



## **OPERATOR OF THE NIGERIAN ELECTRICITY MARKET**

# **Report On The Nigerian Electricity Market Operations** **January – December 2011**

**By**

**The Market Operations Sector**  
**(Transmission Company Of Nigeria)**

**November, 2012**



## OUR MISSION

*To be an Efficient Administrator of the Market Rules, in a manner that assures credibility and promotes Competition and Stability in the Nigerian Electricity Market*



## OUR CORE VALUES

- Independence
- Transparency
- Reliability
- Efficiency
- Accountability

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## **EXECUTIVE SUMMARY**

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As the Market Operator (MO) of the Nigerian Wholesale Electricity Market, our core functions include reporting on Market Operations, Evaluating the improvements and competitiveness, Identifying market flaws, and Recommending improvements to the Electrical Market Design. The 2011 Nigerian Electricity Market Operations Report presents our assessment of not only the operation and performance of the Nigerian Wholesale Electricity Market administered by the Market Operator in 2011, but also the electricity transmitted and distributed by the whole Nigeria Electricity Supply Industry.

The Market Operator operates a wholesale market to satisfy the electricity needs of domestic consumers connected to the main electricity grid of Federal Republic of Nigeria, and some International Consumers in Togo/Benin and Niger Republics.

This Executive Summary provides an overview of key market operations and highlights of the electricity market.

### **Key Generation Figures**

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Average Total Available Generation Capacity: **4,332.15 MW**.

Energy Generated by Federal Generators and Grid Independent Power Producers (IPPs): **27,523.63GWh**.

The Hydro/Thermal mix was **24:76**.

The FG/IPP mix was **67:33**

Energy Injected into the Grid: **26,660.60GWh**.

Generation Internal Losses: **863.04GWh (3.14%)**.

### Key Transmission Figures

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Energy Injected into the Grid: **26,660.60GWh**

Energy delivered from the Grid: **23,603.78GWh**

Energy Losses: **3,056.82GWh (11.47%)**

### Key Demand Figures

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Energy received from the Grid: **23,603.78GWh**

Energy Sold to International Consumers: **1,715.4GWh**

Energy Sold to Large Power Consumers: **252.99GWh**

Energy Sold to Distribution Companies: **21,635.4GWh**

### Key Distribution Companies Figures

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Energy Purchased from the Grid: **21,635.40GWh**

Energy Purchased from Embedded Generators: **304.85GWh**

Energy Sold to captive market: **18, 653.50GWh**

Percentage of Customers with Pre-Payment Meters: **16%**

Energy Losses: **3286.82GWh (15%)**

### **Key Financial Figures**

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Energy Invoiced to Distribution Companies: **N199,714.92Bn**

Energy Payments by Distribution Companies: **N117,192.61Bn**

Annual Market Performance (Collection): **58.68%**

### **Recommendations**

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Reduction of technical and not technical losses for Generation, Transmission and Distribution Companies.

Enhance the Market Performance or Collection Efficiency.

Develop Power Purchase Agreements among Players.

Complete Grid Metering Gaps and New Connections, assuring Grid Metering Compliance.

Apply Best Practices for all the Nigerian Electricity Supply Industry.

Enhance Accountability and proper Market Funds Governance.

## **Market Operator**

## **INTRODUCTION**

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This report is an account of the activities of the Market Operator for the year 2011.

It also highlights the commercial activities of the Nigerian Electricity Market during the year. It is presented in six sections, as follows:

- Administration of the Trading Point Metering and Management of the Metered quantities.
- Administration of Market Settlements (Billing and Charges).
- Administration of Market Collections and Payments.
- Settlement Administration of the Independent Large Power Consumers.
- Settlement Administration in respect of the PPAs and International Connection Agreements.
- Utilization and Payments for Gas.

The report starts with the metering systems at all the trading points in the network, including acquisition of the metered data, for the period in question. It addresses the market settlement activities, including the invoices and the credit notes, during the year, in respect of the participants with negative energy balances and those with positive energy balances, respectively. The report also addresses issues of payments by the participants invoiced and payments to the system participants which received credit notes from the Market Operator during the year.

Market settlement reconciliations, involving both energy and revenue are also highlighted in the report.

## **1.0 ADMINISTRATION OF THE TRADING POINT METERING AND MANAGEMENT OF THE METERED QUANTITIES**

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### **1.1 Inter-Face Metering**

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Table 1.1.1 (pg 34) shows the status of the trading point metering system in the wholesale Electricity Market as at the end of the year 2011, while table 1.1.2 (pg 35) shows grid metering activities during the period.

From table 1.1.1, (pg 34) it can be seen that there were Seven hundred and twenty seven (**727**) trading points nation-wide. Fifty-one (**51**) out of this number were generation/transmission interface points, where the generators, including the IPPs, inject energy into the wholesale market. Six hundred and twenty five (**625**) were transmission/distribution interface points, where distributors, including the independent large power consumers, extract energy from the wholesale market. Forty-six (**46**) were Inter-Disco boundary points on shared feeders (among two or more Distributors), while five (**5**) were the interfaces for export trading.

Six hundred and eighty eight (**688**), representing **95%** of the trading points have been metered with intelligent electronic meters while thirty-nine (**39**), representing **5%** of the trading points were yet to be metered.

The unmetered points were mainly the Inter-Disco boundary points. Metering of these points is currently going on.

## **1.2 Generation Capacity Availability**

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Table 1.2 (pg 37) shows the capacity availability of the generators during the year. The average total available capacity for all the generators was **4,332.15MW** with about **2,802.08MW** or **65%** of the available capacity contributed by the Federal Government owned generators, while **1,530.06MW** or **35%** came from the IPPs. Also, the table shows that average hydro:thermal capacity mix during the year was **24:76**. This shows a significant deviation from 2010 mix of **28:72**. This is because there was an increase in available capacity from some, thermal stations like Afam, Egbin, Geregu , Sapele, Shell (Afam VI), Ibom Power, Trans Amadi and the introduction of Sapele NIPP and Olorunsogo NIPP in 2011. Delta, Omotoso, Olorunsogo, AES, Agip and the hydro stations recorded a shortfall in capacity in 2011. Ajaokuta didn't generate at all in 2011.



Fig's 1.2.1 and 1.2.2 (pg 38) are the pie charts showing the FGN-IPP capacity (MW) contributions and average thermal-hydro capacity (MW) contributions, respectively.

### **1.3 Energy Generated**

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Table 1.3 (pg 39) shows the total energy generated by all the generators connected to the grid (State-owned generation companies and the IPPs) during the year. Also fig's 1.3.1 and 1.3.2 (pg 40) are the pie charts representing the relative generation contributions of the FGN owned plants and the IPP plants, and those of the hydro and the thermal plants, respectively.

From the table, it can be seen that a total of **27,828,479.67MWh** or a monthly average of **2,319,039.97MWh** was generated during the year. The FGN generators contributed **18,465,115.52MWh** or **66%** of the total energy generated while **9,363,364.15MWh** or **34%** came from the IPPs. The hydro: thermal mix was **24:76**. Also the Hydro plants were run for more hours than the thermal units during the year. Gas availability to the FGN thermal plants contributed significantly to this lower capacity load factor.

## **1.4 Energy Injected into the Grid**

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Table 1.4 (pg 41) shows the quantities of energy sent into the grid by the different generators during the year. Fig's 1.4.1 and 1.4.2 (pg 42) are the pie charts representing the relative energy contributions of the FGN owned plants against the IPP plants and those of the hydro against the thermal plants, respectively.

From the table, the total energy injected into the grid during the year was **26,660,598.59MWh** or an average of **2,221,716.55MWh** per month, with the highest contribution of **24%** from Egbin, followed by Shell(Afam VI), Agip and Jebba **12.23%**, **10.96%**, and **9.34%** respectively. The FGN generators contributed **17,744,454.91MWh** or **67%** of the total energy traded in the Wholesale Electricity Market while **8,916,143.33MWh** or **33%** was contributed by the IPPs. Also, the hydro:thermal mix was **25:75**. This shows a significant deviation from the hydro:thermal energy contributions of **31:69** in 2010.

The **304,845.35MWh** generation of Omoku, Trans Amadi and NESCO were not tied to the grid but were restricted to their respective local distribution networks. They are embedded generators.

## **1.5 Energy Consumed by the Generators**

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Table 1.5 (pg 43) shows the quantities of energy consumed by the various generators. This could be traced to the fact that the industry's generator meter accuracy has improved. Sapele thermal station consumed about **11.55%** of its generation. This shows a slight deviation on the **10.95%** consumption of its generation in 2010. The FGN consumed **720,660.61MWh** or **3.90%** of its generation while the IPPs consumed **142,375.12MWh** or **1.57%** of its generation. On the whole, the generators consumed **863,035.73MWh** or **3.14%** of their total generation for their auxiliary services and offices. This is still higher than the MYTO prescribed figure of **1%**.

## **1.6 Energy Received by the Distributors**

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Table 1.6 (pg 44) shows the energy extracted by the various discos and the large power consumers, including the international connections, from the grid. The total energy received by the DISCOS, the International Customers and the large power consumers was **23,603,781.82MWh** or an average of **1,966,981.82MWh** per month.

Out of this, the DISCOS consumed about **21,635,401.47MWh** or **91.63%** while **1,715,391.80MWh** or **7.27%** went for export during the year. A total of **252,988.55MWh** or **1.07%** went to Ajaokuta, NIOMCO Itakpe and Delta Steel Company Aladja(the independent large power consumers). DISCO consumption was a function of level of generation in the grid while consumptions by the Special Customers (particularly the International Connections) were not particularly dependent on the level of generation during the year. This is because supply to the International Connections was based on international Agreement which the industry endeavored to keep throughout the year.

Fig. 1.6 (pg 45) shows the monthly profile of the total energy extracted from the grid. From the profile, it can be seen that the highest energy of **2,181.461GWh** was achieved in April while the lowest of **1,673.310GWh** was achieved in June.

### 1.7 Comparison of Energy Transmitted and Energy Received by the Distributors

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Table 1.7 (pg 46) shows that out of the **26,660,598.59MWh** injected into the grid by the generators, **23,603,781.82MWh** or **88.53%** was received by the Distributors (the Discos, the International Customers and Large Power

Consumers). This means that a total of **3,056,816.77MWh** was lost in the transmission network during the year resulting in an average Transmission Loss Factor of **11.47%**. It can be seen that apart from the months of April, and June, 2011 when the loss factors were **9.45%**, and **9.81%** respectively, transmission losses in 2011 were significantly higher than in the corresponding months in 2010.

Fig. 1.7 (pg 46) shows the profiles of the Transmission Loss Factor (TLF) for 2011 against the TLF for 2010.

## **2.0 ADMINISTRATION OF MARKET SETTLEMENTS (BILLING AND CHARGES)**

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### **2.1 Settlement Report**

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It should be noted that the settlements for the energies sent out by the generators and energies received by the distributors in each month in 2011 were calculated one month in arrears, after data collection and reconciliations. The settlements were conveyed to the participants through Settlement Statements. Three types of Settlement Statements were involved in the market system – the Settlement Statements for the DISCOS, GENCOS and TCN. Also NERC's monthly expectations from the market during the year were conveyed through the instrument of Settlement Statements.

#### **2.1.1 DISCOS**

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The Disco Settlement Report shows the calculation of payments by the DISCOS to the market for energy received. Apart from paying the GENCOS for energy delivered, the DISCOS were expected to pay the TCN for wheeling and System Operations services. Other beneficiaries on the DISCO settlement statements are shown in table 2.1.1 (pg 47). The table also shows that the

total settlement charges on the DISCOS during the year were **N202.15bn**.

This also includes some non-energy based charges.

From the table, it can be seen that Ikeja which received about **14.75%** of the total energy to the DISCOS contributed about **17.61%** of the total DISCO settlements to the market, while Yola which received about **2.04%** of the total energy contributed about **1.78%** to the market settlements. It should be noted that whereas Ikeja contributed to the equalization pool, Yola drew from it. This situation contributed towards the observed in-balances in the energy and settlement equations for the two opposite companies.

### **2.1.2 GENCOS**

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The GENCO settlement report shows the total payments to be received by the GENCOS from the market for energy sent out to the grid, and also the calculation of payments to be made by the GENCOS during the year. The GENCO settlement report for 2011 is shown in table 2.1.2 (pg 48).

The table shows that the total settlement for the GENCOS for the capacity and energy sent out during the year was **N84.00bn**. The table also shows that the payment outflows from the GENCOS were **N27.22bn**. The net payment to the GENCOS is shown to be **N56.78bn**.

### **2.1.3 TCN**

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The TCN settlement report shows payments to be made to TCN for wheeling and System Operations services and also the calculation of payments by the TCN to the market during the year. The TCN settlement report is shown in table 2.1.3 (pg 48). It can be seen from the table that a total of **N36.45bn** was due to TCN out of which it should pay out **N4.82bn** as CHQ, Regulatory, Pension and Ancillary Services charges.

The net income for TCN during the year was **N31.62bn**.

## **2.2 Tariff Equalization Report**

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In order to achieve a Uniform National Tariff, the tariff order of 2008 harmonised the cost of service across the DISCOS through the process of tariff equalization. Consequently, three Distribution Companies, adjudged to be operating below average cost contributed into the equalisation pool, while the rest eight (8) DISCOS, which were operating above average cost, drew from the pool.

Ideally, the equalisation pool should read zero for equalisation equilibrium to be achieved. But during the year, there was a serious equalisation deficit.



Details of the equalisation payments and drawls are shown in table 2.2 (pg 49).

From the table, it can be seen that whereas payments into the pool was **N8.70bn**, total drawls was **N10.97bn** leaving an equalization deficit of **N2.27bn** during the year.

Equalisation drawls were made upfront; therefore a total equalisation drawls of **N10.97bn** means that some stakeholders had to forfeit part of their dues from the market.

With respect to prices, the ratio of equalisation inflow against outflow was **3:8** while energy-wise it was **36:64**. It follows that the energy balance should have tilted more in favour of the paying companies for possible equalisation equilibrium during the year.

### **2.3 PHCN/Ajaokuta and NIOMCO Itakpe Energy Generation Reconciliation**

There was no energy net-off between PHCN and Ajaokuta because Ajaokuta did not generate during the year.

Therefore the energy due to be paid for by Ajaokuta Steel Company and Nigerian Iron Ore Mining Company (NIOMCO), Itakpe during the year, according to table 2.3 (pg 50), was **78,421,800.00KWh**.

## 2.4 Energy Billed by the DISCOS, and billed to the International Connections and the Independent Large Power Consumers

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Table 2.4 (pg 51) shows the total monthly energy billed during the year.

Fig. 2.4 (pg 52) is the graphical presentation of the monthly energy billed by the DISCOS, and billed to the International Customers and the Special Customers during the year compared with the total energy received during the period.

The total energy billed (billed by the Discos, billed to the International Connections and Large Power Consumers) during the year was **20,621,884,274.57KWh** or an average of **1,718,490,356.21KWh** per month. This was against the total energy of **23,603,781,820.00KWh** received (by the Discos, International Connections and Large Power Consumers) during the year. This shows that a total of **2,981,897,545.43KWh** was lost in the distribution network due to technical and non-technical reasons.

Since bills to the International Connections and the Special Customers were based on the supplies at the trading points, it follows that all the losses were incurred at the DISCO distribution networks. Therefore, with the energy extracted by the DISCOS, the average distribution loss factor during the year

was **13.82%**. Again, this figure seems to have been affected by the large scale estimations in the disco bills, and therefore cannot be relied upon.

## **2.5 Revenue Billed by the DISCOS, and billed to the International Connections and the Independent Large Power Consumers**

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Table 2.5 (pg 53) shows the total monthly revenue billed by the DISCOS during the year. The graphical presentation of the monthly revenue billed during the year is shown in fig. 2.5 (pg 54).

The total revenue billed (billed by the Discos, billed to the International Connections and Large Power Consumers) during the year was **N213,639,687,437.45** or a monthly average of **N17,803,307,286.45**.

With the total energy of **20,621,884,274.57KWh** billed (billed by the Discos, billed to the International Connections and Large Power Consumers), it follows that the operating average price of electricity to consumers (including VAT and MMF) during the year was **N10.36/KWh..**

## 3.0 ADMINISTRATION OF MARKET COLLECTION AND PAYMENTS

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### 3.1 Revenue Collection and Income Distribution

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Table 3.1 (pg 55) shows the total revenue expected in respect of the total energy sent out by the generators and received by the distributors during the year. The minimum revenue expected in the market consists of the sum of the Market Operator's invoices to the DISCOS and the Special Customers (including the International Connections), and the MYTO-based DISCO incomes. Minimum revenue expected during the year was **N270.96bn**.

Whereas, total revenue of **N255.39bn** was expected from the DISCOS (including the subsidy expected) for the energy supplied to them, actual revenue collected by the DISCOS was **N189.18bn** (including the subsidy received).

For the energy supplied to the large power consumers, including the International Connections, total revenue of **N15.57bn** was expected. But the sum of **N10.45bn** was collected bringing the total collection for the market to **N199.62bn**.

Against the expected revenue of **N270.96bn**, only the sum of **N199.62bn** was collected including the sum of **N37.00bn** received during the year as part of the subsidy due. This created a revenue gap of **N71.34bn** for the market to clear.

Table 3.1 (pg 55) also shows how the **N199.62bn** (that is collection plus subsidy) available to the market during the year was allocated to all the stakeholders. It can be seen that whereas the MYTO-based income for the DISCOS was **N53.41bn**, actual allocation to the DISCOS was **N80.68bn**. Due to the high operating costs of the DISCOS which MYTO could not capture completely (which made some DISCOS to receive more than their MYTO-based revenues), there was a settlement surplus of **N27.27bn** to the DISCOS to enable them pay staff salaries and handle some minor operating expenses. However, this caused an in-balance in the market equilibrium.

Whereas the required settlement for the GENCOS was **N57.74bn**, only the sum of **N26.11bn** was available to them. Out of the available sum of **N26.11bn** to the GENCOS, Afam received a surplus payment of **N344.76mn**. With the surplus payment of **N344.76mn** to Afam out of the

available **N26.11bn**, the GENCOS were left with a settlement deficit of **N31.98bn**.

Also, the required settlement for the IPPs was **N70.90bn** but only **N33.59bn** was paid leaving the IPPs with a settlement deficit of **N37.30bn**.

Again, the required settlement for Other Stakeholders including TCN, gas suppliers etc, was **N88.91bn**. But the sum of **N59.24bn** was available to them. Out of the available sum of **N59.24bn** to Other Stakeholders, CHQ received a surplus payment of **N5.19bn**, while a surplus of **N171.10mn** and **N119.80mn** was paid to NERC and MO respectively for the year.

Total surplus payment to other stakeholders was **N11.36bn**. With this out of the available sum of **N59.24bn**, the Other Stakeholders were left with a settlement deficit of **N41.03bn**.

The settlement shortfall is mainly due to the fact that the entire expected subsidy for the year was not received, and the fact that collection from the DISCOS was lower than expected. Also the surplus settlements in respect of DISCOS, some GENCOS and Other Stakeholders contributed to the over-all settlement shortfall.

Total settlement required as per MYTO was **N270.96bn** but actual settlement was **N199.62bn** (which includes surplus payments and payments which were not provided for by MYTO, totalling **N38.97bn**).

Therefore, to settle the market fully, including all the collection inefficiencies, the sum of **N110.31bn** would be required.

In order to arrive at the actual settlement shortfall [see table 3.1 (pg 55)], the settlement deficits and those allocations which were not provided for by MYTO but actually dispensed, were captured, and added to the difference between the settlement required as per MYTO and the actual settlement driven by the revenue collected in the market.

This is why the settlement shortfall was higher than the revenue gap by about **N38.97bn**.

### **3.2 DISCO Evaluation Report**

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This report compares the performances of the various DISCOS with respect to the expected revenues against the actual revenue collection, including subsidy earned and received.

It can be seen from table 3.2 (pg 56) which shows the DISCO Evaluations that the best performed DISCO during the year was Eko with **93.49%**

performance, while the least performed was Kaduna with just about **56.19%**.

All the other DISCOS fell between Eko and Kaduna Electricity Distribution Companies. On the average, the DISCOS collected **74.74%** of the expected revenues while **25.26%** of the expected revenue was not collected.

This report is without Prejudice to the fact that the revenue expected to clear the market includes the MYTO Subsidy provision for the various DISCOS. But it should be noted that the more the revenue collected, the more the associated subsidy. Also not all Subsidies earned during the year were released. However, all subsidies earned during the year (whether released or not) were considered in the evaluation.

It should be noted that the closer the revenue collection is to the expected revenue, the better the chances of the associated subsidy to be able to close the gap between actual revenue and expected revenue.

Fig. 3.2 (pg 56) is a graphical representation of the DISCO Efficiency Report during the year.

### **3.3 DISCO Wholesale Payment Performance Report**

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This report compares the payments by the DISCOS against the Market Operators invoices for the energy received during the year.



Table 3.3 (pg 57) shows that Benin, Kaduna, PortHarcourt and Yola Distribution Companies paid less than **50%** of their invoices. On the average, about **58.68%** of the DISCO Invoices were paid while **41.32%** was not paid. With this, even if the MYTO Subsidy were fully released, the market could not have been fully settled for 2011. Therefore, the inability to settle the market fully in 2011 cannot be blamed only on the non-release of MYTO Subsidy, but also on the low collection performance of the DISCOS during the year.

Fig. 3.3 (pg 57) represents the wholesale payment performance of the DISCOS graphically.

### **3.4 DISCO Collection Against Operating Costs**

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This report compares the total DISCO cash collections with what they retained for staff salaries and minor operating expenses during the year. It can be seen from table 3.4 (pg 58) that Yola Distribution Company retained about **86.81%** of its cash collection for its own operations.

On the average, **42.65%** of total DISCO collections were retained by the DISCOS. Only **57.35%** got to the wholesale market for other obligations, including payments to the GENCOS and IPPs.

Fig. 3.4 (pg 58) represents the situation graphically.

## **4.0 SETTLEMENT ADMINISTRATION OF THE INDEPENDENT LARGE POWER CONSUMERS**

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### **4.1 Payment Status of Ajaokuta Steel Company and NIOMCO Itakpe**

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The net energy due to be paid for by Ajaokuta Steel Company and NIOMCO Itakpe during the year was **78,421,800.00KWh**. Table 4.1 (pg 59) shows that the total invoices issued Ajaokuta and Itakpe during the period was **N1,094,501,335.88**. The sum of **N2,391,994.88** was paid. Cumulative outstanding against Ajaokuta and NIOMCO Itakpe at the end of the year including outstanding brought forward from 2010 was **N2,897,593,490.92**.

