

OPERATOR OF THE NIGERIAN ELECTRICITY MARKET

Report On The Nigerian Electricity Market Operations

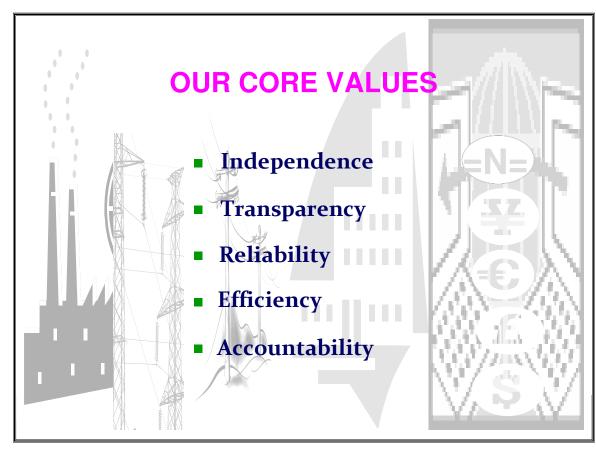
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INTRODUCTION

This report is an account of the activities of the Market Operations Sector for the year 2009. It also represents an account of 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 Special Customers.
- Settlement Administration in respect of the PPAs and Connection Agreements.
- Utilization and Payments for Gas.





1.0 ADMINISTRATION OF THE TRADING POINT METERING AND MANAGEMENT OF THE METERED OUANTITIES

1.1 Inter-Face Metering

Table 1.1.1 shows the status of the trading point metering in the wholesale Electricity Market as at the end of the year 2009, while table 1.1.2 shows the activities on grid metering, during the period.

From table 1.1.1, it can be seen that there were six hundred and fifty nine (659) trading points nation-wide. Forty-five (45) out of this number were generation/transmission interface points, where the generators, including the IPPs, inject energy into the wholesale market. Five hundred and sixty three (563) were transmission/distribution interface points, where distributors, including the 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 twenty five (625) trading points have been metered with intelligent electronic meters while thirty four (34) 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

Table 1.2 shows the capacity availability of the generators during the year. The average total available capacity for all the generators was 4,547.86Mw with about **76%** of the available capacity contributed by the Federal Government owned generators, while 24% came from the IPPs. Also, the table shows that average hydro:thermal capacity mix during the year was **26:74.** This shows a significant deviation from 2008 mix of **33:67**. This is because there was an increase in available capacity from some thermal stations like Egbin (from **778.91Mw** in 2008 to **975.52Mw** in 2009), Geregu (from **294.59Mw** in 2008 to **360.64Mw** in 2009), Sapele (from **131.65Mw** in 2008 to **135.42Mw** in 2009), Omotoso (from **232.59Mw** in 2008 to **268.90Mw** in 2009) Olorunsogo/Papalanto (from **252.65Mw** in 2008 to **284.14Mw** in 2009), Delta (from **199.14Mw** in 2008 to **227.54Mw** in 2009), Agip (from **357.00Mw** in 2008 to **442.46Mw** in 2009), Afam VI (Shell) (from **60.21Mw** in **2008** to **321.65Mw** in 2009), Omoku (from **75.16Mw** in 2008 to **92.34Mw** in 2009), and the





introduction of Ibom Power in December, 2009. Afam I-V and the hydro stations recorded a shortfall in capacity in 2009. Ajaokuta didn't generate at all in 2009.

Fig. 1.2.1 and fig. 1.2.2 are the pie charts showing the FGN-IPP capacity (Mw) contributions and average thermal-hydro capacity (Mw) contributions, respectively.

1.3 Energy Generated

Table 1.3 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. 1.3.1 and fig. 1.3.2 are the pie charts representing the relative generation contributions of the FGN 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 **21,216,975.29Mwh** or a monthly average of **1,769,081.27Mwh** was generated during the year. The FGN contributed **66%** of the total energy generated while **34%** came from the IPPs. The hydro:thermal mix was **35:65**. These relative energy contributions shows that the IPP plants were run for more hours than the FGN plants. 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

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

From the table, the energy injected into the grid during the year was 19,769,746.46Mwh or an average of 1,647,478.87Mwh per month, with the highest contribution of 15:2% from Agip, followed by Egbin, Jebba, and Kainji with 15.19%, 13.07% and 12.64% respectively. The FGN generators contributed 66% of the total energy traded in the WEM while 34% was contributed by the IPPs. Also, the hydro:thermal mix was 37:63. This show a slight deviation from the hydro:thermal energy contributions in 2008.

