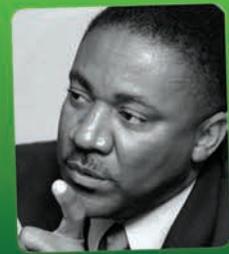


ENERGY

STRATEGIC DEPENDENCE ON LNG IS BAD POLICY



Government's proposed LNG project is fraught with too many uncertainties including source of natural gas, absence of end user take off agreements and financing arrangements. Government should not be determining the fuel source of preference; rather, policy should promote diversification of sources. And government should initiate a renegotiation of the JPS licence with a view to opening up the national electricity grid to more energy providers.

Phillip Paulwell

Our lack of competitiveness and low efficiency are due largely to the high cost of energy, in particular, electricity. The current price of US\$0.30 cents per kilowatt hour is exceedingly high and will continue to rise as the cost of crude oil increases.

With the recently imposed ten percent GCT on electricity we have reached another major crisis situation. In many instances it is becoming a cheaper option for businesses to exit the public grid and run their own private generators.

The presentation of an energy policy has taken too long for such an important area of our lives. The Ministry Paper was tabled in November 2009 and it has taken one year for Parliament to grant its approval. All previous Government of Jamaica energy policies dating back to the mid-1990s had, as their central impetus, the establishment of a broad diversification strategy to address the impact of economic shocks occasioned by geopolitical developments, energy market volatility and unpredictable price movements which triggered unstable macro-economic conditions in the local economy.

The policies, including the present one, have been geared to balance issues of energy demand and supply, energy security, conservation, curtailment of our dependence on imported petroleum energy resources and the development of renewable technologies. The onset of significant price spikes in the cost of oil and gas signalled that more aggressive measures be pursued by the government to mitigate the negative impact of volatile energy markets on economic output and standards of living.

To date government's efforts at entrenching the principle of energy diversification can, at best, be described as muted and uncertain, with little achieved in terms of implementation of broad based initiatives to bring tangible benefits to the energy consuming public. As a consequence, both private and commercial users of energy have experienced debilitating increases in expenses to cover energy costs, pushing them to the brink of business paralysis or outright financial failure.

Up to 80,000 jobs have been lost in the economy as layoffs and redundancies are typically applied as the first acts of financial relief for businesses. It is within this context that we believe that diversification of the energy complex should focus on the exploitation of renewable energy resources with indigenous potential, rather than replacing an established dependency on one imported energy resource oil, with another, LNG.

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Recently, Dr. Raymond Wright, consultant to the Petroleum Corporation of Jamaica, cautioned that Jamaica would have to turn to renewable energy as its main source of electricity by 2015 when "the price of gas is expected to increase." This begs the question: What is the basis for creating a new dependence on gas, a finite resource, which in its liquid form, LNG, is being proposed as the magic solution to lowering the cost of utility power?

The project is fraught with too many uncertainties. Its three main and critical components are yet to be finalized:

- (a) *The source of the LNG is not known. It is reckless to pursue such an expensive venture unless there is an upfront and ready supplier of the gas, who is willing to commit to a long term arrangement with predictable prices. That's the reason our administration had signed MOUs with the Governments of Trinidad and Tobago and Venezuela to secure gas supplies. We were relentless in pushing for the activation of these MOUs as, without such a reliable source of gas, the project is non-viable.*
- (b) *As a result of the above, end user take off agreements have not been secured. It is clear that the bauxite companies are not going to give commitments unless they are told where the supplies of gas are coming from and given a realistic basis for determining the price.*
- (c) *As a result of (a) and (b) the mobilization of capital to fund the high upfront infrastructure costs has not yet been achieved.*

These are not the only concerns. The project, mired in controversy from the outset on issues of transparency and probity, appears to lack the requisite in-depth analysis and detailed evaluation demanded by its scope and complexity. Comparing the cost of oil relative to the current barrel equivalent of gas is cold comfort as future higher energy prices plus capital recovery, handling and delivery costs will severely challenge the notion that there are real long term cost advantages to the use of LNG.

There are other important factors to be considered. The planned expansion of the Petrojam Refinery, if not completed to coincide with the introduction of LNG, will seriously impact the viability of Petrojam due to the loss of heavy oil sales to JPS. There is reason to believe that project estimates do not include end user burner tip investments for receiving and handling LNG. An estimate to convert existing JPS generation equipment is of the order of between US\$400 ▶▶

million and US\$600 million. We question the lack of attention to the creation of an appropriate regulatory framework for LNG given its planned dominant role in the future. New fiscal arrangements will be required to ensure that the government will be able to continue to play its role in the development of its energy policy.