### **4.2 Payment Status of Delta Steel Company**

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The total energy supplied Delta Steel Company during the year was **174,566,753.00KWh**. According to table 4.2 (pg 59), the total invoices issued during the period was **N2,483,735,029.10**. The sum of **N70,000,000.00** was paid. Cumulative outstanding against Delta Steel Company at the end of the year, including outstanding brought forward from 2010 was **N7,087,534,210.85**.

## 5.0 SETTLEMENT ADMINISTRATION OF THE PPAS AND CONNECTION AGREEMENTS

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### 5.1 Status of the IPPs and Operation of the PPAs

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Table 5.1 (pg 60) shows the power and energy supplied to PHCN by Agip, AES, Shell (Afam VI), Ibom Power, Sapele NIPP, Olorunsogo NIPP and NESCO during the year.

#### 5.1.1 Agip

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Table 5.1 (pg 60) shows that Agip nominated an average capacity of **478.68MW** but delivered an average of **352.96MW** during the year. The gap between the declared capacity and the average actual capacity generated was attributed to short down of the plants for scheduled inspections. From Table 5.1.1 (pg 61), the invoice received from Agip for the capacity nominated and energy delivered during the year was **\$162.38m**. Payment made to Agip during the year was **\$80.59m**. Cumulative outstanding in favour of Agip as at end of 2011, including brought forward from 2010 was **\$396.81m**.

### 5.1.2 AES

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According to table 5.1 (pg 60), AES nominated an average capacity of **300.00MW** but delivered an average of **183.69MW** during the year. From Table 5.1.2 (pg 61), the company issued invoices in the total sum of **\$68.19m** as capacity charge during the year. Payment made to AES during the year was **\$68.19m**. Cumulative outstanding to AES at the end of the year, including brought forward from 2010 was **\$3.93m**.

### 5.1.3 Shell (Afam VI)

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From table 5.1 (pg 60), Shell (Afam VI) nominated an average capacity of **650.00MW** but delivered an average of **402.82MW** during the year. The reason for the significant difference between the nominated capacity and the capacity delivered is the transmission bottleneck in the Eastern bloc which prevents the complete evacuation of Shell generation. From Table 5.1.3 (pg 62), the company issued invoices in the total sum of **\$94.46m** as capacity and energy charges but was paid the total sum of **\$64.22m**. Cumulative outstanding in favour of Shell (Afam VI) at the end of the year, including brought forward from 2010 was **\$75.45m**.

#### **5.1.4 Ibom Power**

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From table 5.1 (pg 60), Ibom Power nominated an average capacity of **140.00Mw** but delivered an average of **53.79Mw** during the year. From Table 5.1.4 (pg 62), the company issued invoices in the total sum of **N1,115.36m** as capacity and energy charges but was paid the total sum of **N1,085.85m**. Cumulative outstanding to Ibom Power at the end of the year including brought forward from 2010 was **N67.48m**.

#### **5.1.5 Sapele (NIPP)**

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Table 5.1 (pg 60) shows that Sapele NIPP nominated an average of **450.00MW** but delivered an average of **14.74MW** during the year (though it started operation from August). From Table 5.1.5 (pg 63), the invoice received from Sapele NIPP for the capacity nominated and energy and energy delivered during the year was **\$3.67m**. Payment made to Sapele NIPP during the year was **\$2.10m**. Outstanding in favour of Sapele NIPP as at end of 2011 was **\$1.57m**.

#### 5.1.6 Olorunsogo (NIPP)

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From table 5.1 (pg 60), Olorunsogo NIPP nominated an average capacity of **500.00MW** but delivered an average of **229.75MW** during the year. From Table 5.1.6 (pg 63), the company issued invoices in the total sum of **N49.36m** as capacity and energy charges but paid the total sum of **N26.93m**. Outstanding to Olorunsogo NIPP at the end of the year was **N22.43m**.

#### 5.1.7 NESCO

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From table 5.1 (pg 60), the total energy delivered by NESCO to Jos Electricity Distribution Company during the year was **8.44GWh**. NESCO's Invoice of **N90.27m** for energy supplied during the year according to table 5.1.7 (pg 64) was fully paid. There was no outstanding in favour of NESCO at the end of the year.

## **5.2 Operation of the Connection Agreements with International Customers**

This section shows the Capacity, Energy and Invoice/Payment transactions with the International Customers (NIGELEC AND CEB) during the year under review.

Table 5.2.1 (pg 65) shows that an average capacity of **90.81MW** and a total energy of **607,607.80MWh** were supplied to NIGELEC while table 5.2.2 (pg 65) shows that an average capacity of **150.00MW** and a total energy of **1,107,784.00MWh** were supplied to CEB during the year.

Total invoices issued to NIGELEC during the year under review were **\$19.65m** while total payment made was **\$4.19m**. Total outstanding balance in favour of PHCN from NIGELEC during the year, including receivable brought forward from 2010 was **\$18.32m**.

Total invoice issued to CEB for electricity it received during the year was **\$74.07m**. The sum of **\$50.49m** was paid. Total outstanding against CEB at the end of the year, including receivable brought forward from 2010 was **\$41.41m**.

## **6.0 NATIONAL PRE-PAYMENT METERING PROGRAM**

The National Pre-payment Metering Program in the Nigerian Electricity Supply Industry started when contracts were signed with private operators to invest-in and manage Pre-Payment Metering in 9 out of the eleven Electricity Distribution Companies with a pilot PPM Program in Ikeja and later in Kano.

The progress in the National Pre-Payment Metering Program, including the Ikeja and Kano projects is as shown in table 6 (pg 66). From the table, it can be seen that a total of **823,410** (representing **16%**) Pre-Payment Meters has been installed throughout the country out of a total customer population of **5,279,922**. This means that the remaining customer population of **4,456,512** are either metered with the electromechanical meters (including obsolete meters) or are not metered.

The table also shows that the total number of Pre-Payment Meters in the store (PPM yet to be installed) as at 31<sup>st</sup> December, 2011 is **30,664**.



## 7.0 UTILIZATION AND PAYMENTS FOR GAS

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Table 7.1 (pg 67) shows the analysis of the quantity of gas consumed with the corresponding energy generated by the various thermal plants.

Figure 7.1.1 (pg 67) shows the graphical analysis of the cost of gas consumed for the generation of a unit of electrical energy (i.e. **N/KWh**) as reflected in Table 7.1 (pg 67) while figure 7.1.2 (pg 68) shows the graphical analysis of the quantity of electrical energy generated from a unit of gas consumed. These have close relationships with the efficiency of the generating machines. From the figures in Table 7.1 (pg 67), it can be shown that the Delta machines were the most efficient in terms of **N/KWh** and **KWh/Mscf**.

Table 7.2 (pg 68) shows the monthly invoices issued with the corresponding payments made against the various thermal plants.

All thermal plants including AES consumed a total of **140,681.95MMScf** of gas supplied by NGC and Shell during the year. Total Invoices issued during the year by the gas Suppliers were **N29.47bn**. The sum of **N16.48bn** was paid, bringing the cumulative outstanding against PHCN including brought forward from 2010 to be **N16.37bn**.

## 8.0 UPDATE ON THE ACTIVITIES FOR THE INITIATION OF THE TRANSITIONAL MARKET

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### 8.1 Conditions Precedent to the Initiation of the Transitional Market Stage

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According to the Market Rules Appendix 2: **Conditions Precedent**: Initiation of the Transitional Market Stage is to a large extent subject to the following conditions precedent:

- i. Passage of the Electric Power Sector Reform Act;
- ii. Establishment and commencement of operations of the commission;
- iii. Development, Implementation and Testing by the System Operator, of the Systems and Procedures required to implement the Grid Code;
- iv. Development, Implementation and Testing by the Market Operator, of the Systems and Procedures to implement the Market Rules for the Transitional Stage;
- v. Approval of the Grid Code and the Market Rules;
- vi. Formalization of the vesting contracts between the companies that will participate in the Transitional Stage Market;

- vii. Publication by the Commission, of the list of licensees entitled to become participants in the Transitional Market, with the relevant details.
- viii. Publication of the initial transmission Usage Charge by the Commission;
- ix. Publication of the initial System Operation and Market Administration Charges by the Commission;
- x. Constitution of the initial Dispute Resolution Panel, and the Initial Stakeholder Advisory Panel;
- xi. Notification by the Market Operator of the initial Market Operator Payments Calendar pursuant to Rule 31.7.7.

The status of each condition precedent is shown in Appendix 1 on page 32 of this report. From the table, it can be seen that considerable progress has been made towards the commencement of the Transitional Stage of the Nigerian Electricity Industry.

## 8.2 Status of Preparations for the Transitional Stage Market

The status of the Preparation for Transitional Stage Market is as shown below;

Appendix 1

S/N	CONDITION PRECEDENT	STATUS	REMARKS
1	Passage of the Electric Power Sector Reform Act	Done	
2	Establishment and commencement of operation of the Commission	Done	
3	Development, implementation and testing by the SO, of the systems and procedures required to implement the Grid Code	In progress	
4	Development, implementation and testing by the MO, of the systems and procedures required to implement the Market Rules for the Transitional stage	In progress	
5	Approval of the Grid Code and the Market Rules	Done	
7	Publication by the Commission of the list of Licensees entitled to become Participants, with relevant details	Not Yet	
8	Publication of the initial Transmission Usage Charge by the Commission	Done	
9	Publication of the initial System Operation and Market Operation Charge by the Commission	Incomplete	MO's charges done but SO's is in the process
10	Constitution of the initial Dispute Resolution Panel, and the initial Stakeholder Advisory Panel	Partly Done	ISAP has been constituted but the DRP is yet to
11	Notification by the Market Operator of the initial MO Payments Calendar	In progress	

## **9.0 OUTSTANDING ISSUES**

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### **9.1 Metering of the Transmission Station Consumptions**

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The project for the metering of the transmission stations' consumptions is aimed at measuring the energy consumptions of offices and station auxiliaries of the transmission stations. Project is on-going and also captured in the 2012 budget.

### **9.2 Inter Company Boundary Metering**

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Project to meter actual consumption of the DISCOS on shared feeders. Such meters are to be installed at the geographical boundaries of the interfacing DISCOS. Project is on-going and also captured in the 2012 budget.

### **9.3 Telemetry**

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Project to automate the reading of the trading point meters nation-wide. Pilot has been successfully completed. Project is also captured in the 2012 budget.

## 1.0 ADMINISTRATION OF THE TRADING POINT METERING SYSTEM AND MANAGEMENT OF THE METERED DATA

### 1.1 Inter-Face Metering

Table 1.1.1 Status of Trading Point Metering System

TRANSMISSION REGION	GENERATOR	DISTRIBUTOR	TYPE OF INTERFACE	NO	STATUS	REMARKS
BAUCHI	NESCO		GEN/TRANS	4	OK	GANAWURI METER BURNT
		JOS	TRANS/DIST	35	OK	
		JOS/YOLA	DIST/DIST	2	NOT OK	1 YET TO BE METERED
		JOS/KADUNA	DIST/DIST	1	OK	
		JOS/ABUJA	DIST/DIST	1	OK	
		JOS/KANO	DIST/DIST	2	OK	
		YOLA-NIGELEC	PHCN/NIGELEC	1	OK	
		YOLA	TRANS/DIST	40	OK	
BENIN	SAPELE		GEN/TRANS	3	OK	
	OMOTOSHO		GEN/TRANS	4	OK	
	DELTA		GEN/TRANS	5	OK	
	AGIP		GEN/TRANS	4	OK	
	GEREGU		GEN/TRANS	3	OK	
		BENIN	TRANS/DIST	41	OK	
ENUGU			DIST/DIST	1	OK	
			GEN/TRANS	0	OK	
			GEN/TRANS	0	OK	
	OJI-RIVER		GEN/DIST	0	NOY OK	
			GEN/DIST	0		
		ENUGU	TRANS/DIST	65	OK	
KADUNA		ENUGU/PHC	DIST/DIST	4	NOT OK	3 YET TO BE METERED
		ENUGU/ABUJA	DIST/DIST	1	NOT OK	YET TO BE METERED
		ENUGU/BENIN	DIST/DIST	1	NOT OK	YET TO BE METERED
		KADUNA	TRANS/DIST	48	OK	
		KADUNA/NIGELEC	PHCN/NIGELEC	3	OK	
		KADUNA/KANO	DIST/DIST	1	NOT OK	
LAGOS		KANO	TRANS/DIST	32	OK	
		KANO/KADUNA	DIST/DIST	1	NOT OK	
		KANO/YOLA	DIST/DIST	1	NOT OK	
	EGBN		GEN/TRANS	6	OK	
	AES		GEN/TRANS	2	OK	
		IKEJA	TRANS/DIST	80	OK	
OSHOGBO		IKEJA/CEB	PHCN/CEB	1	OK	
		IKEJI/IBADAN	DIST/DIST	1	NOT OK	YET TO BE METERED
		IKEJA/EKO	DIST/DIST	2	NOT OK	YET TO BE METERED
		EKO	TRANS/DIST	80	OK	
		EKO/IBADAN	DIST/DIST	1	NOT OK	
		EKO/IKEJA	DIST/DIST	13	NOT OK	YET TO BE METERED
PORTHARCOURT		PAPALANTO	GEN/TRANS	4	OK	
			GEN/TRANS	0		
		IBADAN	TRANS/DIST	83	OK	
		IBADAN/BENIN	DIST/DIST	1	NOT OK	YET TO BE METERED
		IBADAN/IKEJA	DIST/DIST	2	NOT OK	YET TO BE METERED
	AFAM		GEN/TRANS	6	OK	
SHIRORO	OMOKU		GEN/TRANS	1	OK	
	RST		GEN/DIST	N/A	OK	
	ELEME		GEN/DIST	N/A	OK	
		PHC/JOS	DIST/DIST	1	NOT OK	YET TO BE METERED
		PORT-HARCOURT	TRANS/DIST	47	OK	
		PHC/ENUGU	DIST/DIST	2	NOT OK	YET TO BE METERED
TOTAL	SHIRORO		GEN/TRANS	4	OK	
	JEBBA		GEN/TRANS	2	OK	
	KAINJI		GEN/TRANS	3	OK	
		ABUJA	TRANS/DIST	74	OK	
		ABUJA/KADUNA	DIST/DIST	4	NOT OK	YET TO BE METERED
		ABUJA/BENIN	DIST/DIST	3	NOT OK	YET TO BE METERED
TOTAL				727		

**Table 1.1.2 Activity Report on Grid Metering**

REGION	STATION	COMPLAINTS AND OBSERVATIONS	ACTION TAKEN	REMARKS
BAUCHI	JOS	ENERGY METERS ON TORO AND MAKERI 33KV FEEDERS FAULTY	FAULTY ENERGY METERS REPLACED	METERS ARE NOW OK
	GOMBE	MALLAM-SIDI ENERGY METER FAULTY	ENERGY METER REPLACED	METER OK
	MAIDUGURI	ALL THE ENERGY METERS AT THE STATION ARE FAULTY AS A RESULT OF LOW VOLTAGE	FAULTY ENERGY METERS REPLACED	METERS ARE NOW OK
BENIN	UKPILLA	NO READING ON CEMENT FEEDER METER. METERING C.T. FAULTY	FAULTY C.T. REPLACED.	METER OK
	SAPELE	ENERGY METERS ON LINES S3B, S4B AND S4W FAULTY	FAULTY ENERGY METERS REPLACED	METER OK
	AJAOKUTA	NO DIGITAL METERS ON STEEL COMPANY LINES 1 & 2	STATION VISITED & DIGITAL METERS INSTALLED ON LINE 1 AT THE STEEL COMPANY & LINES 1 & 2 AT AJAOKUTA TRANSMISSION STATION	METERS COMMISSIONED OK
ENUGU	AHOADA	T1 INCOMER ENERGY METER FAULTY	METER REPLACED	OK
	EKET	T1 INCOMER V.T. FAULTY. THIS AFFECTS THE ACCURACY OF THE ENERGY METERS IN THE STATION	FAULTY V. Ts. REPLACED	METERS ARE NOW FUNCTIONING PROPERLY
	YANDEV	WRONG C.T. POLARITY ON YANDEV AND WUKARI 33KV DETECTED	C.T. POLARITY REVERSAL CORRECTED	METERS ARE NOW FUNCTIONING PROPERLY
	OWERRI	OGUTA AND ORLU 33KV FEEDER METERS ARE FAULTY	FAULTY ENERGY METERS REPLACED	METERS ARE NOW OK
KADUNA	ZARIA	ENERGY METERS ON FEEDERS 4 & 5 ON THE MOBITRA INDICATE SERIOUS LOAD INBALANCE BETWEEN THE RED & BLUE PHASES.	FAULTY C.Ts. REPLACED	METERS ARE NOW FUNCTIONING PROPERLY
		BLUE PHASE C.T. OF FEEDER 4 FAULTY	FAULTY C.T. REPLACED	METER NOW OK
	GUSAU	ENERGY METER ON MARU 33KV FEEDER FAULTY	FAULTY METER REPLACED	METERS NOW OK
	KUMBOTSO	BAGAUDA AND ANGEL SPINNERS FEEDER METERS NOT FUNCTIONING PROPERLY	FAULTY C.T. WIRING DETECTED AND CORRECTED	METERS NOW OK
	KATSINA	FEEDER 7 (KUGA) COMMISSIONED	ENERGY METER INSTALLED ON THE FEEDER	METER NOW OK
	MANDO-ROAD	FAULTY MOBITRA (T3) REPLACED WITH 60MVA	ENERGY METER INSTALLED ON THE INCOMER OF THE TRANSFORMER	METER OK

**Table 1.1.2 contd Activity Report on Grid Metering**

LAGOS	OTA	NEW AMJE 33KV FEEDER NOT METERED	ENERGY METER INSTALLED ON THE FEEDER	METER OK
	OSOGBO	POWER LINE FEEDER C.T. RATIO WAS CHANGED FROM 300/5 TO 300/1 AND THEREFORE A NEW METER WAS REQUIRED	A NEW 1A ENERGY METER INSTALLED	METER OK
		C.T. OF STEEL ROLLING MILL FEEDER SUSPECTED FAULTY, AND NEEDS REPLACEMENT	FAULTY C.T. REPLACED	FEEDER METER NOW OK
	IFE	NEW IKIRE FEEDER COMMISSIONED	ENERGY METER INSTALLED ON THE FEEDER	METER OK
	ILORIN	T1B ENERGY METER DAMAGED BY SURGE AND NEEDS REPLACEMENT	A NEW ENERGY METER INSTALLED ON THE CIRCUIT	METER OK
	OMU-RAN	EGBE 33KV FEEDER ENERGY METER BAD. ERROR E3 INDICATION SHOWING	A NEW ENERGY METER INSTALLED ON THE CIRCUIT	METER OK
	IKORODU	IJEDE FEEDER ENERGY METER FAULTY	A NEW ENERGY METER INSTALLED ON THE CIRCUIT	METER OK
PORTHARCOURT	PORTHARCOURT MAINS	T3 INCOMER ENERGY METER FAULTY	FAULTY ENERGY METER REPLACED	METER OK
		ENERGY METERS ON FEEDER 1, ABULOMA, UNIPOINT NOT RECORDING ENERGY DELIVERED ACCURATELY.	FAULTY ENERGY METERS REPLACED	METER OK
	PORTHARCOURT TOWN	T1B, T2B ENERGY METERS FAULTY	FAULTY ENERGY METERS REPLACED	METERS OK
		ENERGY METER ON SECRETARIAT 33KV FEEDER FAULTY	FAULTY ENERGY METER REPLACED	METER OK
	UYO	RED PHASE C.T. COIL OF ENERGY METER ON FEEDER 1 FAULTY	FAULTY ENERGY METER REPLACED	METER OK
	EKET	DISPLAY UNIT OF ENERGY METER ON ABAK 33KV FEEDER WAS FAULTY	THE ENERGY METER WAS REPLACED	METER OK
	ITU	WRONG C.T. POLARITY ON T1 INCOMER DETECTED	POLARITY REVERSAL CORRECTED	METER OK
SHIRORO	TEGINA	ENERGY METER ON FEEDER 1 NOT FUNCTIONING PROPERLY. NEW BREAKER AND C.T. INSTALLED	METERING C.T. CORES WIRED TO THE CONTROL PANEL	METER RE-PROGRAMMED TO THE NEW C.T. RATIO
	BIRNIN-KEBBI	ENERGY METERS ON JEGA AND ARGUNGU FEEDERS ARE NOT FUNCTIONING PROPERLY	FAULTY C.T. WIRING DETECTED AND CORRECTED	METERS NOW OK
	APO	AIRPORT FEEDERS K21 AND K23 COMMISSIONED	ENERGY METERS INSTALLED ON THE CIRCUITS	METERS OK
	JEBBA	MOKWA 33KV, 5A C.T.-CARRING BREAKER FAULTY AND REPLACED WITH 1A TYPE	THE 1A ENERGY METERS REPLACED WITH 5A TYPE	METER OK
		ENERGY METERS ON OSOGBO 1, OSOGBO 2 AND KAINJI 2, 330KV OUTGOING FEEDERS ARE FAULTY	FAULTY ENERGY METERS REPLACED	METERS ARE NOW OK
	SULEJA	ENERGY METERS NOT INSTALLED ON 11KV FEEDERS AT THE STATION	4 (NO) 11KV FEEDER METERS INSTALLED	METERS OK



## 1.2 Generation Capacity Availability

Table 1.2 Generation Capacity (MW) Availability

OWNERSHIP	TECHNOLOGY	GENERATOR	JAN	FEB	MAR	APR	MAY	JUN	JUL
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM I-V	48.87	68.61	57.52	67.17	50.00	47.50	50.32
		DELTA	134.42	193.21	208.39	242.57	235.10	211.90	190.39
		EGBIN	1,027.42	1,021.43	934.58	1,013.23	936.06	861.80	821.61
		GEREGU	274.19	241.50	265.58	260.37	152.61	241.37	241.61
		SAPELE	19.52	81.43	51.77	145.00	90.19	115.33	103.06
		OMOTOSO	82.35	71.93	65.74	66.93	97.61	90.77	3.27
		OLORUNSOGO	7.74	7.54	42.97	21.37	71.65	92.30	53.30
	HYDRO	JEBBA	391.29	431.43	333.90	421.13	391.61	346.90	182.16
		KAINJI	377.42	368.93	301.94	324.67	219.74	254.83	93.71
		SHIRORO	295.16	264.00	435.48	435.00	356.45	314.33	212.84
TOTAL		2,658.39	2,750.00	2,697.87	2,997.44	2,601.03	2,577.03	1,952.28	
INDEPENDENT POWER PRODUCERS	THERMAL	AES	201.95	178.82	187.38	226.49	214.40	214.38	172.49
		AGIP	469.13	413.04	417.42	357.33	228.42	402.70	350.55
		SHELL (AFAM VI)	562.13	522.71	458.55	429.93	566.71	526.20	406.58
		IBOM POWER	142.48	127.14	110.81	70.83	29.04	71.50	24.38
		SAPELE NIPP	-	-	-	-	-	-	-
		OLORUNSOGO NIPP	64.68	129.46	96.29	95.09	193.32	259.33	123.24
		AJAOKUTA	-	5.54	-	-	-	-	-
		OMOKU	84.65	83.89	54.84	36.67	25.16	55.83	22.93
		T/AMADI	93.55	83.04	93.55	83.33	50.32	65.00	18.71
	HYDRO	NESCO	10.00	10.00	10.00	10.00	10.00	10.00	10.00
TOTAL		1,628.56	1,553.64	1,428.83	1,309.68	1,317.37	1,604.95	1,128.88	
TOTAL			4,286.95	4,303.64	4,126.70	4,307.12	3,918.41	4,181.98	3,081.16

