
[43] Tenenbaum (1995) in Zhang, Y, et. Al. (2002). op. cit. (p. 10).
[44] Laffont and Tirole (1993), in Zhang, Y., et al. (2002). loc. cit.

b) anomaly in electricity bills and defected meters not being investigated by the utility company;
c) overcharges in some instances were blatant, as there were customers with very little or no appliance whose bills were within the range of $5,000 to $10,000 per month, with no indication of balance brought forward or any additional appliances acquired;
d) inaccuracy and untimeliness of bill, resulting in the dissatisfaction of electricity bills. In also looking at the annual report of the OUR (2003/2004) consumers (households and commercial enterprises) were most satisfied with the National Water Commission's (NWC) bill, and least satisfied with that of JPSCo's.,
e) poor customer service;
f) request for maintenance of some electrical lines being ignored;
g) asymmetric information, especially with respect to queries.
h) Socio-economic implications:
    - Education – Limitations on attending evening classes because of fear of safety.
    - Health – Lighting from candles and lamps has an impact on the eyes, and sinus.
    - Income – Limitations on engaging in over-time duties because of fear for safety. The issue of safety was indicated mainly among those in the parishes of St. Catherine, St. Andrew, St. Ann and Kingston.
    - Water – The operation of some main water pumps are dependent of electricity. Therefore, whenever light goes, the water supply goes with it (especially among residents in the parishes of St. Andrew and St. Catherine).

While these conditions resulted in consumers/customers rating the performance of JPSCo. (indicated in table 1.0), it should be postulated that a company's performance is usually measured within the framework of productivity and efficiency. However, the respondents did not consider the utility company to be efficient in its service provision. This leaves concern as to whether the Government, in privatizing JPSCo., has managed to meet its rationale for a more efficient service. Of course, this situation is not unique to the Jamaica. In the case of the United Kingdom, for example, privatization was sometimes criticized as 'a policy in search of a rationale'[45] and put down to political dogma.[46] Most governments and commentators accept that the major rationale for privatization is that it is expected to improve the efficiency (that is, reducing costs and/or prices) of commercial enterprise like electric utility,[47] but this is not always achievable.

[45] Kay, J. and Thompson, D. (1986). "Privatization: A Policy in Search of a Rationale," Economic Journal, vol. 96, pp.18 – 32; in Pollitt, M. "The Impact of Liberalization on the Performance of the Electricity Supply Industry: An International Survey." http://www.oxfordenergy.org/JELSAMP.PDF. (p. 12).
[46] Pollitt, M. "The Impact of Liberalization on the Performance of the Electricity Supply Industry: An International Survey." http://www.oxfordenergy.org/JELSAMP.PDF. (p. 12).
[47] Ibid

2. **The worker** - Unemployment, wage reduction, culture of new management, and an imbalance between manpower and technology, create an organizational structure that may not conform readily to changes. According to Martin (2003), the impact of privatization on the worker lies in areas such as (a) union rights and representation (reduced commitment to collective bargaining; and tendency to local bargaining and individual pay determination); (b) pay, terms and conditions (less influenced by collective bargaining and more influenced by market conditions; loss of wage benefits including pension rights); (c) work intensity and flexibility (less security and higher work rate for those remaining or finding new jobs); (d) job loss[48] (in Jamaica 5,511 in electricity – this includes 12.5 percent of the workforce which volunteered redundancy). Where the investor is from a completely different culture, and perhaps embarks upon a form of new right thinking in its approach to managing paradigm shifts, the worker may not be able to keep pace.

3. **The government** – There is concern by many scholars as to how well can privatization replace government functions? Also how much has privatization changed the definition of the role of the state? The World Bank suggests that a central difficulty in redefining the state's role is that the ground beneath governments' feet is always changing.[49] This is in reference to global economic and social forces which have changed the prevailing notions of the state in terms of its provision of public goods and promoting economic and social development.[50] A loss of autonomy in the provision of public goods and socio-economic development, tend to create a blurred line between the investor's portfolio and that of the government, based on contractual arrangement; an imbalance in power and resources; and the type of institutional framework in place. Should the government sell itself short in these areas, this would inadvertently compromise the interest of the consumer (removal of the FTC), thus result in the disappointment of the consumer, and the possible thwarting of socio-economic enhancement. Within the context of regulatory governance, it is the government's responsibility to ensure commitment, autonomy, social control and cohesion, without at the same time, allowing state intervention to cause any failure of the market. If privatization is the only perceived panacea for the state, then the government should install proper regulatory, management, control, and policy framework so that privatization can work better for the poor.