The government should no longer be determining the fuel source of preference but rather, guided by the diversification of sources under and a strict adherence to our environmental standards. Under such a policy, providers should decide for themselves on whether to use natural gas, nuclear, coal, pet coke, diesel, heavy fuel oil, or renewable sources. Let them all contend!

The good news is that, in relation to most of the fuel sources, the infrastructural requirements are becoming miniaturized. Smaller scale facilities are becoming increasingly available and feasible rather than the more expensive large-scale single plants of the past.

In all of this, the greater deployment of renewable sources must be given priority. The target of achieving 20% of our energy from renewable sources by 2030 is too modest and conservative – let us push instead for 30%.

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Within the current energy paradigm, renewables are not competitive on a strict financial basis. This is chiefly because the full economic cost of conventional electricity sources are not incorporated in their market price and renewables make use of newer technologies that have not yet achieved optimal economies of scale or learning. These dynamics are changing. Government has to kick start the renewable energy sector as renewables have lower environmental impacts than fossil fuels and renewables enhance energy security. In the meantime, the following strategy should be pursued:-

1. Immediately mandate the implementation of a net metering system.
2. Implement a feed-in tariffs system that mandates the JPS to

purchase renewable energy sources at a fixed, favourable price. I recommend the actual cost of supplying the energy plus a 15% premium to incentivize investors.

3. Finalize and implement a Carbon Credit Policy that will provide financial benefits for renewable projects.

THE CASE FOR RENEGOTIATING THE JAMAICA PUBLIC SERVICE COMPANY LICENCE

The most fundamental feature of this new policy deals with what is described in the government’s policy document as, “A modernized and expanded energy infrastructure that enhances energy generation capacity and ensures that energy supplies are safely, reliably and affordably transported to homes, communities and the productive sectors on a sustainable basis.”

The provisions are:-

- (i) To unbundle generation and transmission and distribution, creating an energy efficient electricity structure.
- (ii) To unbundle existing vertically integrated industry structures and establish and implement common carrier and common access principle where demonstrated to be technically and economically feasible.

The Minister [of Energy and Mining], in glibly referring to these sections, gave the impression that it would only relate to issues of net metering, wheeling etc and not a fundamental change to introduce real competition to the generation and distribution of electricity. But that is exactly what it is. This raises the question: How do we go about liberalising the grid and achieve maximum benefits?

We are faced with the same scenario today in relation to electricity now as we did 10 years ago with telecommunications, yet we were able to liberalise the telecoms sector creating competition and generating enormous economic benefits. Table 1 shows the similarities of the arguments for maintaining the status quo then and now.

These are important issues but, as demonstrated a decade ago, not insurmountable. So we have to handle this matter with great care but it has to be addressed now with the following objectives: ►►

TELECOMS	ELECTRICITY
Valid licences which guarantee mon status to 2038	Valid licences which guarantee monopoly status to 2021
Telecoms for Jamaica is a natural monopoly	Electricity distribution in Jamaica is a natural monopoly
High prices/poor customer service	High prices/poor customer service
Entirely Private (100%)	Government owns 20%
Technological explosion	Technological explosion
Business opportunities stymied	Business opportunity stymied
Operation of the Essential Facility Doctrine under the Fair Competition Act (FCA)	Operation of the Essential Facility Doctrine under the Fair Competition Act (FCA)

Table 1

- (i) *Government should initiate a renegotiation of licence having regard to above. If not, then the technology is going to enable individuals to circumvent some of the provisions of the licence. Government owns it owns 20% of company so it has some leverage.*
- (ii) *JPSCo should not to resist but work towards getting a reasonable deal; there will be great public resentment if JPSCo resists too strenuously.*
- (iii) *The aim is not to buy back the distribution grid; it is to make it accessible to new players at a reasonable rate of interconnection. (Unlike the telecoms scenario JPSCo grid will maintain its viability and usefulness).*
- (iv) *As a first step, even before the grid is opened, the Government must intervene and establish an independent body that will be responsible for the fair and even handed dispatching of energy to the grid; it cannot continue under the control of the JPSCo.*
- (v) *A reasonable interconnection fee and technical specifications must be determined and applied evenly to all the players.*
- (vi) *Government must not mandate a fuel source; let the market decide subject to the approval processes. Many of today's fuel sources can be implemented in smaller units rather than by mega projects.*
- (vii) *Implement a Smart Grid System for greater efficiency.*
- (viii) *Mandate Net Metering and Wheeling.*
- (ix) *Allow JPSCo to implement Broadband over Power lines and grant them a Telecoms Licence.*

Competition is good for business. It is great for consumers especially our business consumers. I can't help but seeing the injustice in the requirement of JPSCo insisting that developers of major housing projects have to fund totally the cost of getting JPSCo infrastructure to the location even though JPSCo will derive many customers from the development. ■

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