OWNERSHIP	TECHNOLOGY	GENERATOR	AUG	SEPT	OCT	NOV	DEC	AVE	% ContriBution
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM	61.77	35.67	64.68	80.63	58.68	57.62	1.33
		DELTA	267.52	300.33	252.10	292.33	171.48	224.98	5.19
		EGBIN	1,016.90	1,080.00	896.97	976.33	865.61	954.33	22.03
		GEREGU	264.26	272.13	298.52	316.43	406.55	269.59	6.22
		SAPELE	147.74	144.00	141.29	99.00	98.58	103.08	2.38
		OMOTOSO	91.24	89.27	107.55	89.33	99.87	79.66	1.84
		OLORUNSOGO	97.16	212.80	222.71	208.93	86.39	93.74	2.16
	HYDRO	JEBBA	380.32	435.00	444.77	450.00	450.00	388.21	8.96
		KAINJI	176.10	232.17	223.87	205.60	321.71	258.39	5.96
		SHIRORO	379.84	441.50	445.16	445.00	445.16	372.49	8.60
		2,882.85	3,242.87	3,097.61	3,163.60	3,004.03	2802.08	64.68	
INDEPENDENT POWER PRODUCERS	THERMAL	AES	185.48	163.00	204.04	194.17	204.63	195.60	4.52
		AGIP	393.77	449.57	425.97	460.03	465.71	402.80	9.30
		SHELL (AFAM VI)	347.81	509.93	547.06	572.00	429.97	489.97	11.31
		IBOM POWER	33.87	91.27	130.65	136.00	125.81	91.15	2.10
		SAPELE NIPP	7.26	17.33	-	-	82.10	8.89	0.21
		OLORUNSOGO NIPP	187.00	316.47	343.23	456.00	480.00	228.68	5.28
		AJAOKUTA	-	-	-	-	-	0.46	0.01
		OMOKU	62.29	35.13	26.85	28.80	37.52	46.21	1.07
		T/AMADI	56.94	38.40	35.03	31.90	25.87	56.30	1.30
	HYDRO	NESCO	10.00	10.00	10.00	10.00	10.00	10.00	0.23
		TOTAL		1,284.42	1,631.10	1,722.82	1,888.91	1,861.60	1530.06
TOTAL			4,167.26	4,873.97	4,820.44	5,052.51	4,865.63	4332.15	100.00

HYDRO : THERMAL = 24 : 76

FGN : IPP = 65 : 35

HYDRO : THERMAL = 24 : 76

FGN : IPP = 65 : 35

Fig. 1.2.1

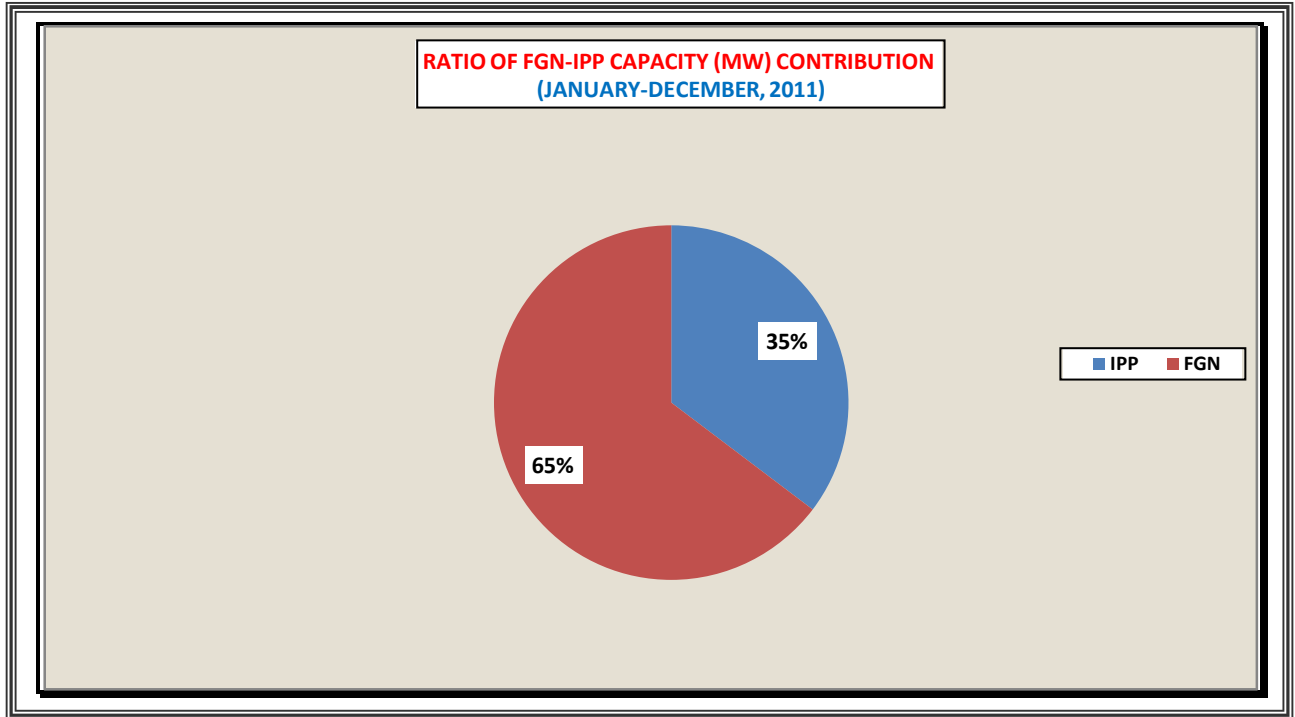
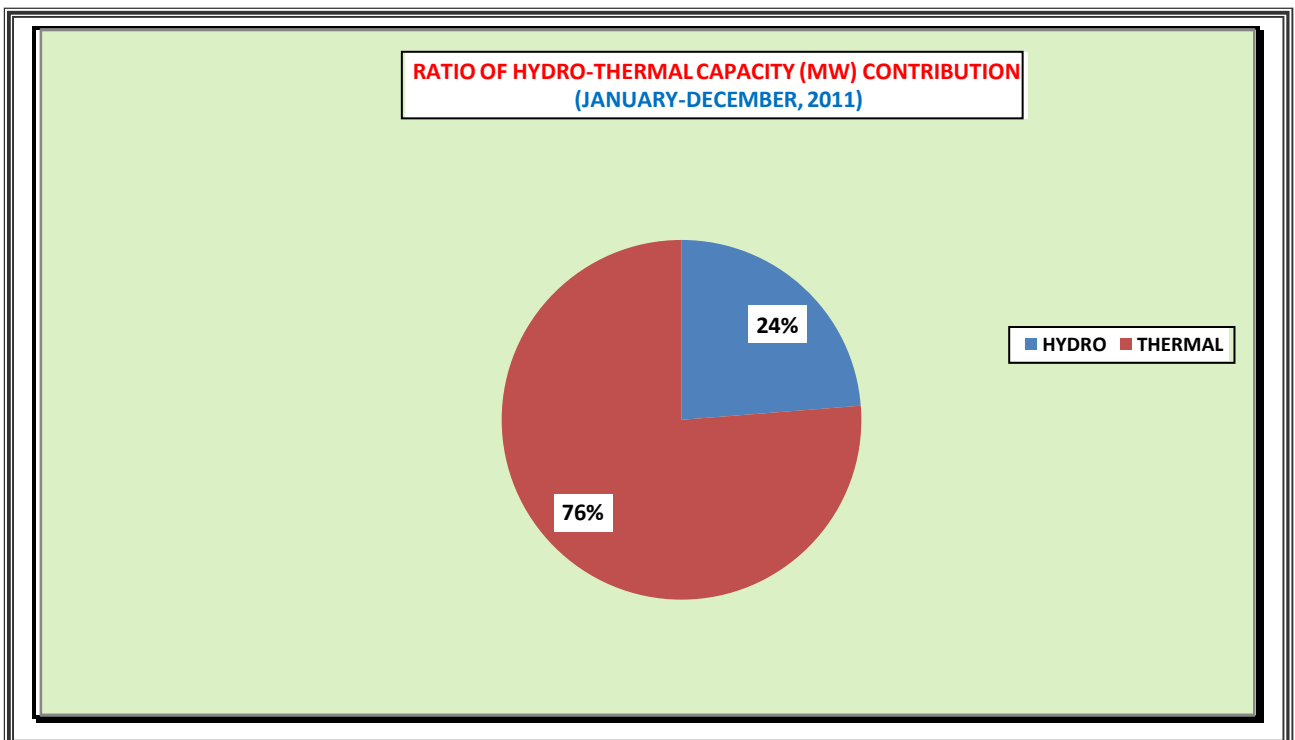


Fig. 1.2.2



## 1.3 Energy Generated

Table 1.3 Energy (MWh) Generated by the Generators

OWNERSHIP	TECHNOLOGY	GENERATOR	JAN	FEB	MAR	APR	MAY	JUN	JUL
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM 1-V	35,569.00	33,706.00	34,301.00	40,998.00	30,258.00	23,748.00	36,209.00
		DELTA	62,698.00	102,788.70	124,414.60	144,583.00	137,432.00	111,016.80	130,296.20
		EGBIN	647,752	563,091.28	574,499.46	572,914.01	546,372.00	437,234.31	588,258.24
		GEREGU	139,668.96	128,064.70	181,488.20	139,266.74	87,270.90	132,513.40	166,398.90
		SAPELE	37,583.99	39,169.00	36,226.00	86,377.00	62,667.03	68,578.00	71,823.00
		OMOTOSO	27,202.00	18,396.20	14,511.00	19,730.00	56,501.00	30,969.60	2,633.00
		OLORUNSOGO	-	2,306.70	30,715.20	20,635.34	34,715.75	28,353.49	34,971.12
	HYDRO	JEBBA	252,027.90	217,035.00	238,570.00	276,699.00	229,154.00	202,418.00	132,931.00
		KAINJI	237,821.00	198,463.00	183,061.00	199,059.00	128,825.00	117,905.00	66,233.00
		SHIRORO	195,144.00	140,107.00	290,268.00	250,555.00	157,038.00	92,014.00	159,399.00
SUB TOTAL		1,635,465.85	1,443,127.58	1,708,054.46	1,750,817.09	1,470,233.68	1,244,750.60	1,389,152.46	
INDEPENDENT POWER PRODUCERS	THERMAL	AES	126,562.20	105,746.40	133,730.07	159,518.65	151,179.50	133,244.90	125,741.60
		AGIP	301,777.00	206,588.00	239,982.00	218,050.00	154,008.00	230,213.00	252,413.00
		SHELL (AFAM VI)	237,935.50	238,449.80	261,035.60	272,284.34	329,061.40	255,949.90	288,403.31
		IBOM POWER	34981.28	33,174.44	29,586.06	23,821.28	14,332.38	21,564.58	17,551.52
		SAPELE NIPP	-	-	-	-	-	-	-
		OLORUNSOGO NIPP	31023.25	75,023.25	65,640.90	57,377.10	82,144.10	70,604.40	96,428.50
		AJAKUTA	-	-	-	-	-	-	-
		OMOKU	21,674.40	19197.50	13,509.60	10,461.82	5,301.94	12,569.45	16,351.34
		T/AMADI	14,926.20	10,232.50	14,604.00	12,593.40	13,275.00	10,783.72	13,344.95
		NESCO	706.26	639.10	833.54	478.75	488.78	1,015.40	522.24
	SUB TOTAL		769,586.09	689,050.99	758,921.77	754,585.34	749,791.10	735,945.35	810,756.46
TOTAL		2,405,051.94	2,132,178.57	2,466,976.23	2,505,402.43	2,220,024.78	1,980,695.95	2,199,908.92	

OWNERSHIP	TECHNOLOGY	GENERATOR	AUG	SEPT	OCT	NOV	DEC	TOTAL	AVE	%	
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM	38,519.00	34,191.00	33,583.00	43,801.00	31,362.00	416,244.50	34,687.04	1.50	
		DELTA	164,435.10	148,354.90	129,168.00	149,297.20	88,075.95	1,492,559.95	124,380.00	5.36	
		EGBIN	585,321.52	629,286.51	508,605.20	565,457.30	533,885.90	6,752,677.73	562,723.14	24.27	
		GEREGU	133,278.40	136,523.30	84,011.00	161,917.90	208,036.00	1,698,438.40	141,536.53	6.10	
		SAPELE	93,360.00	80,600.00	19,950.00	50,244.00	51,017.00	697,595.02	58,132.92	2.51	
		OMOTOSO	34,954.00	33,834.00	40,106.00	39,055.00	55,635.00	373,526.80	31,127.23	1.34	
		OLORUNSOGO	49,915.87	46,325.00	27,307.20	26,623.20	21,829.60	323,698.47	26,974.87	1.16	
	HYDRO	JEBBA	136,563.00	220,194.00	290,401.00	200,422.00	170,922.00	2,567,336.90	213,944.74	9.23	
		KAINJI	58,651.75	142,392.00	127,492.00	112,362.00	196,780.00	1,769,044.75	147,420.40	6.36	
		SHIRORO	208,096.00	225,210.00	261,519.00	193,951.00	200,692.00	2,373,993.00	197,832.75	8.53	
SUB TOTAL			1,503,094.64	1,696,910.71	1,522,142.40	1,543,130.60	1,558,235.45	18,465,115.52	1,538,759.63	66.35	
INDEPENDENT POWER PRODUCERS	THERMAL	AES	124,961.05	101,991.30	123,341.00	130,145.79	140,904.12	1,557,066.58	129,755.55	5.60	
		AGIP	257,259.00	260,463.00	252,094.00	288,474.00	325,084.00	2,986,405.00	248,867.08	10.73	
		SHELL (AFAM VI)	219,315.00	263,486.00	318,309.30	318,155.40	292,966.00	3,295,351.55	274,612.63	11.84	
		IBOM POWER	15,640.59	27,744.94	10,883.37	38,654.12	48,603.11	316,537.67	26,378.14	1.14	
		SAPELE NIPP	4,139.00	10,502.40	-	-	49,396.40	64,037.80	5,336.48	0.23	
		OLORUNSOGO NIPP	70,334.30	77,698.50	70,917.70	87,158.30	54,769.90	839,120.20	69,926.68	3.02	
		AJAKUTA	-	-	-	-	-	-	-	-	
		OMOKU	16,887.27	11,712.60	8,055.50	8,942.76	12,743.87	157,408.05	13,117.34	0.57	
		T/AMADI	9,151.83	7,055.80	12,125.00	11,630.00	9,295.91	139,018.31	11,584.86	0.50	
		NESCO	1,077.14	1,007.22	855.91	409.59	385.06	8,418.99	701.58	0.03	
	SUB TOTAL			718,765.18	761,661.76	796,581.78	883,569.96	934,148.37	9,363,364.15	780,280.35	33.65
	TOTAL			2,221,859.82	2,458,572.47	2,318,724.18	2,492,383.82	7,237,808.56	27,828,479.67	2,319,039.97	100.00

HYDRO : THERMAL = 24 : 76

FGN : IPP = 66 : 34

Fig. 1.3.1

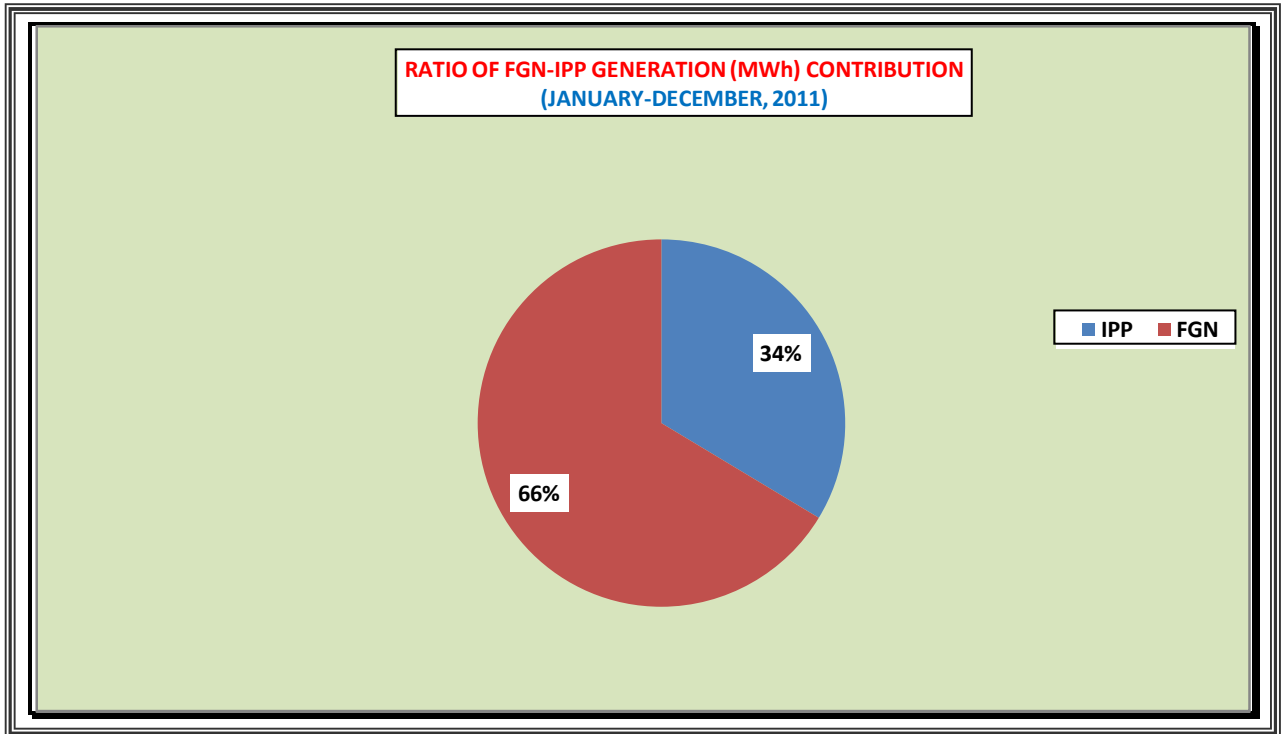
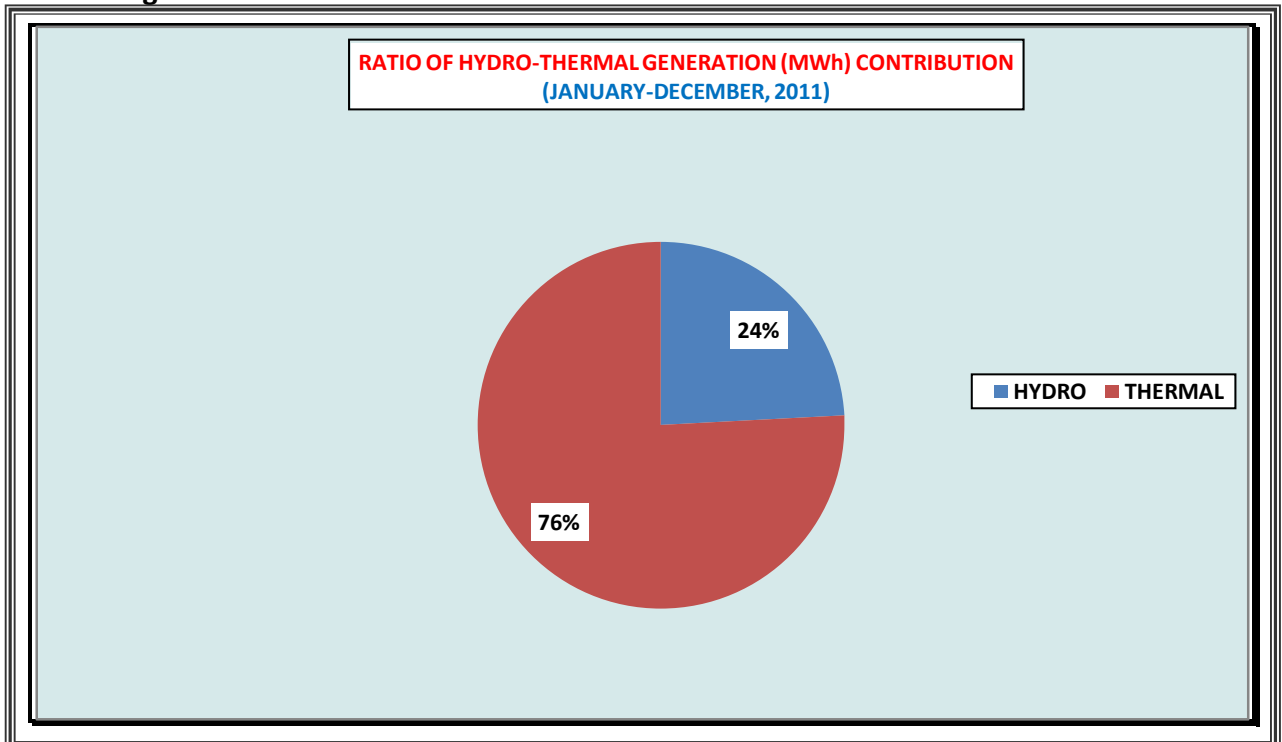


Fig. 1.3.2



## 1.4 Energy Injected into the Grid

Table 1.4 Energy (MWh) Injected into the Wholesale Electricity Market(WEM)