   The question as to whether government can do nothing right remains mind boggling, not only for the economic rationalists/public choice theorists,[51] but also in the realm of this study. This is to say that enough efforts have not been made to sanction against the prevalence of a 'freeness' mentality which hangs loosely among certain classes of the Jamaican society - resulting in the high level of illegal connections. Much of this

[48] Ibid (p. 4).
[49] World Development Report (1997). The State in a Changing World. Oxford: Oxford University Press (p. 25)
[50] Ibid
[51] The Public Choice and Economic Rationalism theorists contend that government can do nothing right – assuming that politicians, bureaucrats, citizens and states, act solely for self-interest, using their powers and the authority of government for their own selfish ends. Todaro, M (1997). Economic Development (6^{th} ed). London: Longman. (p. 86).

is embraced by political tribalism, especially in the case of the garrison communities. This paper is not turning a blind eye to the mechanism for improvement - specifically: the implementation of the REP since 1975; and the Urban Inner-city Electricity Programme, since about 2003. A more serious measure (increase in fine and/or terms of arrests) needs to be taken in this regard.

4. **The investor** – The new investor usually has to contend with issues such as consumer's abuse of the monopoly industry; technical and non-technical losses; bad debt from unpaid electricity bills; conflicts in culture and operation. In the case of the average Jamaican consumer, there is ignorance regarding the need for the investor to financially survive in order to enhance efficient performance in service delivery. The vying for increase in electricity rates is an indication that costs (non-technical and technical losses) need to be recovered, so as to fulfill the social obligation of meeting electricity demand through higher megawatt capacity.

One of the challenges for the investor is where a vast number of consumers engage in electricity theft. This is referred to as a social and productivity benefits,[52] despite its propensity to breakdown capacity and weaken institutionalism through its imposition of losses on both the investor and the legally connected.

It is not only those at the bottom of the socio-economic ladder who engage in illegal connections, but also individuals who are financially capable. Usually, this matter is settled out of court, thus giving the impression that it is only residents of the rural and inner-city communities who engage in such illegal actions. This is perhaps because 'throw-ups' (figure 1.0), unlike the tampering/bypassing of meters are more visible and are usually dealt with openly where the incidents of arrests are seen on national television.

Figure 1.0 – An example of a 'throw-up' – a common form of electricity theft.

Source: http://www.jpsco.com/site.nsf/web/electricitytheft.htm, accessed September 12, 2005.

[52] Brewster, A. "Caribbean Electricity Restructuring: An Assessment." Public Administration and Development 25, p. 9 (2005). Peru: Inter-American Development Bank. www.interscience.wiley.com.

In 2004, steps against the illegally connected (figure 2.0), resulted in 121 arrests and 14,208 disconnections.[53] In the previous year, JPSCo., with the company of police personnel made 44,782 disconnections during 231 raids island-wide.[54]

Figure 2.0 - Removal of illegal power lines (below surface) by a JPSCo member.

Source: http://www.jpsco.com/site.nsf/web/news-9.htm

Table 3.0, defines the legal, illegal and semi-legal[55] connections among the respondents. A challenge of this nature imposes approximately 9.5 percent loss to the investor. According to the Jamaica News Network report of September 22, 2005 at 6:00 pm., JPSCo. suffers $250M loss annually from electricity theft. This does not include the 10 percent technical loss which the company encounters, and is allowed by the OUR 15.8 percent.

Table 3.0 – Legal, Illegal and Semi-Legal Access

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Legal	824	82.4	88.2	88.2
	Illegal	50	5.0	5.4	93.6
	semi-legal	60	6.0	6.4	100.0
	Total	934	93.4	100.0	
Missing	System	66	6.6		
Total		1000	100.0		

[53] Television Jamaica, News Report (7:00pm), May 27, 2004
[54] Power 106, News Report (6:00 pm), March 26, 2004.
[55] This is in reference to persons who connects to customer's infrastructure, without the knowledge of JPSCo., but in agreement with the customers, with whom they share the bill.

Loss does not only take place within the purview of illegal connections, but also where outstanding payments for electricity is not being honoured by customers, and has to be written off as bad debt after a while. These result in a slower move towards productivity and technological advancement, thereby asphyxiating capital injection.

RECOMMENDATIONS

Standards for Divestment: What is the correct approach?

Below are the steps in the privatization process by the NIBJ. This paper believes that these were not fully realized, as other important factors were not considered.

1. Financial review of the enterprise
2. Identification of means of removing impediments to divestment
3. Valuation
4. Recommendation of an appropriate method of divestment
5. Invitation of bids through advertisement
6. Screening of prospective investors
7. Negotiations with short-listed applicants
8. Final recommendation to cabinet for approval
9. Supervision of legal and other arrangements necessary to complete the transaction.

In adding to these criteria, the other factors which should be considered are:

- Conduct a social cost benefit analysis.
- Citizen's empowerment (a bonding between the citizens and the state).
- Investigate financial status of the bidder.
- Capture the bidder's commitment outside of a contractual arrangement.
- Objectives for privatization should be examined carefully, as this is not always achievable, owing to the time, pace, and climate during implementation.
- Remove political objectives and create a clear vision for divestment.
- Make clearly, the line of authority between the government and the investor, in the interest of the consumer.
- Sound regulatory framework and public policy should be installed as a proactive measure against failure.
- Incorporate a clear definition of regulatory governance (credible incentives, rules, transparency, accountability, autonomy, monitoring, and capacity) and regulatory content (pricing laws, pricing methods and structure, access and competition), so as to remove or avoid principal-agent problems, asymmetric information, and/or high transaction cost.
- Ensure that the incentives to discarding old policies, and correct weak institutions, are stronger than the incentive to keep same. In so doing, new economic parameters for growth may be defined.

