

**American Chamber of Commerce of
Jamaica**

Forum on Energy

**Regulatory Environment and Competition
in the Power Sector**

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Factors driving the cost of electricity

- **Dependence on expensive imported fuel.**
- **Fuel accounts for more than 60% of electricity cost.**
- **Old plants have high heat rates and are inefficient.**
- **System losses in Jamaica are high.**

Industry Structure

- **Integrated Electric Utility.**
- **JPS has Exclusivity over Transmission and Distribution.**
- **There is competition for addition of new generating Capacity between incumbent and IPPs.**

Generation Capacity

Installed Capacity:	
Renewable	67.1 MW
Automotive Diesel Oil	279.5 MW
Heavy Fuel Oil	517.4 MW
TOTAL	864.0 MW
Peak Demand	617.0 MW
Reserve Margin	25.0 MW or 4%
Firm Capacity Over 20 years old	483.0 MW
Projected 2015 Installed Capacity	940.6 MW
Projected 2020 Installed Capacity	1,271.2 MW

Cost Components (OUR Est.)

Sales	3,216 GWh	
Revenue	102.9 J\$B	
Average Electricity Price	32.41 J\$/kWh (US¢/kWh = 37.68)	
	J\$M	J\$/kWh Sales
Taxes (total)	9,113	2.83 (8.7%)
Non-fuel	1,524	0.47 (1.4%)
Fuel	1,947	0.61 (1.9%)
GCT	5,592	1.74 (5.4%)
	J\$M	J\$/kWh Sales
Cost of Fuel	66,377	20.64 (64.5%)
Non Fuel Cost	36,540	11.36 (35.5%)
	J\$M	J\$/kWh Sales
Dollar Value of System Losses	14,787	4.60 (14.2%)
Heat rate Adjustment Cost	2,087	0.65 (2.0%)
	J\$M	J\$/kWh Sales
Fuel Cost Savings (CET Removal)	3,370	1.05 (3.2%)
Fuel Consumed	6.57 Million Barrels	

Competition in the Electricity Sector

- **Unlike the telecom electricity T&D needs physical power lines to deliver service.**
- **Self generation is costly due to economies of scale.**
- **Competition is achieved at the entry level through competitive bidding for generation capacity.**

Regulation is a Proxy for Competition

- **Where there is no competition, Regulation is necessary.**
- **Regulator uses a price cap. For non-fuel portion, in Jamaica Performance Based Rate Making mechanism (PBRM) is used.**
- **The fuel portion must meet certain requirements before it is passed through to the customer.**

How to Reduce Costs?

- **Costs can be reduced by:**
 - **introducing fuel diversification and renewables;**
 - **procuring fuel through competition;**
 - **reduce system losses;**
 - **replace old plants with modern plants; and**
 - **Separate accounts.**