OWNERSHIP	TECHNOLOGY	GENERATOR	JAN	FEB	MAR	APR	MAY	JUN	JUL
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM	25,969.05	33,518.93	34,119.70	40,792.40	30,109.64	23,588.01	36,022.40
		DELTA	60,648.00	98,133.60	123,517.80	137,587.40	131,339.20	105,862.90	113,576.00
		EGBIN	616,655.80	534,238.78	543,960.66	541,980.71	516,743.30	414,014.51	558,073.44
		GEREGU	139,039.00	126,861.00	178,841.00	138,589.00	86,593.00	86,593.00	163,950.00
		SAPELE	9,515.00	35,535.00	32,829.00	81,822.00	50,901.00	63,840.00	67,812.00
		OMOTOSO	25,832.00	17,383.00	13,645.00	19,007.90	53,771.00	29,092.60	2,479.00
	OLORUNSOGO	-	2,237.50	30,599.00	16,631.00	34,385.00	26,736.00	34,530.00	
	HYDRO	JEBBA	244,780.00	210,520.00	231,400.00	268,890.00	222,410.00	195,960.00	128,380.00
		KAINJI	237,237.50	197,896.10	182,460.60	198,479.80	128,376.70	117,392.80	65,741.80
		SHIRORO	193,811.60	138,762.60	288,750.10	249,168.40	155,629.00	90,686.50	158,276.30
SUB TOTAL			1,553,487.95	1,395,086.51	1,660,122.86	1,692,948.61	1,410,257.84	1,153,766.32	1,328,840.94
INDEPENDENT POWER PRODUCERS		AES	125,497.00	103,076.00	129,425.00	155,778.00	146,669.80	129,805.00	122,803.90
		AGIP	295,848.20	201,529.87	234,224.81	212,704.83	151,408.68	225,910.88	247,129.50
		SHELL (AFAM VI)	236,570.46	235,700.56	257,355.15	266,664.31	326,908.07	254,001.79	284,915.99
		IBOM POWER	34,747.00	32,955.00	29,387.00	23,697.00	14,129.00	21,323.00	17,291.00
		SAPELE NIPP	-	-	-	-	-	-	-
		OLORUNSOGO NIPP	30,305.07	75,190.10	64,751.90	57,342.60	82,096.10	70,559.40	96,382.00
		AJAOKUTA	-	-	-	-	-	-	-
		OMOKU	-	-	-	-	-	-	-
	T/AMADI	-	-	-	-	-	-	-	
	HYDRO	NESCO	-	-	-	-	-	-	-
	SUB TOTAL			722,967.73	648,451.53	715,143.86	716,186.74	721,211.65	701,600.07
TOTAL			2,276,455.68	2,043,538.04	2,375,266.72	2,409,135.35	2,131,469.49	1,855,366.39	2,097,363.33

OWNERSHIP	TECHNOLOGY	GENERATOR	AUG	SEPT	OCT	NOV	DEC	TOTAL	AVE	%
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM	38,312.49	18,585.80	33,381.40	43,571.33	31,121.39	389,092.54	32,424.38	1.46
		DELTA	161,042.30	137,803.10	127,661.50	141,048.00	85,481.48	1,423,701.28	118,641.77	5.34
		EGBIN	554,440.62	596,933.41	480,523.10	535,896.60	505,967.70	6,399,428.63	533,285.72	24.00
		GEREGU	131,280.00	134,641.00	82,572.00	159,892.00	204,860.00	1,633,711.00	136,142.58	6.13
		SAPELE	89,260.00	76,117.00	16,593.00	45,223.00	47,581.00	617,028.00	51,419.00	2.31
		OMOTOSO	33,203.00	32,063.00	38,258.00	37,244.00	53,341.00	355,319.50	29,609.96	1.33
		OLORUNSOGO	49,411.00	46,002.00	26,165.00	25,722.00	21,829.60	314,248.10	26,187.34	1.18
	HYDRO	JEBBA	131,980.00	213,310.00	281,840.00	194,070.00	165,670.00	2,489,210.00	207,434.17	9.34
		KAINJI	58,163.60	141,914.90	127,039.00	111,933.80	196,279.66	1,762,916.26	146,909.69	6.61
		SHIRORO	207,227.60	224,312.50	260,385.40	193,037.90	199,751.70	2,359,799.60	196,649.97	8.85
SUB TOTAL		1,454,320.61	1,621,682.71	1,474,418.40	1,487,638.63	1,511,883.53	17,744,454.91	1,478,704.58	65.82	
INDEPENDENT POWER PRODUCERS	THERMAL	AES	122,229.10	99,692.70	120,157.50	126,791.70	136,976.00	1,518,901.70	126,575.14	5.70
		AGIP	251,713.78	254,615.99	246,003.35	282,275.63	318,407.60	2,921,773.12	243,481.09	10.96
		SHELL (AFAM VI)	217,721.00	260,438.72	316,660.21	317,224.16	287,703.71	3,261,864.13	271,822.01	12.23
		IBOM POWER	15,378.00	27,515.00	10,709.00	38,376.00	48,313.00	313,820.00	26,151.67	1.18
		SAPELE NIPP	4,027.38	9,977.28	-	-	49,173.00	63,177.66	5,264.81	0.24
		OLORUNSOGO NIPP	70,299.80	77,601.00	70,613.70	86,797.30	54,668.10	836,607.07	69,717.26	3.14
		AJAOKUTA	-	-	-	-	-	-	-	-
		OMOKU	-	-	-	-	-	-	-	-
		T/AMADI	-	-	-	-	-	-	-	-
		HYDRO	NESCO	-	-	-	-	-	-	-
	SUB TOTAL		681,369.06	729,840.69	764,143.76	851,464.79	895,241.41	8,916,143.68	743,011.97	33.08
	TOTAL		2,135,689.67	2,351,523.40	2,238,562.16	2,339,103.42	2,407,124.94	26,660,598.59	2,221,716.55	100.00
HYDRO : THERMAL =			25 : 75				FGN : IPP = 67 : 33			

Fig. 1.4.1

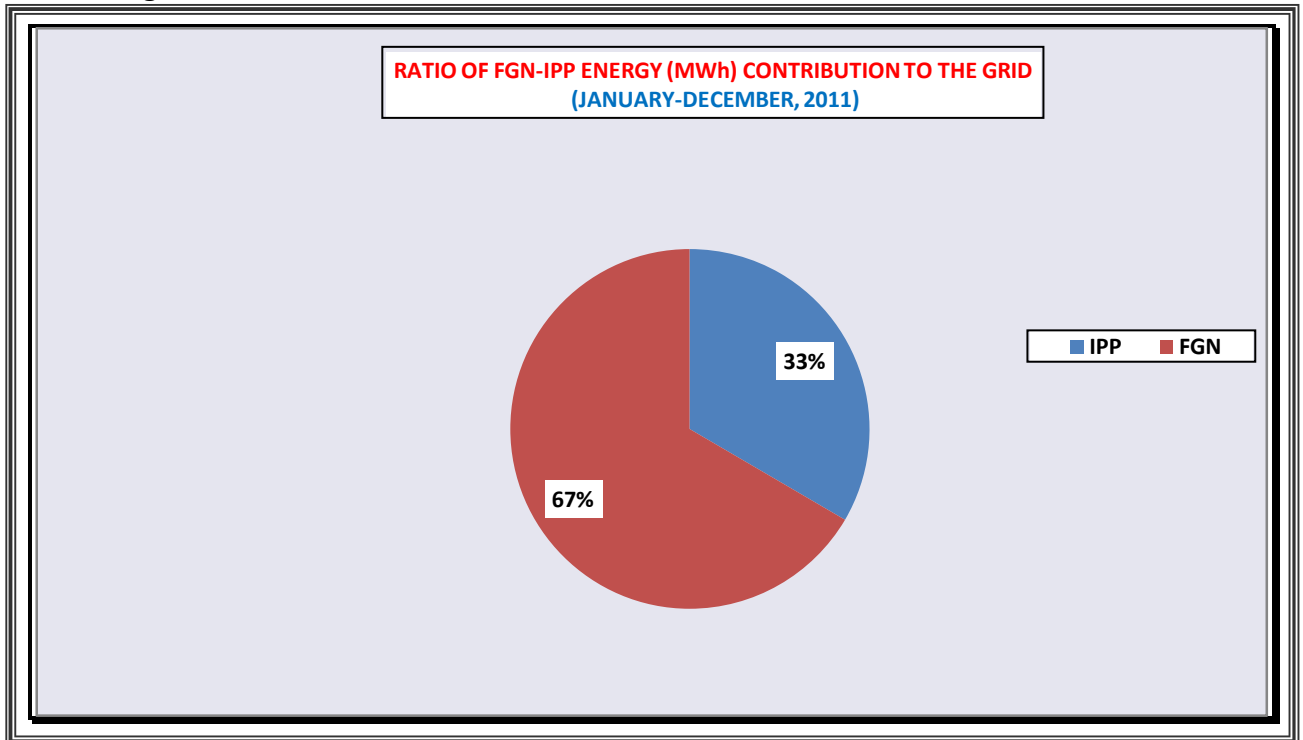
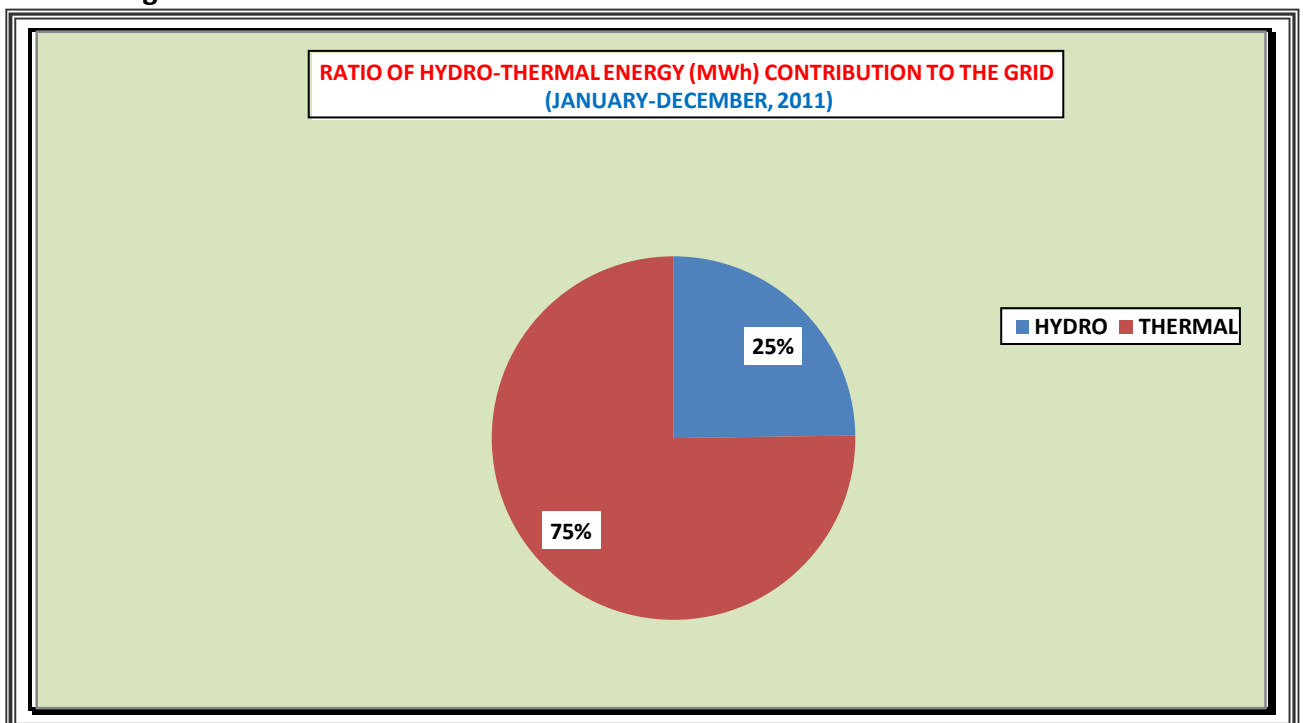


Fig. 1.4.2



## 1.5 Energy Consumed by the Generators

Table 1.5 Energy (MWh) Consumed by the Generators

OWNERSHIP	TECHNOLOGY	GENERATOR	ENERGY GENERATED (MWh)	ENERGY INJECTED (MWh)	ENERGY CONSUMED BY THE GENERATORS	% OF CONSUMPTION
FEDERAL GOVERNMENT OF NIGERIA	THERMAL	AFAM	416,244.50	389,092.54	27,151.96	6.52
		DELTA	1,492,559.95	1,423,701.28	68,858.67	4.61
		EGBIN	6,752,677.73	6,399,428.63	353,249.10	5.23
		GEREGU	1,698,438.40	1,633,711.00	64,727.40	3.81
		SAPELE	697,595.02	617,028.00	80,567.02	11.55
		OMOTOSO	373,526.80	355,319.50	18,207.30	4.87
		OLORUNSOGO	323,698.47	314,248.10	9,450.37	2.92
	HYDRO	JEBBA	2,567,336.90	2,489,210.00	78,126.90	3.04
		KAINJI	1,769,044.75	1,762,916.26	6,128.49	0.35
		SHIRORO	2,373,993.00	2,359,799.60	14,193.40	0.60
SUB TOTAL		18,465,115.52	17,744,454.91	720,660.61	3.90	
INDEPENDENT POWER PRODUCERS	THERMAL	AES	1,557,066.58	1,518,901.70	38,164.88	2.45
		AGIP	2,986,405.00	2,921,773.12	64,631.88	2.16
		SHELL (AFAM VI)	3,295,351.55	3,261,864.13	33,487.42	1.02
		IBOM POWER	316,537.67	313,820.00	2,717.67	0.86
		SAPELE NIPP	64,037.80	63,177.66	860.14	1.34
		OLORUNSOGO NIPP	839,120.20	836,607.07	2,513.13	0.30
		AJAKUTA	-	-	-	-
		OMOKU	-	-	-	-
		T/AMADI	-	-	-	-
	HYDRO	NESCO	-	-	-	-
	SUB TOTAL		9,058,518.80	8,916,143.68	142,375.12	1.57
	TOTAL		27,523,634.32	26,660,598.59	863,035.73	3.14

## 1.6 Energy Extracted from the Grid

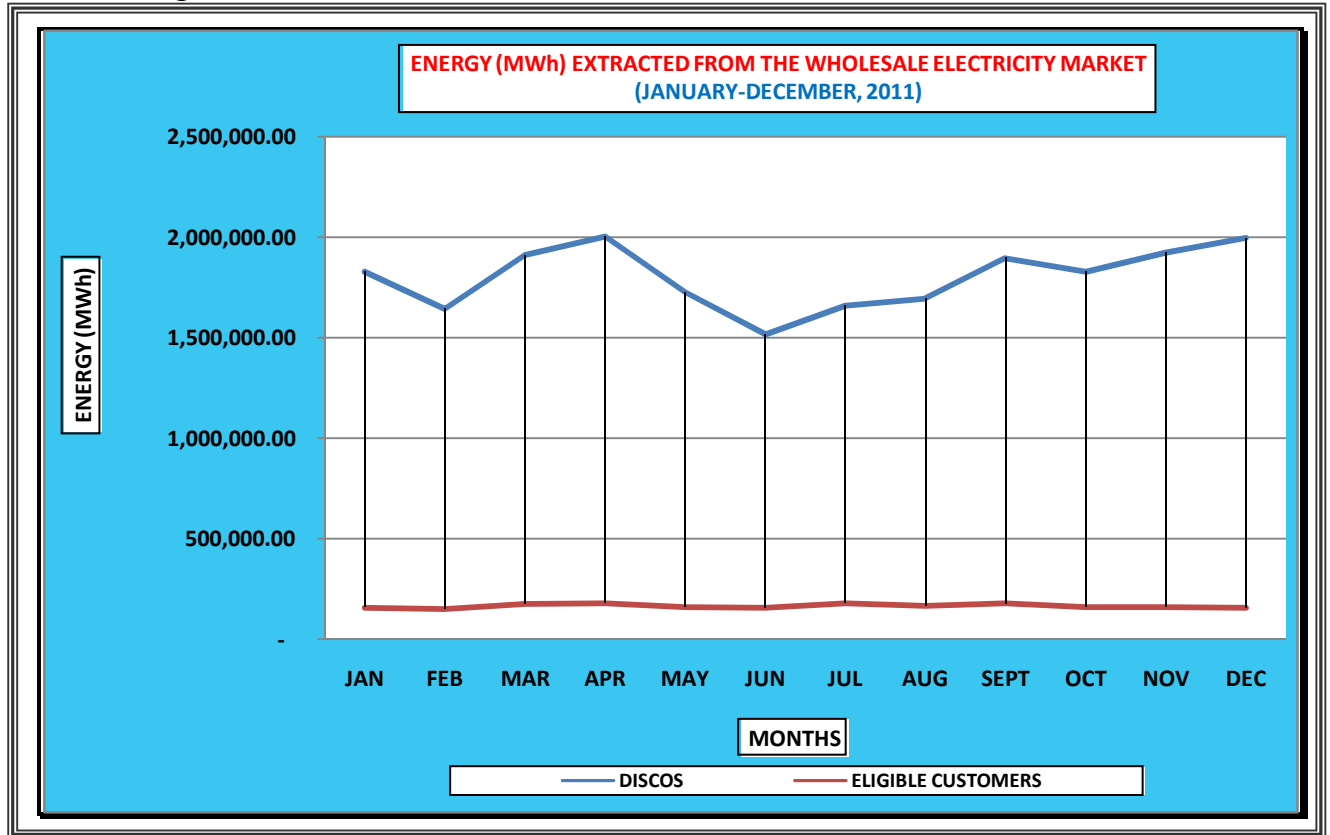
Table 1.6 Energy (MWh) Extracted from the Wholesale Electricity Market (WEM)

TYPE	DISCOS	JAN	FEB	MAR	APR	MAY	JUN	JUL
DISCOS	ABUJA	191,731.32	175,214.19	207,895.54	211,212.63	220,124.19	179,685.81	193,266.49
	BENIN	269,174.90	231,406.10	236,279.00	240,315.80	213,902.90	231,021.00	246,933.46
	EKO	170,052.64	151,665.01	202,517.61	228,331.96	164,438.10	129,184.21	134,432.78
	ENUGU	214,721.50	201,895.30	193,603.26	215,243.93	176,812.50	189,273.54	194,410.11
	IBADAN	229,317.25	199,504.37	241,731.74	262,999.74	214,077.01	177,819.06	210,510.93
	IKEJA	267,364.81	237,210.18	308,408.04	306,592.72	264,006.34	216,858.98	242,458.11
	JOS	98,785.23	84,518.94	107,063.33	104,139.16	84,051.09	65,405.13	79,033.45
	KADUNA	133,775.96	131,925.62	153,039.10	152,951.52	128,414.34	117,283.82	123,333.10
	KANO	94,089.02	81,933.31	100,712.63	114,022.30	91,287.68	64,970.03	81,415.76
	P/H	122,771.19	114,499.91	117,928.44	120,479.58	136,326.77	120,686.62	125,674.20
	YOLA	36,918.68	33,762.15	42,823.76	48,288.71	33,655.16	24,873.30	27,452.15
	SUB TOTAL	1,828,702.50	1,643,535.08	1,912,002.45	2,004,578.05	1,727,096.08	1,517,061.50	1,658,920.54
SPECIAL CUSTOMERS	NIGEELEC	39,692.80	43,957.80	52,738.00	52,435.90	55,193.70	52,700.60	55,554.80
	CEB	101,435.00	93,471.00	94,821.00	98,045.00	82,564.00	81,776.00	94,143.00
	SUB TOTAL	141,127.80	137,428.80	147,559.00	150,480.90	137,757.70	134,476.60	149,697.80
	AJAOKUTA	5,816.00	6,012.00	6,836.00	6,663.00	6,422.00	6,300.00	6,102.00
	DELTA	8,171.60	6,313.74	20,887.73	19,539.67	15,267.10	15,294.14	21,277.04
	ITAKPE	115.20	198.00	242.40	199.20	183.60	177.60	171.60
	SUB TOTAL	14,102.80	12,523.74	27,966.13	26,401.87	21,872.70	21,771.74	27,550.64
TOTAL		1,983,933.10	1,793,487.62	2,087,527.58	2,181,460.82	1,886,726.48	1,673,309.84	1,836,168.98

TYPE	DISCOS	AUG	SEPT	OCT	NOV	DEC	TOTAL	AVE	%
DISCOS	ABUJA	201,454.01	209,547.80	208,752.04	232,604.10	242,743.50	2,474,231.62	206,185.97	10.48
	BENIN	246,723.90	234,111.26	235,999.40	244,221.64	268,456.97	2,898,546.33	241,545.53	12.28
	EKO	164,065.20	216,512.73	189,841.69	195,799.77	192,446.11	2,139,287.81	178,273.98	9.06
	ENUGU	192,727.76	187,519.70	204,751.06	230,909.29	212,854.80	2,414,722.75	201,226.90	10.23
	IBADAN	222,847.32	236,410.27	237,187.05	246,366.07	253,666.50	2,732,437.31	227,703.11	11.57
	IKEJA	246,981.46	290,498.64	259,530.37	266,946.96	285,317.63	3,192,174.24	266,014.52	13.52
	JOS	70,546.12	103,440.66	91,476.99	93,483.62	102,516.44	1,084,460.16	90,371.68	4.59
	KADUNA	130,378.77	143,575.79	138,363.91	129,796.65	147,719.47	1,630,558.05	135,879.84	6.91
	KANO	74,121.28	115,803.55	102,943.84	90,056.72	94,260.04	1,105,616.16	92,134.68	4.68
	P/H	114,314.05	107,004.55	124,170.84	157,014.05	161,003.81	1,521,874.01	126,822.83	6.45
	YOLA	32,775.03	52,910.79	35,918.70	36,398.09	35,716.51	441,493.03	36,791.09	1.87
	SUB TOTAL	1,696,934.90	1,897,335.74	1,828,935.89	1,923,596.96	1,996,701.78	21,635,401.47	1,802,950.12	91.63
SPECIAL CUSTOMERS	NIGEELEC	53,299.10	54,298.10	55,248.00	49,784.20	42,704.80	607,607.80	50,633.98	2.57
	CEB	84,962.00	93,918.00	91,310.00	98,531.00	92,808.00	1,107,784.00	92,315.33	4.69
	SUB TOTAL	138,261.10	148,216.10	146,558.00	148,315.20	135,512.80	1,715,391.80	142,949.32	7.27
	AJAOKUTA	5,983.00	6,434.00	6,491.00	7,060.00	6,360.00	76,479.00	6,373.25	0.32
	DELTA	21,277.04	21,277.04	5,983.91	4,319.10	14,958.63	174,566.75	14,547.23	0.74
	ITAKPE	128.40	135.60	153.60	147.60	90.00	1,942.80	161.90	0.01
	SUB TOTAL	27,388.44	27,846.64	12,628.51	11,526.70	21,408.63	252,988.55	21,082.38	1.07
TOTAL		1,862,584.44	2,073,398.48	1,988,122.40	2,083,438.86	2,153,623.21	23,603,781.82	1,966,981.82	100.00