Although the arguments for divestment are based on reason of government and/or market failure, government need not fail if there is proper budgetary forecasting, and technical

know-how of management taking proactive measures to manage the present and the future of the SOE, within the proper framework of transparent financial reports. Where the possible failure of the public sector is realized on time, efforts could be made to rationalize and trim the sector, making it more macro and micro-economically viable, instead of having to divest. Part of the failure also is brain drain on the public sector in developing countries, also workers have become conscious of the possibility of not being adequately remunerated.
Divestment is not a panacea, neither is it the total answer to social welfare, macro and micro-economic problems. It includes risks such as inconsistencies between policy and culture; institutional weakness; increase in cost of living; an unstable and political climate; and bottlenecks in the management of the reform/privatization process. It should be borne in mind that the divestment challenges faced by this executive management team under the management contract was the destruction of one of the plants in Old Harbour, thus presenting significant losses to a company. This situation hived high electricity demand, a shrinking reserve margin, hence a setback in the performance of the sector. The Government's decision to divest at that time was understandable, especially (according to Shirley), having received the ultimatum from the donor agencies that divestment should take place for a loan to be obtained to install a new plant.[56] The consensus therefore, is that divestment had become an absolute necessity, as neither the executive management nor the Government had the resources to meet the demand for an efficient electricity service.

Should the electricity sector JPSCo. be market liberalized, three factors may be considered: Firstly, the exemption of the FTC from consumer protection may be restored. The CAC would also be incorporated, but with less duplication, especially with respect to the functions of the OUR. Secondly, the OUR could focus more on ensuring that the issues of financing, investing (a reflection of the prices that are set), and amortizing of debt (reducing constraints on the public purse). Thirdly, the use of the price cap mechanism (RPI-X) should be maintained, because where competition is not robust, then the stringent on the 'X' could be upgraded and be able to determine the effect on actual and potential competitors. Besides, this approach has been proven to be more efficient and is used by Britain, Chile, Argentina, and now Jamaica. It is also most likely to foster growth within various arms of the competitive environment.

Under a liberalized market, there would also be changes in the way bills are calculated and electricity is delivered. The respondents of this study, as well as the Jamaican consumers, are frequently disgruntled about billing computation and estimated charges, not being a true reflection of their consumption. Some meters are inaccessible to JPSCo meter readers. This study recommends that a form of prepaid meter be launched, similar to that of prepaid cards for telephones. Having investigated whether this situation existed, it is noted that in Ghana, a swipe card type of system exists within the electricity system which is stated-owned inclined.[57] This enables persons to monitor the use of their service intake. Whenever the value of the card is depleted, there would be no electricity unless value is restored. Further recommendation from this study is that meter should be read

[56] Shirley, G. (Interview), April 7, 2004).
[57] Ofori, M. (Interview). May 2, 2005.

from the JPSCo office, so as to avoid any form of physical reading, and bill estimation. Physical reading puts JPSCo workers at risk, especially where the areas are considered volatile.

Based on the experience deriving from the electricity privatization, it is imperative that policies (be it competition or monopoly), have a clear distinction between the roles and functions of sector/industry ownership management and the State. The legal framework and practices should be separate and be properly streamlined.

Social Welfare Development and Efficiency

This section speaks to two crucial factors: blackouts, and other sources of energy.

Blackouts: One of the common complaints of rural residents is blackout. Overall, there has been significant improvement since privatization, especially in the corporate areas of Kingston, St. Andrew, and St. Catherine. In order to ascertain the risk of blackout, certain factors should be examined: its frequency; length of period, and costs. While the cost of blackout is not easily measured. The risk involved is usually similar irrespective of the size of the blackout.

Whenever the matter of illegal connection is brought to court, and persons are charged a fine, this should be paid over to the utility company for their loss, and be redirected to the consumers, as they (the legally connected) pay $12.5M per annum for recovery of loss from electricity theft. The fine charged in court should **not** be paid to the Government, because it is the said Government, and its political representatives, who protect residents of the garrison communities from sanctions against illegal connections. In addition, the sum collected as out of court settlement, from those at the top of the socio-economic ladder, who engage in illegal connection, should also be redirected to consumer's accounts that are legally connected. There is concern as to the transparency of the funds collected in this regard. The consumers' bills should also show the amount of percentage deduction made towards electricity theft.

Other sources of energy: The Government should make greater effort to implement, as well as encourage other sources of energy such as solar, biomass and biogas.

Self regulation

It should be made mandatory that citizens police their utilities in terms of security, metering, and policy standards, thus becoming sensitive to the various legislations which represent their interest (for example, the guaranteed standard). Consumers should also not ignore their rights for a public inquiry of the contractual arrangement between the Government and Mirant Cooperation – bearing in mind that if reform is flawed, this could result in a crisis (similar to the California case) of high transaction cost and negative externalities.