Fig. 1.6



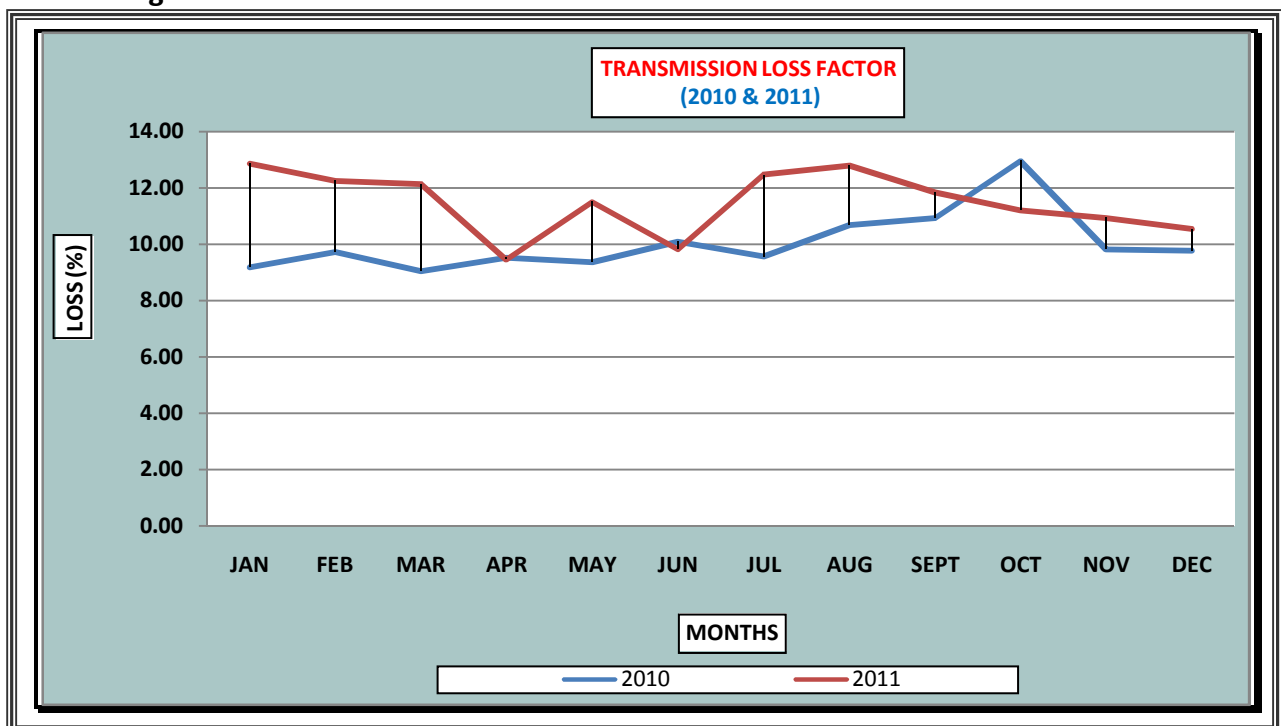
## 1.7 Comparison of Energy Transmitted and Energy Received

Table 1.7 Comparison of Energy Transmitted and Energy Received by the Distributors

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
ENERGY INJECTED (MWh)	2,276,455.68	2,043,538.04	2,375,266.72	2,409,135.35	2,131,469.49	1,855,366.39
ENERGY EXTRACTED (MWh)	1,983,933.10	1,793,487.62	2,087,527.58	2,181,460.82	1,886,726.48	1,673,309.84
LOSS (MWh)	292,522.58	250,050.42	287,739.14	227,674.53	244,743.01	182,056.55
LOSS (%)	12.85	12.24	12.11	9.45	11.48	9.81

	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL	%
ENERGY INJECTED (MWh)	2,097,363.33	2,135,689.67	2,351,523.40	2,238,562.16	2,339,103.42	2,407,124.94	26,660,598.59	
ENERGY EXTRACTED (MWh)	1,836,168.98	1,862,584.44	2,073,398.48	1,988,122.40	2,083,438.86	2,153,623.21	23,603,781.82	88.53
LOSS (MWh)	261,194.35	273,105.23	278,124.92	250,439.76	255,664.55	253,501.73	3,056,816.77	11.47
LOSS (%)	12.45	12.79	11.83	11.19	10.93	10.53	11.47	

Fig. 1.7



## 2.0 ADMINISTRATION OF MARKET SETTLEMENTS (BILLING AND CHARGES)

### 2.1 Settlement Report

#### 2.1.1 Disco Settlement Report

Table 2.1.1 Disco Settlement Report

DISCOS	GENERATION CHARGES (=N=M)			OTHER CHARGES (=N=M)				
	CAPACITY	ENERGY	TOTAL GENERATION CHARGES (A)	TCN	MO	NERC		CHQs
	AMOUNT	AMOUNT				REGULATORY CHARGE	ANNUAL LICENCE FEE	
ABUJA	11,957.07	4,351.50	16,308.56	3,823.07	17.79	95.18	109.58	183.99
BENIN	13,878.71	5,056.19	18,934.89	4,441.25	20.67	110.57	127.30	213.75
EKO	10,311.56	3,768.09	14,079.65	3,305.53	15.38	82.29	94.75	159.09
ENUGU	11,672.21	4,247.39	15,919.60	3,731.12	17.36	92.89	106.95	179.57
IBADAN	13,168.38	4,808.99	17,977.37	4,222.04	19.65	105.11	121.02	203.20
IKEJA	15,371.35	5,619.45	20,990.80	4,932.40	22.95	122.79	141.38	237.38
JOS	5,214.37	1,909.79	7,124.16	1,675.66	7.80	41.72	48.03	80.64
KADUNA	7,865.35	2,870.21	10,735.56	2,519.46	10.82	62.72	72.22	121.25
KANO	5,320.26	1,947.34	7,267.60	1,708.35	7.95	42.53	48.97	82.22
P/H	7,364.14	2,674.27	10,038.41	2,351.53	10.14	58.54	67.40	113.17
YOLA	2,124.75	778.38	2,903.13	682.17	3.17	16.98	19.55	32.83
<b>TOTAL</b>	<b>104,248.14</b>	<b>38,031.59</b>	<b>142,279.73</b>	<b>33,392.58</b>	<b>153.68</b>	<b>831.33</b>	<b>957.16</b>	<b>1,607.09</b>

DISCOS	OTHER CHARGES CONTD (=N=M)								GRAND TOTAL (GENERATION CHARGES PLUS OTHER CHARGES) (=N=M) A+B
	CAP. BUILDING	PEN. CHARGES	EQ. CHARGES	VAT	LOAN REPAYMENT	MMF	ODF	TOTAL OTHER CHARGES (B)	
ABUJA	31.11	346.63	222.68	812.28	60.00	970.67	251.72	6,924.71	23,233.27
BENIN	36.14	404.29	(517.38)	736.19	73.16	878.77	601.66	7,126.37	26,061.27
EKO	26.90	297.24	3,401.47	1,024.40	122.54	1,180.96	368.64	10,079.19	24,158.84
ENUGU	30.36	339.05	(1,835.19)	699.16	65.28	835.56	326.93	4,589.04	20,508.64
IBADAN	34.36	381.55	(765.08)	1,004.51	60.57	1,185.15	569.82	7,141.89	25,119.26
IKEJA	40.14	445.90	4,775.56	1,391.45	120.00	1,672.34	706.02	14,608.31	35,599.11
JOS	13.64	150.96	(1,756.83)	276.52	60.00	329.57	491.59	1,419.30	8,543.46
KADUNA	20.50	228.23	(1,076.17)	386.00	58.80	462.82	643.56	3,510.23	14,245.79
KANO	13.90	153.88	(1,370.96)	370.49	47.26	437.33	681.78	2,223.69	9,491.29
P/H	19.14	213.83	(2,876.34)	362.33	60.00	425.97	744.97	1,550.69	11,589.09
YOLA	5.55	61.27	(763.78)	118.89	29.85	140.79	352.30	699.59	3,602.72
<b>TOTAL</b>	<b>271.74</b>	<b>3,022.83</b>	<b>(2,562.02)</b>	<b>7,182.22</b>	<b>757.46</b>	<b>8,519.94</b>	<b>5,739.00</b>	<b>59,873.00</b>	<b>202,152.73</b>

## 2.1.2 GENCOS Settlement Report

Table 2.1.2 GENCOS Settlement Report

GENCOS	INFLOW (=N=M)			OUTFLOW (=N=M)					GRAND TOTAL (INFLOW MINUS OUTFLOW) (=N=M) A - B
	CAPACITY	ENERGY	TOTAL INFLOW (A)	FUEL	PENSION CHARGE	PENSION FUND	LOAN	TOTAL OUTFLO W (B)	
	AMOUNT	AMOUNT							
AFAM	1,050.73	718.70	1,769.43	545.12	54.56	-	-	599.68	1,169.75
DELTA	4,116.27	2,700.48	6,816.76	2,048.14	205.32	(16.93)	-	2,236.53	4,580.23
EGBIN	17,397.73	11,807.49	29,205.23	8,965.61	897.24	(4.64)	-	9,858.21	19,347.01
SAPELE	4,916.67	3,013.51	7,930.17	2,288.83	227.33	-	-	2,516.16	5,414.01
JEBBA	1,887.12	1,141.35	3,028.46	864.46	87.31	(20.95)	12.70	943.52	2,084.94
SHIRORO	7,082.84	4,600.52	11,683.35	3,487.39	347.86	(20.61)	-	3,814.64	7,868.71
KAINJI	4,706.80	3,254.16	7,960.95	2,469.85	244.63	(122.82)	-	2,591.66	5,369.30
GEREGU	6,805.69	4,355.97	11,161.65	3,306.08	325.84	(21.86)	-	3,610.07	7,551.58
OMOTOSHO	1,454.88	682.23	2,137.10	516.37	51.42	-	-	567.78	1,569.32
OLORUNSOGO	1,718.77	592.80	2,311.57	438.47	44.21	-	-	482.68	1,828.90
AJAKUTA	-	-	-	-	-	-	-	-	-
TOTAL	51,137.48	32,867.20	84,004.68	24,930.31	2,485.72	(207.80)	12.70	27,220.94	56,783.75

## 2.1.3 TCN Settlement Report

Table 2.1.3 TCN Settlement Report

NAME OF COMPANY	INFLOW (=N=M)	OUTFLOW (=N=M)							NET INCOME (INFLOW MINUS OUTFLOW) (=N=M) (A – B)
	TOTAL INFLOW (A)	NERC	CHQs	PENSION CHARGE	LOAN REFUND	PENSION FUND	ANCILLARY CHARGES	TOTAL OUTFLOW (B)	
TCN	36,446.19	357.40	821.46	3,300.58	124.90	(130.56)	349.18	4,822.96	31,623.23

## 2.2 Tariff Equalization Report

Table 2.2 Equalization Table

DISCOS	TOTAL ENERGY RECEIVED (KWh)	% OF TOTAL ENERGY	EQUALIZATION (N/MWh)			
			EQUALIZATION RATE	PAYMENTS (=N=M)	CHARGES (=N=M)	SURPLUS/DEFICIT (=N=M)
ABUJA	2,474,231,620	11.44	(0.09)	222,680,845.80		
BENIN	2,898,546,330	13.40	0.18		(521,738,339.40)	
EKO	2,139,287,810	9.89	(1.59)	3,401,467,617.90		
ENUGU	2,414,722,750	11.16	0.76		(1,835,189,290.00)	
IBADAN	2,732,437,310	12.63	0.28		(765,082,446.80)	
IKEJA	3,192,174,240	14.75	(1.59)	5,075,557,041.60		
JOS	1,084,460,160	5.01	1.62		(1,756,825,459.20)	
KADUNA	1,630,558,050	7.54	0.66		(1,076,168,313.00)	
KANO	1,105,616,158	5.11	1.24		(1,370,964,035.92)	
P/H	1,521,874,010	7.03	1.89		(2,876,341,878.90)	
YOLA	441,493,030	2.04	1.73		(763,782,941.90)	
<b>TOTAL</b>	<b>21,635,401,468</b>	<b>100.00</b>		<b>8,699,705,505.30</b>	<b>(10,966,092,705.12)</b>	<b>(2,266,387,199.82)</b>

Equalization inflow against outflow	
Energy Ratio	36.08 : 63.92
Price Ratio	3.27 : 8.36

## 2.3 PHCN/Ajaokuta and NIOMCO Itakpe Energy Generation Reconciliation

Table 2.3 PHCN/Ajaokuta and NIOMCO Itakpe Energy Generation Reconciliation

MONTHS	ENERGY DELIVERED TO AJAOKUTA AND NIOMCO ITAKPE BY PHCN (KWh)	ENERGY SUPPLIED TO PHCN BY AJAOKUTA (KWh)	NET ENERGY SUPPLIED TO AJAOKUTA AND SISTER COMPANIES (KWh)
JAN	5,931,200	-	5,931,200
FEB	6,210,000	-	6,210,000
MAR	7,078,400	-	7,078,400
APR	6,862,200	-	6,862,200
MAY	6,605,600	-	6,605,600
JUN	6,477,600	-	6,477,600
JULY	6,273,600	-	6,273,600
AUGUST	6,111,400	-	6,111,400
SEPTEMBER	6,569,600	-	6,569,600
OCTOBER	6,644,600	-	6,644,600
NOVEMBER	7,207,600	-	7,207,600
DECEMBER	6,450,000	-	6,450,000
<b>TOTAL</b>	<b>78,421,800</b>	<b>-</b>	<b>78,421,800</b>

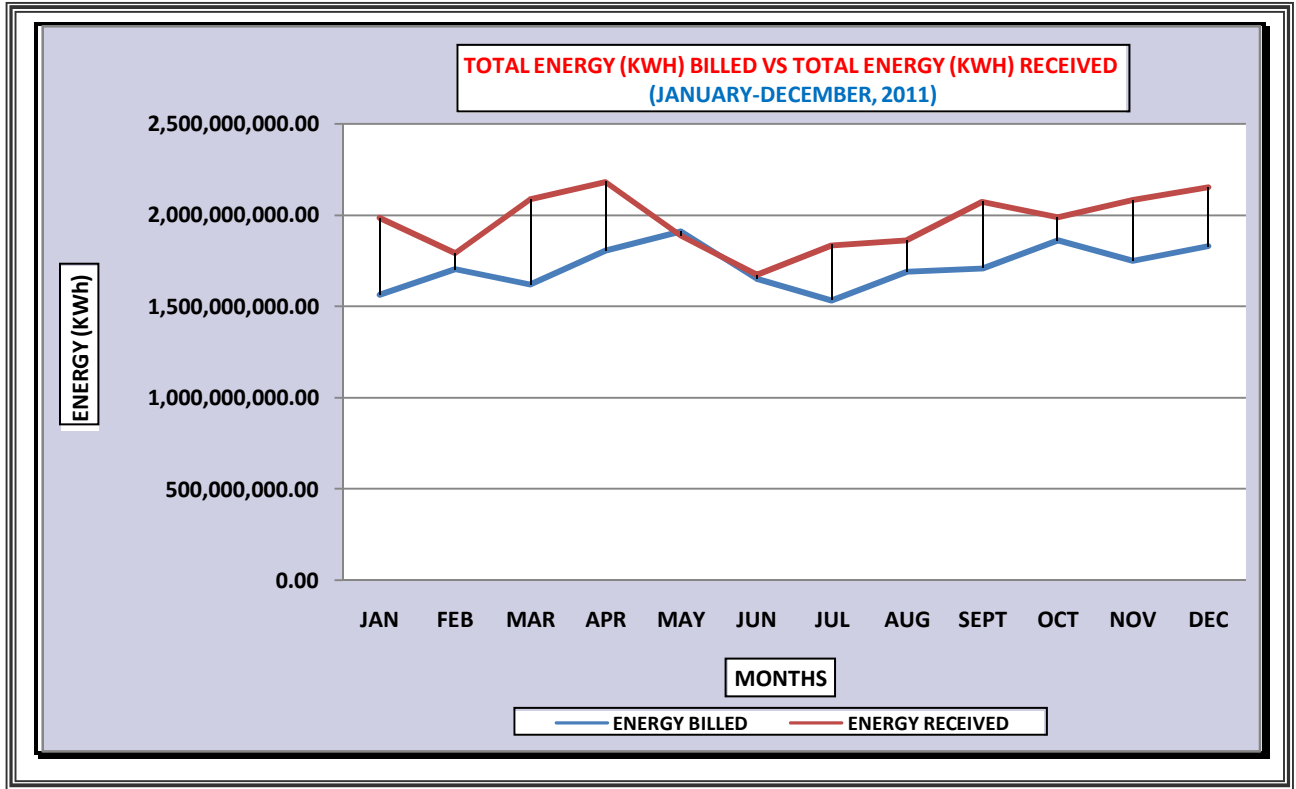
## 2.4 Energy Billed (KWh)

Table 2.4 Energy Billed (KWh) by the DISCOS, and billed to the International Connections and the Large Power Consumers

ZONE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY
ABUJA	160,448,082.00	161,034,029.00	160,166,163.00	175,313,918.00	175,693,354.00	173,199,540.00	162,833,335.00
BENIN	187,978,686.03	193,166,541.94	160,661,160.12	198,261,239.31	190,583,644.70	172,493,373.91	197,907,309.31
EKO	114,210,150.10	160,756,201.70	145,201,035.30	193,312,812.00	200,868,609.50	159,474,861.70	125,810,734.28
ENUGU	192,019,617.00	197,330,665.00	187,024,781.00	177,957,136.00	192,182,426.00	163,256,839.00	174,914,612.00
IBADAN	179,943,162.60	195,935,329.00	168,327,289.00	169,827,615.00	252,870,893.00	212,774,492.00	145,701,905.00
IKEJA	194,826,520.15	223,064,997.78	205,268,022.38	260,842,162.21	261,971,294.83	228,570,443.96	193,396,138.51
JOS	67,605,169.44	84,966,582.44	79,715,540.84	89,914,225.76	85,942,863.36	70,958,697.40	60,525,650.72
KADUNA	118,393,130.66	114,392,528.66	130,287,579.66	131,229,611.66	124,825,585.66	108,487,261.66	108,039,343.66
KANO	69,957,573.70	78,588,072.00	67,526,579.33	84,889,336.00	114,022,300.00	71,138,275.00	54,938,783.00
P-H	97,460,743.00	107,135,524.50	107,046,419.00	104,745,624.00	107,952,342.00	101,077,730.00	108,296,554.70
YOLA	26,573,549.60	35,965,695.70	31,354,693.50	40,576,691.70	43,724,000.20	33,273,677.10	21,993,059.00
SUB-TOTAL	1,409,416,384.28	1,552,336,167.72	1,442,579,263.13	1,626,870,371.64	1,750,637,313.25	1,494,705,191.73	1,354,357,425.18
NIGEELEC	39,692,800.00	43,957,800.00	52,738,000.00	52,435,900.00	55,193,700.00	52,700,600.00	55,554,800.00
CEB	101,435,000.00	93,471,000.00	94,821,000.00	98,045,000.00	82,564,000.00	81,776,000.00	94,143,000.00
SUB TOTAL	141,127,800.00	137,428,800.00	147,559,000.00	150,480,900.00	137,757,700.00	134,476,600.00	149,697,800.00
AJAOKUTA	5,816,000.00	6,012,000.00	6,836,000.00	6,663,000.00	6,422,000.00	6,300,000.00	6,102,000.00
DELTA STEEL	8,171,600.00	6,313,740.00	20,887,730.00	19,539,670.00	15,267,100.00	15,294,140.00	21,277,043.00
ITAKPE	115,200.00	198,000.00	242,400.00	199,200.00	183,600.00	177,600.00	171,600.00
SUB TOTAL	14,102,800.00	12,523,740.00	27,966,130.00	26,401,870.00	21,872,700.00	21,771,740.00	27,550,643.00
GRAND TOTAL	1,564,646,984.28	1,702,288,707.72	1,618,104,393.13	1,803,753,141.64	1,910,267,713.25	1,650,953,531.73	1,531,605,868.18

ZONE	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL ENERGY BILLED	AVE. ENERGY BILLED
ABUJA	166,940,110.00	166,272,965.00	177,506,654.00	171,787,433.00	174,295,801.00	2,025,491,384.00	168,790,948.67
BENIN	226,172,306.35	227,512,679.52	229,423,298.70	225,928,805.27	234,169,102.63	2,444,258,147.79	203,688,178.98
EKO	127,910,887.70	160,921,239.00	226,741,654.70	176,357,751.10	177,916,063.30	1,969,482,000.38	164,123,500.03
ENUGU	176,542,941.00	174,714,588.00	171,713,543.00	182,145,883.00	206,238,575.00	2,196,041,606.00	183,003,467.17
IBADAN	207,396,264.00	192,194,713.00	203,970,587.00	207,094,347.00	211,580,064.00	2,347,616,660.60	195,634,721.72
IKEJA	222,033,861.11	226,720,855.42	275,927,707.19	228,809,804.44	236,544,320.90	2,757,976,128.88	229,831,344.07
JOS	67,500,882.20	61,993,851.32	83,132,378.31	73,304,470.10	74,471,275.58	900,031,587.47	75,002,632.29
KADUNA	114,397,114.60	113,380,084.60	119,941,475.60	119,193,092.60	118,232,198.40	1,420,799,007.42	118,399,917.29
KANO	68,624,408.00	64,304,716.00	88,279,476.00	85,898,579.00	79,603,307.70	927,771,405.73	77,314,283.81
P-H	120,087,488.40	114,660,967.30	85,293,347.30	86,524,368.40	123,206,787.40	1,263,487,896.00	105,290,658.00
YOLA	26,696,272.80	29,857,458.80	41,441,544.70	33,807,607.90	35,284,246.30	400,548,497.30	33,379,041.44
SUB TOTAL	1,524,302,536.16	1,532,534,117.96	1,703,371,666.50	1,590,852,141.81	1,671,541,742.21	18,653,504,321.57	1,554,458,693.46
NIGEELEC	53,299,100.00	54,298,100.00	55,248,000.00	49,784,200.00	42,704,800.00	607,607,800.00	50,633,983.33
CEB	84,962,000.00	93,918,000.00	91,310,000.00	98,531,000.00	92,808,000.00	1,107,784,000.00	92,315,333.33
SUB TOTAL	138,261,100.00	148,216,100.00	146,558,000.00	148,315,200.00	135,512,800.00	1,715,391,800.00	142,949,316.67
AJAOKUTA	5,983,000.00	6,434,000.00	6,491,000.00	7,060,000.00	6,360,000.00	76,479,000.00	6,373,250.00
DELTA STEEL	21,277,043.00	21,277,043.00	5,983,510.00	4,319,104.00	14,958,630.00	174,566,353.00	14,547,196.08
ITAKPE	128,400.00	135,600.00	153,600.00	147,600.00	90,000.00	1,942,800.00	161,900.00
SUB TOTAL	27,388,443.00	27,846,643.00	6,786,210.00	5,172,704.00	21,408,630.00	252,988,153.00	21,082,346.08
GRAND TOTAL	1,689,952,079.16	1,708,596,860.96	1,856,715,876.50	1,744,340,045.81	1,828,463,172.21	20,621,884,274.57	1,718,490,356.21

Fig. 2.4





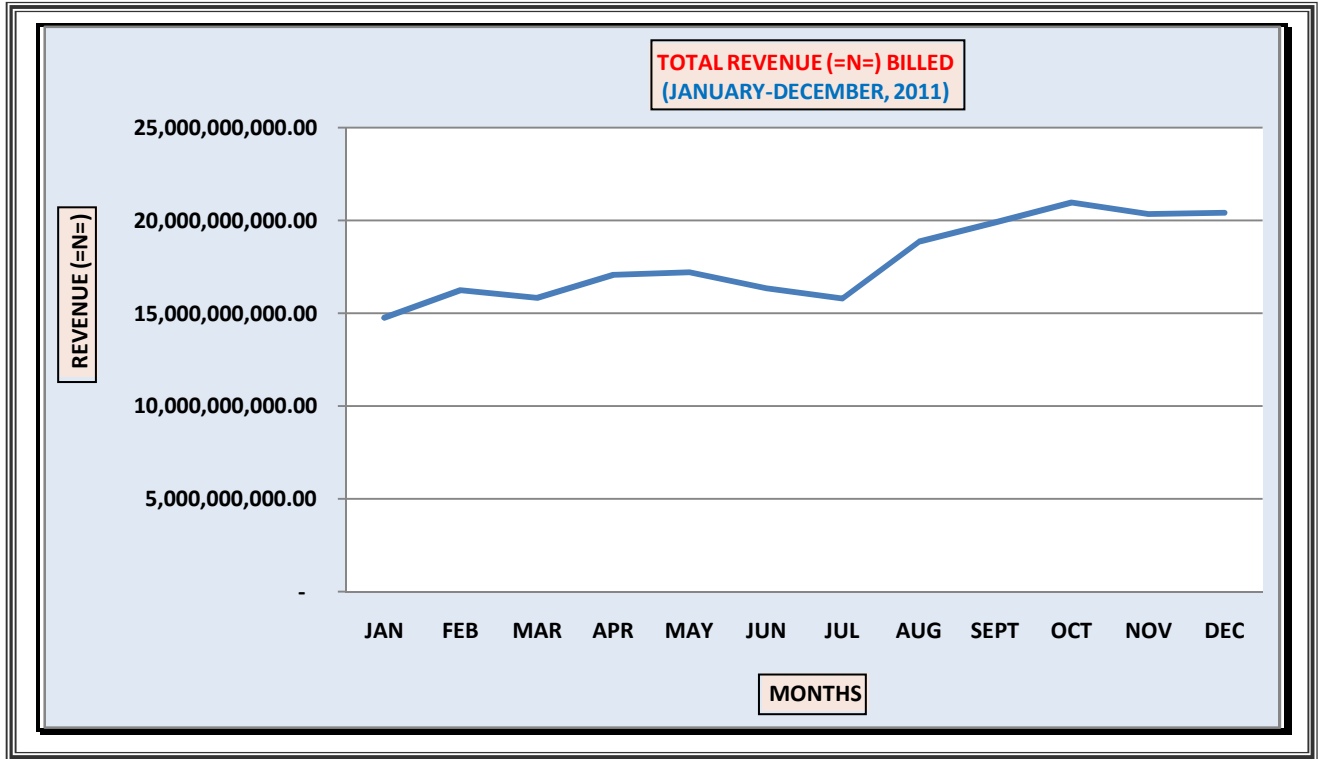
## 2.5 Revenue Billed

Table 2.5 Revenue Billed (=N=) by the DISCOS, and billed to the International Connections and the Large Power Consumers

ZONE	JAN	FEB	MAR	APR	MAY	JUN	JUL
ABUJA	1,617,324,265.24	1,656,978,250.01	1,670,048,190.03	1,742,282,356.16	1,798,968,549.29	1,793,891,517.17	1,745,386,334.37
BENIN	1,184,161,286.13	1,190,792,694.94	1,071,387,436.97	1,529,056,292.31	1,522,476,529.10	1,403,028,520.84	1,631,441,716.63
EKO	1,522,929,294.98	1,928,692,537.34	1,854,490,760.53	2,258,291,764.21	2,330,749,949.63	1,914,488,133.22	1,648,281,184.47
ENUGU	1,448,202,989.83	1,758,196,542.31	1,687,461,091.27	1,424,075,126.62	1,530,484,787.68	1,487,703,091.80	1,598,378,749.21
IBADAN	1,802,389,149.48	1,991,871,811.24	1,832,598,034.07	2,029,500,610.69	1,743,294,546.69	1,941,698,619.20	1,700,810,024.41
IKEJA	2,259,924,860.25	2,525,410,885.88	2,371,142,144.88	2,852,163,119.42	2,827,203,283.33	2,572,112,065.97	2,274,510,359.74
JOS	649,868,891.96	772,708,391.21	754,806,615.87	829,660,942.43	799,713,714.70	680,103,413.84	605,166,541.29
KADUNA	1,087,569,393.00	1,038,847,002.00	1,197,887,899.00	1,208,040,401.00	1,119,985,878.00	1,000,462,030.00	1,173,743,774.00
KANO	762,472,995.44	796,197,937.41	749,286,094.63	890,346,027.56	907,656,013.83	834,222,318.51	672,531,279.96
P-H	985,521,685.60	1,026,214,973.69	986,382,152.95	980,942,772.20	963,659,013.62	894,434,434.27	939,275,516.79
YOLA	206,744,705.08	266,319,406.21	241,847,747.67	308,864,168.34	329,370,069.46	266,664,587.06	184,431,004.62
SUB TOTAL	13,527,109,516.99	14,952,230,432.24	14,417,338,167.87	16,053,223,580.94	15,873,562,335.33	14,788,808,731.88	14,173,956,485.49
NIGELEC	319,593,471.24	349,985,506.77	405,692,119.13	270,158,852.75	444,095,523.81	465,271,480.05	419,654,991.98
CEB	764,740,430.94	792,107,538.10	729,419,630.67	505,368,445.36	669,989,289.09	721,965,984.30	711,146,109.96
SUB TOTAL	1,084,333,902.18	1,142,093,044.87	1,135,111,749.80	775,527,298.11	1,114,084,812.90	1,187,237,464.35	1,130,801,101.93
AJAOKUTA	55,557,621.00	57,461,145.00	65,048,949.00	63,318,381.00	61,284,258.00	107,770,758.97	104,500,906.50
DELTA STEEL	83,134,737.00	66,553,336.50	196,626,197.25	184,594,761.75	146,462,074.50	262,386,059.06	357,873,190.94
ITAKPE	1,336,650.00	2,007,600.00	2,403,870.00	2,018,310.00	2,049,180.00	3,388,518.00	3,414,728.00
SUB TOTAL	140,029,008.00	126,022,081.50	264,079,016.25	249,931,452.75	209,795,512.50	373,545,336.03	465,788,825.44
GRAND TOTAL	14,751,472,427.17	16,220,345,558.61	15,816,528,933.92	17,078,682,331.80	17,197,442,660.73	16,349,591,532.26	15,770,546,412.87

ZONE	AUG	SEPT	OCT	NOV	DEC	TOTAL REVENUE BILLED	AVERAGE REVENUE BILLED
ABUJA	1,677,181,600.94	1,990,524,736.39	2,012,467,293.83	1,929,141,583.79	2,041,490,004.19	21,675,684,681.41	1,806,307,056.78
BENIN	2,181,572,165.86	2,205,312,500.14	2,116,058,968.55	2,086,211,813.48	2,107,370,894.37	20,228,870,819.32	1,685,739,234.94
EKO	1,980,621,466.14	2,395,455,826.67	2,849,581,613.07	2,487,400,554.98	2,460,616,286.43	25,631,599,371.67	2,135,966,614.31
ENUGU	1,947,870,590.56	1,947,359,852.76	1,909,811,453.94	2,048,099,933.22	2,129,568,288.01	20,917,212,497.21	1,743,101,041.43
IBADAN	2,285,707,814.18	2,317,997,792.38	2,314,158,936.61	2,689,978,949.38	2,580,508,822.52	25,230,515,110.85	2,102,542,925.90
IKEJA	2,960,313,693.40	3,023,780,260.53	3,562,451,178.27	3,064,390,297.14	2,982,213,309.00	33,275,615,457.81	2,772,967,954.82
JOS	799,665,031.14	750,978,306.94	936,214,179.66	844,499,981.07	866,655,427.78	9,290,041,437.89	774,170,119.82
KADUNA	1,266,819,524.14	1,246,087,961.25	1,232,109,365.95	1,236,221,876.56	1,217,473,192.16	14,025,248,297.11	1,168,770,691.43
KANO	936,983,633.70	871,180,481.07	1,147,255,029.82	1,118,522,324.65	960,855,409.57	10,647,509,546.15	887,292,462.18
P-H	1,130,213,824.57	1,159,936,036.63	1,037,746,630.82	1,056,262,798.17	1,296,301,383.28	12,456,891,222.59	1,038,074,268.55
YOLA	252,583,380.23	281,590,664.34	377,356,146.68	301,417,493.15	316,252,902.18	3,333,442,275.02	277,786,856.25
SUB TOTAL	17,419,532,724.86	18,190,204,419.10	19,495,210,797.20	18,862,147,605.59	18,959,305,919.49	196,712,630,717.03	16,392,719,226.42
NIGELEC	361,531,121.31	451,058,031.92	466,601,719.77	415,178,637.73	348,132,206.55	4,716,953,663.00	393,079,471.92
CEB	608,862,598.77	780,183,252.12	769,799,970.11	821,705,809.35	756,576,633.67	8,631,865,692.44	719,322,141.04
SUB TOTAL	970,393,720.08	1,231,241,284.03	1,236,401,689.88	1,236,884,447.08	1,104,708,840.23	13,348,819,355.44	1,112,401,612.95
AJAOKUTA	102,115,817.27	109,603,457.25	110,696,133.00	119,895,205.52	108,112,336.50	1,065,364,969.01	88,780,414.08
DELTA STEEL	357,873,190.94	357,873,190.94	113,794,788.26	108,537,744.90	248,025,757.06	2,483,735,029.10	206,977,919.09
ITAKPE	2,420,330.00	2,535,242.00	2,944,493.00	2,762,264.00	1,856,181.87	29,137,366.87	2,428,113.91
SUB TOTAL	462,409,338.21	470,011,890.19	227,435,414.26	231,195,214.42	357,994,275.43	3,578,237,364.98	298,186,447.08
GRAND TOTAL	18,852,335,783.16	19,891,457,593.33	20,959,047,901.34	20,330,227,267.09	20,422,009,035.15	213,639,687,437.45	17,803,307,286.45

Fig. 2.5



## 3.0 ADMINISTRATION OF MARKET COLLECTIONS AND PAYMENTS

### 3.1 Revenue Collection And Income Distribution Report

Table 3.1 Revenue Collection and Income Distribution

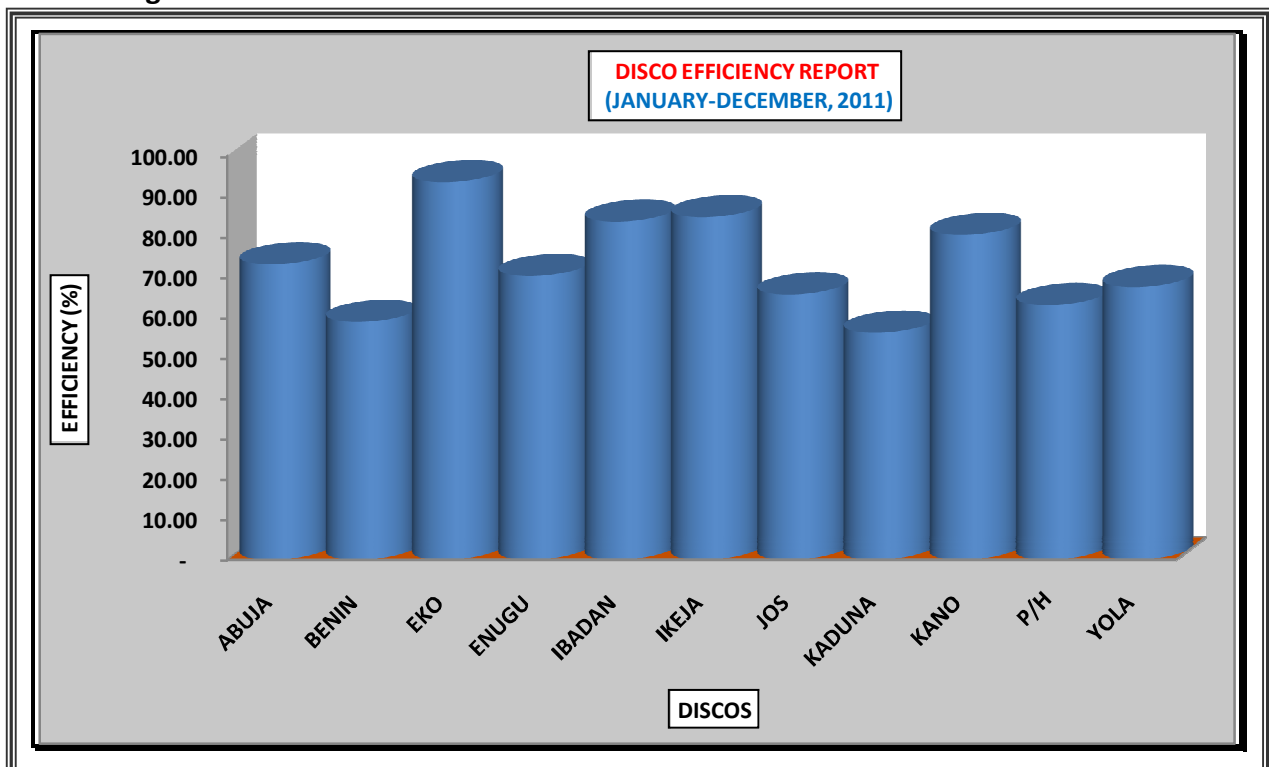
BENEFICIARY	ENERGY (MWh)	REVENUE EXPECTED (=N=M)				ACTUAL REVENUE (=N=M)			REVENUE GAP (=N-M)	REQUIRED SETTLEMENT (=N=M)	ACTUAL SETTLEMENT (ALLOCATION) (=N=M)	SETTLEMENT SHORTFALL (=N-M)
	ENERGY RECEIVED	MO INVOICE	DISCOS MYTO BASED INCOME	PROV. FOR EQUALIZATION	TOTAL	COLLECTION	SUBSIDY	TOTAL				
DISCOS												
ABUJA	2,474,231.62	22,998.27	6,112.26	-	29,110.53	17,074.81	4,211.99	21,286.81	7,823.73	6,112.26	8,339.39	(2,227.13)
BENIN	2,898,546.33	25,780.49	7,100.61	-	32,881.10	15,582.52	3,772.82	19,355.35	13,525.75	7,100.61	8,512.38	(1,411.78)
EKO	2,139,287.81	23,826.47	5,284.83	-	29,111.30	22,014.36	5,202.54	27,216.91	1,894.39	5,284.83	10,698.63	(5,413.80)
ENUGU	2,414,722.75	20,273.92	5,965.26	-	26,239.17	14,772.47	3,662.08	18,434.54	7,804.63	5,965.26	8,824.05	(2,858.80)
IBADAN	2,732,437.31	24,782.86	6,750.13	-	31,532.98	21,370.40	5,028.12	26,398.52	5,134.46	6,750.13	11,035.14	(4,285.01)
IKEJA	3,192,174.24	35,425.86	7,885.85	-	43,311.71	29,531.91	7,195.15	36,727.06	6,584.65	7,885.85	11,759.82	(3,873.98)
JOS	1,084,460.16	8,434.70	2,679.02	-	11,113.72	5,844.12	1,453.94	7,298.06	3,815.66	2,679.02	4,393.79	(1,714.77)
KADUNA	1,630,558.05	14,038.34	4,052.62	-	18,090.96	8,110.63	2,055.07	10,165.70	7,925.26	4,052.62	4,450.94	(398.32)
KANO	1,105,616.16	9,277.44	2,731.28	-	12,008.72	7,747.97	1,907.87	9,655.84	2,352.88	2,731.28	4,934.47	(2,203.19)
PIH	1,521,874.01	11,374.29	3,759.59	-	15,133.88	7,664.02	1,876.49	9,540.51	5,593.37	3,759.59	5,044.13	(1,284.54)
YOLA	441,493.03	3,502.29	1,090.65	-	4,592.94	2,466.13	633.92	3,100.05	1,492.88	1,090.65	2,691.27	(1,600.62)
PROV. FOR EQUAL.				2,262.02	2,262.02							
SUB-TOTAL	21,635,401.47	199,714.92	53,412.09	2,262.02	255,389.03	152,179.34	37,000.00	189,179.34	66,209.69	53,412.09	80,684.02	(27,271.93)
NIGEELEC	607,215.67	4,716.95	-	-	4,716.95	3,076.64	-	3,076.64	1,640.31	-	-	-
CEB	1,107,784.00	8,631.87	-	-	8,631.87	7,296.32	-	7,296.32	1,335.54	-	-	-
AJAKUTA	76,479.00	728.11	-	-	728.11	2.39	-	2.39	725.72	-	-	-
ITAKPE	1,942.80	7.94	-	-	7.94	-	-	-	7.94	-	-	-
DELTA	174,566.75	1,487.18	-	-	1,487.18	70.00	-	70.00	1,417.18	-	-	-
SUB TOTAL	1,968,380.35	15,572.05	-	-	15,572.05	10,445.36	-	10,445.36	5,126.69	-	-	-
TOTAL	23,603,781.82	215,286.97	53,412.09	2,262.02	270,961.08	162,624.70	37,000.00	199,624.70	71,336.38	53,412.09	80,684.02	(27,271.93)
POWER STATIONS												
FGN												
AFAM	389,092.54									1,169.75	1,514.51	(344.76)
DELTA	1,461,912.68									4,583.88	2,564.04	2,019.84
EGBIN	6,399,428.63									20,171.90	6,327.88	13,844.02
GEREGU	1,263,783.70									4,701.13	2,269.81	2,431.32
SAPELE	1,664,528.00									4,493.74	2,068.36	2,425.37
OMOTOSHO	368,568.60									1,569.32	779.46	789.86
OLORUNSOGO	312,970.50									1,814.41	521.70	1,292.71
JEBBA	1,641,196.76									6,196.32	3,431.47	2,764.85
KAINJI	2,361,316.80									6,797.78	3,499.49	3,298.29
SHIRORO	1,931,139.60									6,245.69	3,130.95	3,114.75
SUB-TOTAL	17,793,937.81									57,743.93	26,107.67	31,981.02
IPP												
SHELL	3,261,864.13									30,023.96		
AGIP	2,921,773.12									22,649.74		
AES	1,518,901.70									10,002.47		
IBOM POWER	188,907.00									1,804.49	33,594.59	37,300.72
OLORUNSOGO IPP	809,835.05									5,347.62		
SAPELE IPP	130,779.26									1,011.46		
NESCO	124,913.00									55.58		
SUB-TOTAL	8,956,973.26									70,895.31	33,594.59	37,300.72
TOTAL	26,750,911.07									128,639.24	59,702.26	69,281.74
OTHERS												
TCN										31,572.43	19,969.14	11,603.29
ANCILIARY SERV.										349.18	259.45	89.73
CHQ										2,428.55	7,614.97	(5,186.42)
NERC										1,188.72	1,359.82	(171.10)
NERC LICENCE										957.16	345.11	612.04
MO										155.38	275.18	(119.80)
GAS										23,886.90	17,112.99	6,773.92
VAT										7,185.01	4,149.09	3,035.92
RESERVE/ & PROD.										-	2,167.17	(2,167.17)
CAPACITY BULD.										271.74	293.37	(21.62)
GRATUITY										-	2,000.00	(2,000.00)
LOAN REPAYMENT										504.97	-	504.97
OUT. DEBT										4,762.97	2,000.65	2,762.32
MMF										6,950.60	-	6,950.60
PENSION CHARGE										8,696.13	-	8,696.13
PENSION FUND										-	200.00	(200.00)
MARKET PROJECT										-	1,491.49	(1,491.49)
SUB-TOTAL										88,909.75	59,238.41	41,028.94
GRAND TOTAL		215,286.97	53,412.09	2,262.02	270,961.08	162,624.70	37,000.00	199,624.70	71,336.38	270,961.08	199,624.70	110,310.68

## 3.2 Disco Evaluation Report

Table 3.2 Expected Revenue Vs Actual Collection

DISCOs	EXPECTED REVENUE (=N=)	ACTUAL COLLECTION (INCLUDING SUBSIDY) (=N=)	EFFICIENCY (%)	RANKING
ABUJA	29,110,533,368.80	21,286,805,967.30	73.12	5TH
BENIN	32,881,098,797.44	19,355,345,460.66	58.86	10TH
EKO	29,111,302,424.86	27,216,908,205.30	93.49	1ST
ENUGU	26,239,173,883.00	18,434,541,652.38	70.26	6TH
IBADAN	31,532,983,981.64	26,398,519,153.12	83.72	3RD
IKEJA	43,311,706,006.98	36,727,057,765.74	84.80	2ND
JOS	11,113,721,290.16	7,298,062,180.81	65.67	8TH
KADUNA	18,090,961,719.73	10,165,698,518.05	56.19	11TH
KANO	12,008,716,594.96	9,655,838,075.38	80.41	4TH
PORTHARCOURT	15,133,875,368.74	9,540,509,078.03	63.04	9TH
YOLA	4,592,936,381.42	3,100,054,649.57	67.50	7TH
TOTAL	253,127,009,817.72	189,179,340,706.34	74.74	

Fig. 3.2

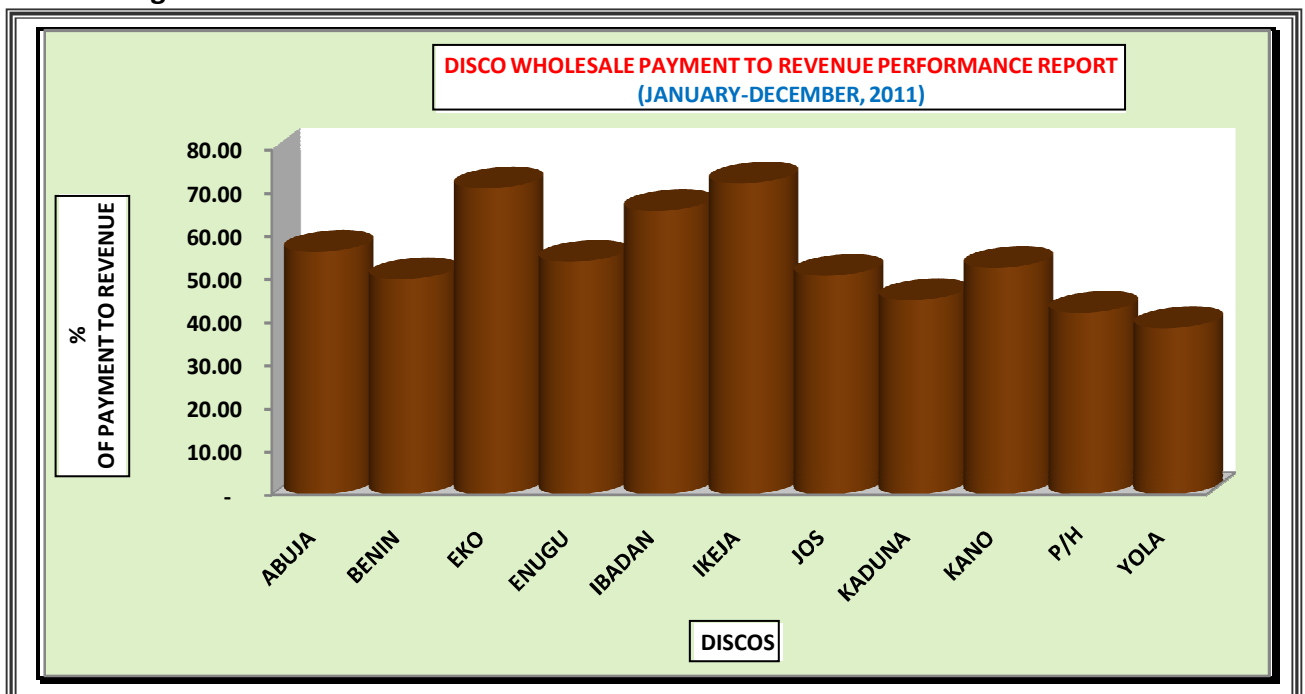


### 3.3 Disco Wholesale Payment Performance Report

Table 3.3 DISCO Wholesale Payment Performance Report

DISCOs	INVOICE =N=	PAYMENT TO MARKET ACCOUNT (INCLUDING SUBSIDY) =N=	PAYMENT EFFICIENCY %	RANKING
ABUJA	22,998,269,148.22	12,948,427,952.07	56.30	4TH
BENIN	25,780,491,020.04	12,877,792,558.84	49.95	8TH
EKO	23,826,472,891.19	16,919,785,008.43	71.01	2ND
ENUGU	20,273,918,509.12	10,944,336,438.14	53.98	5TH
IBADAN	24,782,856,519.93	16,304,476,321.73	65.79	3RD
IKEJA	35,425,858,847.31	25,566,265,184.66	72.17	1ST
JOS	8,434,704,911.49	4,277,931,779.97	50.72	7TH
KADUNA	14,038,339,122.66	6,329,380,381.35	45.09	9TH
KANO	9,277,437,102.11	4,878,572,073.61	52.59	6TH
PORTHARCOURT	11,374,285,529.08	4,794,680,493.33	42.15	10TH
YOLA	3,502,285,882.85	1,350,962,843.67	38.57	11TH
TOTAL	199,714,919,484.01	117,192,611,035.80	58.68	

Fig. 3.3

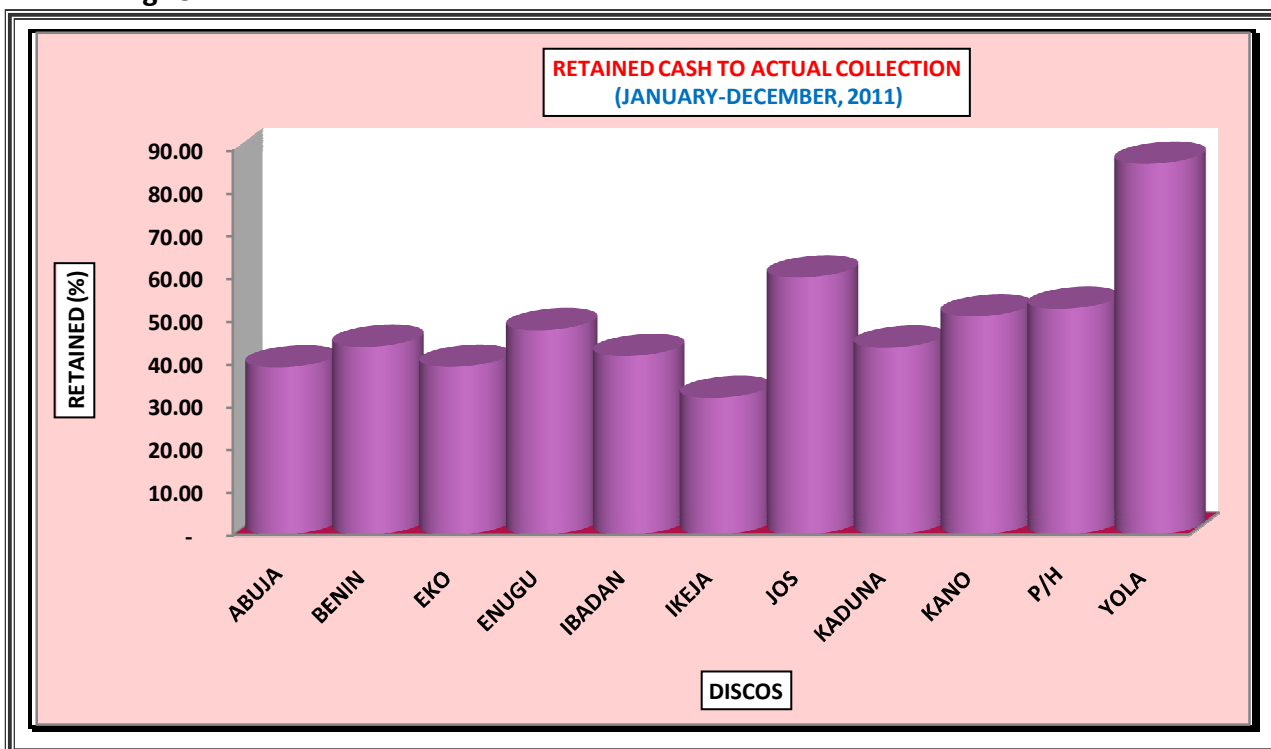


### 3.4 Disco Collection Against Operating Cost

Table 3.4 DISCO Collection Against Operating Cost

DISCOS	ACTUAL COLLECTION =N=	RETAINED BY DISCO =N=	% RETAINED	RANKING
ABUJA	21,286,805,967.30	8,339,389,503.53	39.18	2ND
BENIN	19,355,345,460.66	8,512,382,912.88	43.98	6TH
EKO	27,216,908,205.30	10,698,628,453.09	39.31	3RD
ENUGU	18,434,541,652.38	8,824,053,845.14	47.87	7TH
IBADAN	26,398,519,153.12	11,035,136,238.81	41.80	4TH
IKEJA	36,727,057,765.74	11,759,822,423.76	32.02	1ST
JOS	7,298,062,180.81	4,393,787,386.10	60.20	10TH
KADUNA	10,165,698,518.05	4,450,944,538.46	43.78	5TH
KANO	9,655,838,075.38	4,934,470,497.58	51.10	8TH
PORTHARCOURT	9,540,509,078.03	5,044,133,220.45	52.87	9TH
YOLA	3,100,054,649.57	2,691,273,981.79	86.81	11TH
TOTAL	189,179,340,706.34	80,684,023,001.59	42.65	

Fig. 3.4



## 4.0 SETTLEMENT ADMINISTRATION OF THE INDEPENDENT LARGE POWER CONSUMERS

### 4.1 Payment Status on Ajaokuta Steel Company and NIOMCO Itakpe

Table 4.1 Energy Received Against Invoice/Payment Status on Ajaokuta and NIOMCO Itakpe

MONTHS	CAPACITY (MW)	ENERGY (MWh)	INVOICE =N=	=N=/MWh	PAYMENT MADE =N=	OUTSTANDING =N=	CUMMULATIVE OUTSTANDING =N=
01/01/2011							1,805,484,149.92
JANUARY	11.16	5,931.20	56,894,271.00	9,592.37	-	56,894,271.00	1,862,378,420.92
FEBRUARY	11.40	6,210.00	59,468,745.00	9,576.29	2,391,994.88	57,076,750.12	1,919,455,171.04
MARCH	12.06	7,078.40	67,452,819.00	9,529.39	-	67,452,819.00	1,986,907,990.04
APRIL	11.53	6,862.20	65,336,691.00	9,521.25	-	65,336,691.00	2,052,244,681.04
MAY	12.34	6,605.60	63,332,438.00	9,587.69	-	63,332,438.00	2,115,577,119.04
JUNE	12.23	6,477.60	111,159,276.97	17,160.57	-	111,159,276.97	2,226,736,396.01
JULY	12.24	6,273.60	107,915,634.50	17,201.55		107,915,634.50	2,334,652,030.51
AUGUST	11.00	6,111.40	104,536,147.27	17,105.11		104,536,147.27	2,439,188,177.78
SEPTEMBER	11.46	6,569.60	112,138,699.25	17,069.33		112,138,699.25	2,551,326,877.03
OCTOBER	11.94	6,644.60	113,640,626.00	17,102.70		113,640,626.00	2,664,967,503.03
NOVEMBER	12.44	7,207.60	122,657,469.52	17,017.80		122,657,469.52	2,787,624,972.55
DECEMBER	11.06	6,450.00	109,968,518.37	17,049.38		109,968,518.37	2,897,593,490.92
TOTAL	11.75	78,421.80	1,094,501,335.88	13,956.60	2,391,994.88	1,092,109,341.00	2,897,593,490.92

### 4.2 Payment Status on Delta Steel Company Aladja Warri

Table 4.2 Energy Received Against Invoice/Payment Status on Delta Steel

MONTHS	CAPACITY (MW)	ENERGY (MWh)	INVOICE =N=	=N=/MWh	PAYMENT MADE =N=	OUTSTANDING =N=	CUMMULATIVE OUTSTANDING =N=
01/01/2011							4,673,799,181.75
JANUARY	28.79	8,171.60	83,134,737.00	10,173.62	-	83,134,737.00	4,756,933,918.75
FEBRUARY	28.79	6,313.74	66,553,336.50	10,541.03	70,000,000.00	(3,446,663.50)	4,753,487,255.25
MARCH	28.79	20,887.73	196,626,197.25	9,413.48	-	196,626,197.25	4,950,113,452.50
APRIL	28.79	19,539.67	184,594,761.75	9,447.18	-	184,594,761.75	5,134,708,214.25
MAY	28.79	15,267.10	146,462,074.50	9,593.31	-	146,462,074.50	5,281,170,288.75
JUNE	28.79	15,294.14	262,386,059.06	17,155.99	-	262,386,059.06	5,543,556,347.81
JULY	28.79	21,277.04	357,873,190.94	16,819.69	-	357,873,190.94	5,901,429,538.75
AUGUST	28.79	21,277.04	357,873,190.94	16,819.69	-	357,873,190.94	6,259,302,729.69
SEPTEMBER	28.79	21,277.04	357,873,190.94	16,819.69	-	357,873,190.94	6,617,175,920.63
OCTOBER	28.79	5,983.51	113,794,788.26	19,018.07	-	113,794,788.26	6,730,970,708.89
NOVEMBER	62.34	4,319.10	108,537,744.90	25,129.71	-	108,537,744.90	6,839,508,453.79
DECEMBER	14.62	14,958.63	248,025,757.06	16,580.78	-	248,025,757.06	7,087,534,210.85
TOTAL	28.41	174,566.35	2,483,735,029.10	13,751.79	70,000,000.00	2,413,735,029.10	7,087,534,210.85

## 5.0 SETTLEMENT ADMINISTRATION OF THE PPAS AND CONNECTION AGREEMENT

### 5.1 Operation of the PPAs

Table 5.1 Nominated Vs Delivered Generation of the IPPs

		JAN	FEB	MAR	APR	MAY	JUN	JUL
AGIP	NOMINATED (MW)	478.68	478.68	478.68	478.68	478.68	478.68	478.68
	DELIVERED (MW)	416.68	317.25	348.80	305.83	204.74	331.90	350.55
	DELIVERED (GWh)	295.85	201.53	234.22	212.70	151.41	225.91	247.13
AES	NOMINATED (MW)	300.00	300.00	300.00	300.00	300.00	300.00	300.00
	DELIVERED (MW)	181.14	161.53	172.95	222.72	215.63	192.93	172.49
	DELIVERED (GWh)	125.50	103.08	129.43	155.78	146.67	129.81	122.80
SHELL	NOMINATED (MW)	650.00	650.00	650.00	650.00	650.00	650.00	650.00
	DELIVERED (MW)	330.32	375.74	365.50	379.24	449.35	452.17	406.58
	DELIVERED (GWh)	236.57	235.70	257.36	266.66	326.91	254.00	284.92
IBOM POWER	NOMINATED (MW)	140.00	140.00	140.00	140.00	140.00	140.00	140.00
	DELIVERED (MW)	56.04	61.39	62.55	80.48	32.56	38.20	26.99
	DELIVERED (GWh)	34.75	32.96	29.39	23.70	14.13	21.32	17.29
SAPELE NIPP	NOMINATED (MW)	450.00	450.00	450.00	450.00	450.00	450.00	450.00
	DELIVERED (MW)	-	-	-	-	-	-	-
	DELIVERED (GWh)	-	-	-	-	-	-	-
OLORUNSOGO NIPP	NOMINATED (MW)	500.00	500.00	500.00	500.00	500.00	500.00	500.00
	DELIVERED (MW)	64.68	129.46	109.09	95.09	193.32	259.33	123.24
	DELIVERED (GWh)	30.31	75.19	64.75	57.34	82.10	70.56	96.38
NESCO	DELIVERED (GWh)	0.71	0.64	0.83	0.48	0.49	1.02	0.52

		AUG	SEPT	OCT	NOV	DEC	TOTAL	AVE
AGIP	NOMINATED (MW)	478.68	478.68	478.68	478.68	478.68		478.68
	DELIVERED (MW)	347.52	371.63	354.87	420.03	465.71		352.96
	DELIVERED (GWh)	251.71	254.62	246.00	282.28	318.41	2,921.77	243.48
AES	NOMINATED (MW)	300.00	300.00	300.00	300.00	300.00		300.00
	DELIVERED (MW)	174.64	144.15	175.33	186.18	204.63		183.69
	DELIVERED (GWh)	122.23	99.69	120.16	126.79	136.98	1,518.92	126.58
SHELL	NOMINATED (MW)	650.00	650.00	650.00	650.00	650.00		650.00
	DELIVERED (MW)	314.64	387.07	470.27	472.97	429.97		402.82
	DELIVERED (GWh)	217.72	260.44	316.66	317.22	287.70	3,261.86	271.82
IBOM POWER	NOMINATED (MW)	140.00	140.00	140.00	140.00	140.00		140.00
	DELIVERED (MW)	24.58	50.40	28.32	58.20	125.81		53.79
	DELIVERED (GWh)	15.38	27.52	10.71	38.38	48.31	313.84	26.15
SAPELE NIPP	NOMINATED (MW)	450.00	450.00	450.00	450.00	450.00		450.00
	DELIVERED (MW)	7.26	87.52	-	-	82.10		14.74
	DELIVERED (GWh)	4.02	9.98	-	-	49.17	63.17	5.26
OLORUNSOGO NIPP	NOMINATED (MW)	500.00	500.00	500.00	500.00	500.00		500.00
	DELIVERED (MW)	187.00	316.60	343.23	456.00	480.00		229.75
	DELIVERED (GWh)	70.30	77.60	70.61	86.80	54.67	836.61	69.72
NESCO	DELIVERED (GWh)	1.08	1.01	0.86	0.41	0.39	8.44	0.70



Table 5.1.1 Capacity Delivered Against Invoice and Payment Status on Agip PPA

MONTH	CAPACITY 1 (NOMINATED) MW	CAPACITY 2 (DELIVERED) MW	DELIVERED GWh	INVOICE US\$	US\$ /MWh	PF	PAYMENT MADE US\$	OUTSTANDING US\$	CUMMULATIVE OUTSTANDING US\$
01/01/2011									315,023,924.28
JAN	478.68	416.68	295.85	13,689,972.28	46.27	0.97	6,841,986.14	6,847,986.14	321,871,910.42
FEB	478.68	317.25	201.53	13,474,693.01	66.86	0.87	6,841,986.14	6,632,706.87	328,504,617.29
MARCH	478.68	348.80	234.22	13,723,174.56	58.59	0.92	6,841,986.14	6,881,188.42	335,385,805.71
APRIL	478.68	305.83	212.70	13,715,442.35	64.48	0.95	198,442.03 6,857,721.18	6,659,279.14	342,045,084.85
MAY	478.68	204.74	151.41	13,150,599.95	86.85	1.01	6,575,299.98	6,575,299.97	348,620,384.82
JUNE	478.68	331.90	225.91	13,090,944.34	57.95	0.93	6,545,472.17	6,545,472.17	355,165,856.99
JULY	478.68	350.55	247.13	13,414,425.61	54.28	0.97	6,707,212.81	6,707,212.80	361,873,069.79
AUGUST	478.68	347.52	251.71	13,453,303.07	53.45	0.99	6,726,651.54	6,726,651.53	368,599,721.32
SEPTEMBER	478.68	371.63	254.62	13,474,489.21	52.92	0.94	6,737,244.60	6,737,244.61	375,336,965.93
OCTOBER	478.68	354.87	246.00	13,461,922.39	54.72	0.95	6,730,961.20	6,730,961.19	382,067,927.12
NOVEMBER	478.68	420.03	282.28	13,730,337.19	48.64	0.92	6,984,838.60	6,745,498.59	388,813,425.71
DECEMBER	478.68	465.71	318.41	13,997,713.84	43.96	0.94	6,000,000.00	7,997,713.84	402,811,139.55
TOTAL		363.76	2,921.77	162,377,017.80	55.57	0.92	80,589,802.53	81,787,215.27	396,811,139.55

Table 5.1.2 Capacity Delivered Against Invoice and Payment Status on AES PPA

MONTH	CAPACITY 1 (NOMINATED) MW	CAPACITY 2 (DELIVERED) MW	DELIVERED GWh	INVOICE US\$	US\$ /MWh	PF	PAYMENT MADE US\$	OUTSTANDING US\$	CUMMULATIVE OUTSTANDING US\$
01/01/2011									3,926,724.98
JAN	300.00	181.14	125.50	5,682,615.00	45.28	0.95	5,682,615.00	-	3,926,724.98
FEB	300.00	161.53	103.08	5,682,615.00	55.13	0.87	5,682,615.00	-	3,926,724.98
Credit Note Received							2,650,426.80	-	3,926,724.98
MARCH	300.00	172.95	129.43	5,682,615.00	43.90	1.03	3,032,188.20		
APRIL	300.00	222.72	155.78	5,682,615.00	36.48	0.96	5,682,615.00	-	3,926,724.98
MAY	300.00	215.63	146.67	5,682,615.00	38.74	0.93	5,682,615.00	-	3,926,724.98
JUNE	300.00	192.93	129.81	5,682,615.00	43.78	0.92	5,682,615.00	-	3,926,724.98
JULY	300.00	172.49	122.80	5,682,615.00	46.28	0.98	5,682,615.00	-	3,926,724.98
AUGUST	300.00	174.64	122.23	5,682,615.00	46.49	0.96	5,682,615.00	-	3,926,724.98
SEPTEMBER	300.00	144.15	99.69	5,682,615.00	57.00	0.95	5,682,615.00	-	3,926,724.98
OCTOBER	300.00	175.33	120.16	5,682,615.00	47.29	0.94	5,682,615.00	-	3,926,724.98
NOVEMBER	300.00	186.18	126.79	5,682,615.00	44.82	0.93	5,682,615.00	-	3,926,724.98
DECEMBER	300.00	204.63	136.98	5,682,615.00	41.48	0.92	5,682,615.00	-	3,926,724.98
TOTAL		186.14	1,518.92	68,191,380.00	44.89	0.93	68,191,380.00	-	3,926,724.98

**Table 5.1.3** Capacity Delivered Against Invoice and Payment Status on SHELL (AFAM VI) PPA

MONTH	CAPACITY 1 (NOMINATED) MW	CAPACITY 2 (DELIVERED) MW	DELIVERED GWh	INVOICE US\$	US\$ /MWh	PF	PAYMENT MADE US\$	OUTSTANDING US\$	CUMMULATIVE OUTSTANDING US\$
01/01/2011									65,647,083.41
Adjustment after Reconciliation of 2009 & 2010 Over-billing				(9,984,583.50)			-	(9,984,583.50)	55,662,499.91
Balance After Adjustment				(10,443,964.70)			-	(10,443,964.70)	45,218,535.21
JAN	650.00	330.32	236.57	6,097,011.15	25.77	0.98	3,209,833.79	2,887,177.36	48,105,712.57
FEB	650.00	375.74	235.70	7,281,941.86	30.89	0.86	3,989,504.75	3,292,437.11	51,398,149.68
MARCH	650.00	365.50	257.36	7,242,112.31	28.14	0.96	3,900,948.29	3,341,164.02	54,739,313.70
APRIL	650.00	379.24	266.66	7,344,399.72	27.54	0.96	3,952,514.39	3,391,885.33	58,131,199.03
MAY	650.00	449.35	326.91	9,560,626.22	29.25	1.00	5,351,184.78	4,209,441.44	62,340,640.47
JUNE	650.00	452.17	254.00	7,672,725.54	30.21	0.77	4,199,211.18	3,473,514.36	65,814,154.83
JULY	650.00	406.58	284.92	8,839,936.00	31.03	0.96	4,862,065.22	3,977,870.78	69,792,025.61
AUGUST	650.00	314.64	217.72	5,992,039.68	27.52	0.95	3,276,066.07	2,715,973.61	72,507,999.22
SEPTEMBER	650.00	387.07	260.44	8,389,759.94	32.21	0.92	6,986,969.63	1,402,790.31	73,910,789.53
OCTOBER	650.00	470.27	316.66	9,618,525.37	30.37	0.92	6,986,969.63	2,631,555.74	76,542,345.27
NOVEMBER	650.00	472.97	317.22	8,912,794.29	28.10	0.92	8,539,582.60	373,211.69	76,915,556.96
DECEMBER	650.00	429.97	287.70	7,503,396.61	26.08	0.92	8,966,561.73	(1,463,165.12)	75,452,391.84
TOTAL		408.19	3,261.86	94,455,268.69	28.96	0.91	64,221,412.06	30,233,856.63	75,452,391.84

**Table 5.1.4** Capacity Delivered Against Invoice and Payment Status on IBOM Power PPA

MONTH	CAPACITY 1 (NOMINATED) MW	CAPACITY 2 (DELIVERED) MW	DELIVERED GWh	INVOICE =N=	=N= /MWh	PF	PAYMENT MADE =N=	OUTSTANDING =N=	CUMMULATIVE OUTSTANDING =N=
01/01/2011									16,840,577.90
Adjustment after Reconciliation of years 2009 & 2010				21,131,501.34			-	21,131,501.34	37,972,079.24
Balance after Adjustment									37,972,079.24
JAN	140.00	56.04	34.75	122,484,982.52	3,524.75	0.85	97,766,720.04	24,718,262.48	62,690,341.72
FEB	140.00	61.39	32.96	116,187,006.47	3,525.09	0.74	86,413,802.38	29,773,204.09	92,463,545.81
MARCH	140.00	62.55	29.39	103,321,676.10	3,515.54	0.64	78,703,223.55	24,618,452.55	117,081,998.36
APRIL	140.00	80.48	23.7	82,810,771.69	3,494.13	0.40	63,784,017.24	19,026,754.45	136,108,752.81
MAY	140.00	32.56	14.13	49,637,144.71	3,512.89	0.59	38,252,810.32	11,384,334.39	147,493,087.20
JUNE	140.00	38.20	21.32	75,175,266.21	3,526.04	0.76	57,518,625.28	17,656,640.93	165,149,728.13
JULY	140.00	26.99	17.29	60,944,143.76	3,524.82	0.88	46,655,579.68	14,288,564.08	179,438,292.21
AUGUST	140.00	24.58	15.38	54,134,437.30	3,519.79	0.86	43,307,549.84	10,826,887.46	190,265,179.67
Payment from MYTO							144,858,592.16	(144,858,592.16)	45,406,587.51
SEPTEMBER	140.00	50.40	27.52	96,880,973.73	3,520.38	0.75	77,504,778.98	19,376,194.75	64,782,782.26
OCTOBER	140.00	28.32	10.71	37,077,934.06	3,461.99	0.52	29,662,347.25	7,415,586.81	72,198,369.07
NOVEMBER	140.00	58.20	38.38	135,571,644.68	3,532.35	0.90	171,632,909.75	(36,061,265.07)	36,137,104.00
DECEMBER	140.00	125.81	48.31	181,134,246.92	3,749.42	0.53	149,790,486.15	31,343,760.77	67,480,864.77
TOTAL		63.21	313.84	1,115,360,228.15	3,553.91	0.57	1,085,851,442.62	29,508,785.53	67,480,864.77

Table 5.1.5 Capacity Delivered Against Invoice and Payment Status on Sapele NIPP PPA

MONTH	CAPACITY 1 (NOMINATED) MW	CAPACITY 2 (DELIVERED) MW	DELIVERED GWh	INVOICE US\$	US\$ /MWh	PF	PAYMENT MADE US\$	OUTSTANDING US\$
JAN	-	-	-	-	-	-		
FEB	-	-	-	-	-	-		
MARCH	-	-	-	-	-	-		
APRIL	-	-	-	-	-	-		
MAY	-	-	-	-	-	-		
JUNE	-	-	-	-	-	-		
JULY	-	-	-	-	-	-		
AUGUST	450.00	7.26	4.02	237,615.42	59.11	0.76	130,688.48	106,926.94
SEPTEMBER	450.00	87.52	9.98	533,587.74	53.47	0.16	293,473.26	240,114.48
OCTOBER	450.00	-	-	-	-	-	-	-
NOVEMBER	450.00	-	-	-	-	-	-	-
DECEMBER	450.00	82.10	49.17	2,901,207.00	59.00	0.82	1,675,447.04	1,225,759.96
TOTAL		78.19	63.17	3,672,410.16	58.14	0.09	2,099,608.78	1,572,801.38

Table 5.1.6 Capacity Delivered Against Invoice and Payment Status on Olorunsogo NIPP PPA

MONTH	CAPACITY 1 (NOMINATED) MW	CAPACITY 2 (DELIVERED) MW	DELIVERED GWh	INVOICE US\$	US\$ /MWh	PF	PAYMENT MADE US\$	OUTSTANDING US\$	CUMMULATIVE OUTSTANDING US\$
JAN	500.00	64.68	30.31	1,787,999.13	58.99	0.64	983,399.52	804,599.61	804,599.61
FEB	500.00	129.46	75.19	4,436,215.90	59.00	0.80	2,439,918.75	1,996,297.15	2,800,896.76
MARCH	500.00	109.09	64.75	3,820,362.10	59.00	0.81	2,101,199.16	1,719,162.94	4,520,059.70
APRIL	500.00	95.09	57.34	3,383,213.40	59.00	0.83	1,860,767.37	1,522,446.03	6,042,505.73
MAY	500.00	193.32	82.10	4,843,664.00	59.00	0.58	2,664,015.20	2,179,648.80	8,222,154.53
JUNE	500.00	259.33	70.56	4,163,004.60	59.00	0.37	2,289,652.53	1,873,352.07	10,095,506.60
JULY	500.00	123.24	96.38	5,686,538.00	59.00	1.07	3,127,595.90	2,558,942.10	12,654,448.70
AUGUST	500.00	187.00	70.30	4,147,688.00	59.00	0.51	2,064,051.78	2,083,636.22	14,738,084.92
SEPTEMBER	500.00	316.60	77.60	4,578,459.00	59.00	0.34	2,518,152.45	2,060,306.55	16,798,391.47
OCTOBER	500.00	343.23	70.61	4,166,208.30	59.00	0.28	2,291,414.57	1,874,793.73	18,673,185.20
NOVEMBER	500.00	456.00	86.80	5,121,040.70	59.00	0.26	2,816,572.39	2,304,468.31	20,977,653.51
DECEMBER	500.00	480.00	54.67	3,225,417.90	59.00	0.16	1,773,979.85	1,451,438.05	22,429,091.56
TOTAL		236.71	836.61	49,359,811.03	59.00	0.40	26,930,719.47	22,429,091.56	22,429,091.56

Table 5.1.7 Capacity Delivered Against Invoice and Payment Status on NESCO PPA

MONTH	DELIVERED GWh	INVOICE =N=	=N=/MWh	PF	PAYMENT MADE =N=	OUTSTANDING =N=	CUMMULATIVE OUTSTANDING =N=
JANUARY	0.71	4,791,447.05	6,748.52	0.97	4,791,447.05	-	-
FEBRUARY	0.64	3,902,715.50	6,097.99	0.88	3,902,715.50	-	-
MARCH	0.83	3,758,534.33	4,528.35	1.14	3,758,534.33	-	-
APRIL	0.48	3,466,000.00	7,220.83	0.66	3,466,000.00	-	-
MAY	0.49	2,534,869.89	5,173.20	0.67	2,534,869.89	-	-
JUNE	1.02	3,043,928.48	2,984.24	1.40	3,043,928.48	-	-
JULY	0.52	3,456,209.61	6,646.56	0.71	3,456,209.61	-	-
AUGUST	1.08	13,718,121.82	12,701.96	1.48	13,718,121.82	-	-
SEPTEMBER	1.01	13,381,933.27	13,249.44	1.38	13,381,933.27	-	-
OCTOBER	0.86	11,942,824.73	13,887.01	1.18	11,942,824.73	-	-
NOVEMBER	0.41	12,713,290.39	31,008.03	0.56	12,713,290.39	-	-
DECEMBER	0.39	13,560,019.23	34,769.28	0.53	13,560,019.23	-	-
TOTAL	8.44	90,269,894.30	10,695.49	0.96	90,269,894.30	-	-

## 5.2 Operation of the Connection Agreements with International Customers

Table 5.2.1 Energy Received Against Invoice and Payment Status on NIGEEC

MONTHS	CAPACITY (MW)	ENERGY (MWh)	INVOICE UD\$	US\$/MWh	PAYMENT MADE US\$	OUTSTANDING US\$	CUMMULATIVE OUTSTANDING US\$
01/01/2011							2,868,407.74
Adjustment (Reconciliation)					(1,497,605.70)	1,497,605.70	4,366,013.44
JANUARY	83.16	39,692.80	1,343,524.70	33.85	-	1,343,524.70	5,709,538.14
FEBRUARY	87.39	43,957.80	1,466,784.87	33.37	765,872.80	700,912.07	6,410,450.21
MARCH	89.65	52,738.00	1,680,125.78	31.86	1,043,148.00	636,977.78	7,047,427.99
APRIL	89.61	52,435.90	1,683,453.50	32.10	1,312,858.78	370,594.72	7,418,022.71
MAY	93.40	55,193.70	1,753,539.63	31.77	-	1,753,539.63	9,171,562.34
JUNE	93.22	52,700.60	1,692,176.32	32.11	-	1,692,176.32	10,863,738.66
JULY	94.36	55,554.80	1,775,619.78	31.96	-	1,775,619.78	12,639,358.44
AUGUST	94.48	53,299.10	1,698,942.85	31.88	-	1,698,942.85	14,338,301.29
SEPTEMBER	92.73	54,298.10	1,738,458.01	32.02	-	1,738,458.01	16,076,759.30
OCTOBER	92.67	55,248.00	1,754,038.55	31.75	2,569,184.26	(815,145.71)	15,261,613.59
NOVEMBER	91.09	49,784.20	1,622,314.86	32.59	-	1,622,314.86	16,883,928.45
DECEMBER	87.98	42,704.80	1,439,557.31	33.71	-	1,439,557.31	18,323,485.76
TOTAL	91.11	607,607.80	19,648,536.16	32.34	4,193,458.14	15,455,078.02	18,323,485.76

Table 5.2.2 Energy Received Against Invoice and Payment Status on CEB

MONTHS	CAPACITY (MW)	ENERGY (MWh)	INVOICE UD\$	US\$/MWh	PAYMENT MADE US\$	OUTSTANDING US\$	CUMMULATIVE OUTSTANDING US\$
01/01/2011							17,828,245.16
JANUARY	150.00	101,435.00	4,526,826.50	44.63	3,323,646.30	1,203,180.20	19,031,425.36
FEBRUARY	150.00	93,471.00	4,211,452.10	45.06	-	4,211,452.10	23,242,877.46
MARCH	150.00	94,821.00	4,264,912.10	44.98	6,336,076.20	(2,071,164.10)	21,171,713.36
APRIL	150.00	98,045.00	4,392,582.50	44.80	4,526,773.50	(134,191.00)	21,037,522.36
MAY	150.00	82,564.00	3,779,534.90	45.78	-	3,779,534.90	24,817,057.26
JUNE	150.00	81,776.00	3,748,330.10	45.84	16,648,896.70	(12,900,566.60)	11,916,490.66
JULY	150.00	94,143.00	4,738,063.30	50.33	4,392,582.50	345,480.80	12,261,971.46
AUGUST	150.00	84,962.00	7,374,495.70	86.80	3,779,534.90	3,594,960.80	15,856,932.26
SEPTEMBER	Adjustment (Arrears of Billing)		11,963,115.60		11,486,433.40	6,733,428.20	22,590,360.46
	150.00	93,918.00	6,256,746.00	66.62			
OCTOBER	150.00	91,310.00	6,120,086.80	67.03	-	6,120,086.80	28,710,447.26
NOVEMBER	150.00	98,531.00	6,498,467.20	65.95	-	6,498,467.20	35,208,914.46
DECEMBER	150.00	92,808.00	6,198,582.00	66.79	-	6,198,582.00	41,407,496.46
TOTAL	150.00	1,107,784.00	74,073,194.80	56.07	50,493,943.50	23,579,251.30	41,407,496.46

## 6.0 THE NATIONAL PRE-PAYMENT METERING PROGRAM

### 6.0 Progress On The National Pre-Payment Metering Project

Table 6.0 Progress On The National Pre-Payment Metering Project  
As At 31<sup>st</sup> Dec, 2011

DISCOS	COSTOMER POPULATION	PRE-PAYMENT METERS INSTALLED	% OF PRE-PAYMENT METERS INSTALLED OUT OF THE TOTAL CUSTOMER POPULATION	PRE-PAYMENT METERS IN THE STORE (PPM YET TO BE INSTALLED)
ABUJA	634,627	81,664	13 %	56
BENIN	683,250	145,151	21 %	-
EKO	316,818	83,185	26 %	17,021
ENUGU	560,208	95,537	17 %	350
IBADAN	1,083,779	129,397	12 %	-
IKEJA	581,453	80,651	14 %	-
JOS	279,702	46,923	17 %	1,382
KADUNA	273,577	47,764	17 %	-
KANO	340,222	40,815	12 %	8,945
PORTHARCOURT	353,547	44,333	13 %	2,910
YOLA	172,739	27,990	16 %	-
<b>TOTAL</b>	<b>5,279,922</b>	<b>823,410</b>	<b>16 %</b>	<b>30,664</b>

## 7.0 GAS ADMINISTRATION AND SETTLEMENT

### 7.1 Gas Consumption Against Energy Generated

Table 7.1 Gas Consumption Against Energy Generated

GENCO	GAS CONSUMED (MMSCF)	RATE (=N=/1000SCF)	AMOUNT (=N='1000)	VAT (=N='1000)	TOTAL (=N='1000)	ENERGY GENERATED (MWh)	COST OF GAS/ ENERGY (=N=/MWh)	MWH/ MMSCF
EBIN	71,050.73	30.00	2,131,521.98	106,576.10	2,238,098.08	6,752,677.73	0.33	95.04
AES	20,264.67	30.00	607,940.10	30,397.01	638,337.11	1,557,066.58	0.41	76.84
SAPELE	7,770.26	30.00	233,107.69	11,655.38	244,763.08	697,595.02	0.35	89.78
DELTA	12,491.70	30.00	374,751.13	18,737.56	393,488.69	1,492,559.95	0.26	119.48
AFAM	4,565.32	30.00	136,959.69	6,847.98	143,807.67	416,244.50	0.35	91.18
GEREGU	16,418.39	30.00	492,551.64	24,627.58	517,179.22	1,698,438.40	0.30	103.45
OMOTOSO	4,390.35	30.00	131,710.38	6,585.52	138,295.90	373,526.80	0.37	85.08
OLORUNSOGO	3,730.53	30.00	111,915.96	5,595.80	117,511.76	323,698.47	0.36	86.77
TOTAL	140,681.95		4,220,458.57	211,022.93	4,431,481.50	13,311,807.45		

Fig. 7.1.1

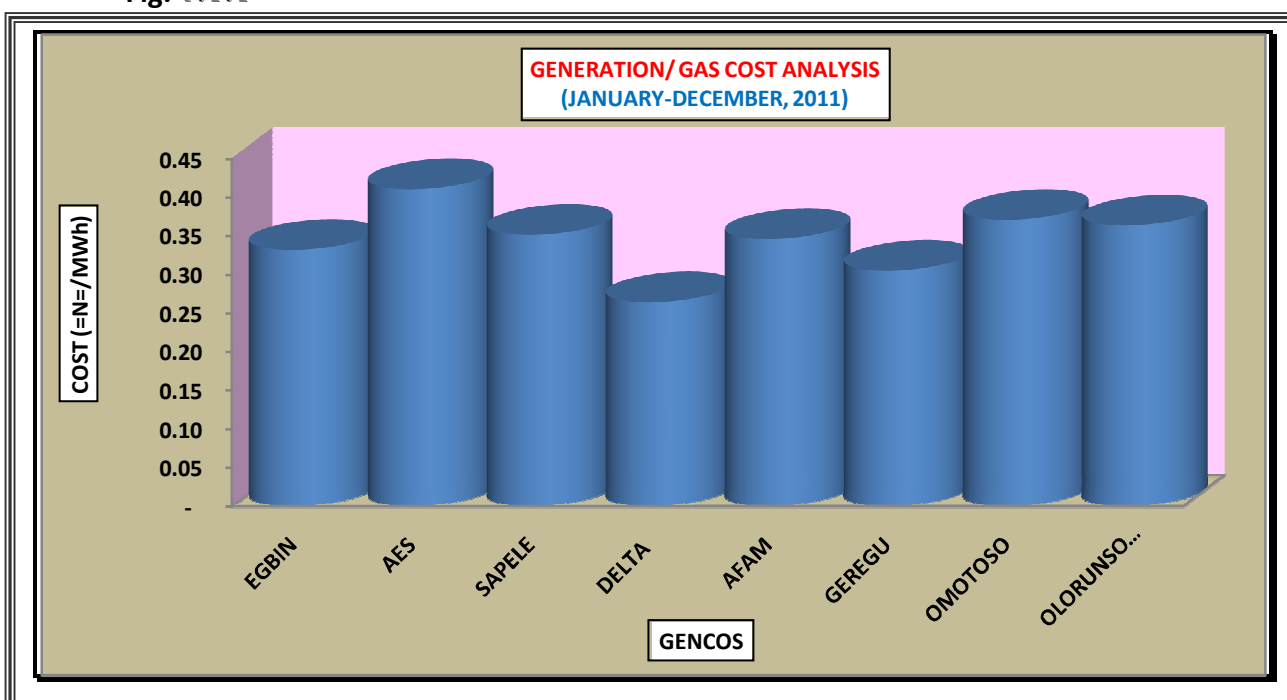
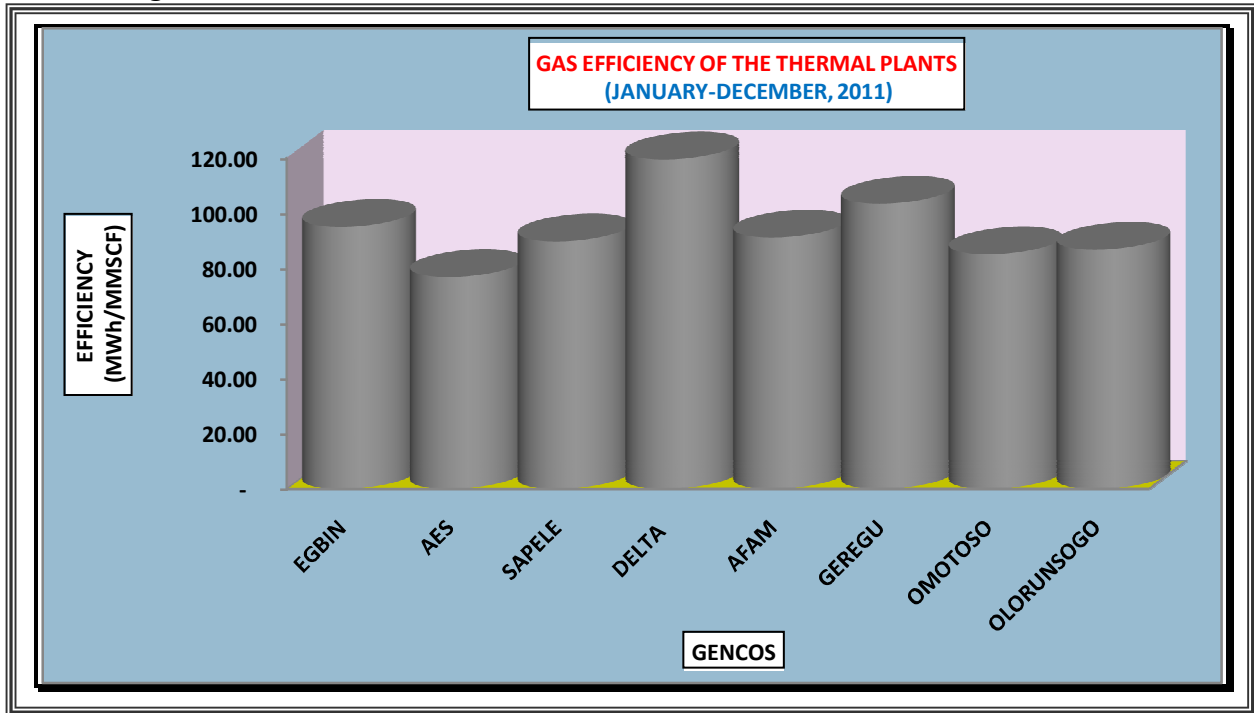


Fig. 7.1.2



## 7.2 Gas Invoice and Payment

Table 7.2 Gas Invoicing and Payments

MONTHS	INVOICES (=N=)					PAYMENTS (=N=)	OUTSTANDING (=N=)
	AFAM, DELTA, AES, EGBIN & SAPELE	OMOTOSO	OLORUNSOGO	GEREKU	TOTAL		
01/01/2011							3,386,116,445.01
JANUARY	1,809,493,838.22	65,712,734.50	-	459,669,361.87	2,334,875,934.59	2,067,259,448.33	3,653,732,931.27
FEBRUARY	1,680,220,751.77	44,353,153.64	9,112,077.04	403,050,434.58	2,136,736,417.03	0.00	5,790,469,348.30
MARCH	1,790,338,097.62	35,282,205.96	83,792,941.71	550,025,756.51	2,459,439,001.80	536,601,738.69	7,713,306,611.41
APRIL	1,986,381,816.30	50,554,817.69	49,647,370.23	493,939,615.46	2,580,523,619.68	1,500,000,000.00	8,793,830,231.09
MAY	1,867,659,196.41	152,383,293.78	91,253,800.37	289,572,063.65	2,400,868,354.21	-	11,194,698,585.30
JUNE	1,586,273,734.42	77,849,434.26	68,011,431.11	442,357,368.05	2,174,491,967.84	2,444,970,665.10	10,924,219,888.04
JULY	1,903,867,121.04	8,082,904.34	86,073,468.27	616,236,911.70	2,614,260,405.35	859,098,255.31	12,679,382,038.08
AUGUST	2,013,383,123.08	94,943,430.55	125,022,662.10	456,995,277.27	2,690,344,493.00	1,300,000,000.00	14,069,726,531.08
SEPTEMBER	1,915,702,855.21	95,240,542.69	118,068,873.35	477,401,783.75	2,606,414,055.00	1,300,000,000.00	15,376,140,586.08
OCTOBER	1,681,228,545.60	108,470,297.25	70,620,213.46	281,251,036.69	2,141,570,093.00	5,173,192,846.72	12,344,517,832.36
NOVEMBER	1,939,925,251.63	112,512,200.87	66,380,267.63	523,930,509.48	2,642,748,229.61	-	14,987,266,061.97
DECEMBER	1,807,155,383.19	160,131,712.39	56,345,145.43	662,055,569.44	2,685,687,810.45	1,300,000,000.00	16,372,953,872.42
TOTAL	21,981,629,714.49	1,005,516,727.92	824,328,250.70	5,656,485,688.45	29,467,960,381.56	16,481,122,954.15	16,372,953,872.42