The **449,132.76Mwh** generation of Omoku, Trans Amadi and NESCO were not tied to the grid but were restricted to their respective local distribution networks.





1.5 Energy Consumed by the Generators

Table 1.5 shows the quantities of energy consumed by the various generators. From the table, it can be seen that Omotoso and Olorunsogo thermal stations sent out more energy than they generated. This was traced to generator meter accuracy problems. This situation has been discussed with the relevant officers in the power plants for solutions. Sapele thermal station consumed about 80.99% of its generation. On the whole, the generators consumed 998,096.07Mwh or 4.81% of their total generation for their auxiliary services and offices. This is substantially higher than the MYTO prescribed figure of 1%.

This situation may not be real but suggests that action should be taken by the management of the generating companies to verify the numbers.

1.6 Energy Received by the Distributors

Table 1.6 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 eligible customers was 18,025,230.56Mwh or an average of 1,503,232.47Mwh per month.





Out of this, the DISCOS consumed about **16,618,552.56Mwh** or **92.20%** while **1,192,842.20Mwh** or **6.62%** went for export during the year. A total of **213,835.80Mwh** or **1.19%** went to Ajaokuta, NIOMCO Itakpe and Delta Steel Company Aladja(the special wholesale customers).

DISCO consumption was a function of level of generation while consumption by the Eligible Customers (particularly the International Connections) was approximately constant, irrespective of generation level, during the year. This is because supply to the International Connection was based on international Agreement which the industry endeavored to keep throughout the year.

Fig. 1.6 shows the monthly profile of the total energy extracted from the grid.

From the profile, it can be seen that the highest generation of 1,891.26Gwh was achieved in December while the lowest of 1,125.92Gwh was achieved in July.

1.7 Comparison of Energy Transmitted and Energy Delivered

Table 1.7 shows that out of the **19,769,746.46Mwh** injected into the grid by the generators **18,025,230.56Mwh** was received by the Distributors. This means that a total of **1,744,515.90Mwh** was lost in the transmission network during the year resulting in an average Transmission Loss Factor of





8.82%. It can be seen that apart from the months of January, March and July, 2009 when the loss factors were **9.99**%, **9.2**%, and **9.63**% respectively, transmission losses in 2009 were significantly lower than in the corresponding months in 2008.

Fig. 1.7 shows the profiles of the Transmission Loss Factor (TLF) for 2009 against the TLF for 2008.





2.0 ADMINISTRATION OF MARKET SETTLEMENTS (BILLING AND CHARGES)

2.1 Settlement Report

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 2009 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

This shows the calculation of payments by the DISCOS to the market. 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. The table also shows that the total settlements by the DISCOS for the year was N132.357bn.





From the table, it can be seen that Ikeja which received about **12.80%** of the total energy to the DISCOS contributed about **14%** of the total DISCO settlements to the market, while Yola which received about **1.69%** of the total energy contributed about **1.29%** to the market settlements. The customer mix of the two discos was probably responsible for the observed in-balances.

In other to balance the DISCO Settlement Report properly, Reserved Fund which was a charge in the DISCO Settlement Invoice before the MYTO Billing started in April, 2009, was captured.

2.1.2 GENCOS

The GENCO settlement report shows the total payments to be received by the GENCOS from the market for energy sent out to the market and also the calculation of payments by the GENCOS during the year. The GENCO settlement report for 2009 is shown in table 2.1.2.

The table shows that the total settlement for the GENCOS for the capacity and energy sent out during the year was **N37.837bn**. The table also shows that the payment outflows from the GENCOS was **N10.480bn**. The net payment to the GENCOS is shown to be **N27.357bn**.





Also, in other to balance the GENCOS Settlement Report properly, charges such as Regulatory, TCN, CHQ, MO, Reserved Fund and Equalization Fund which were items in the GENCO Settlement Invoice before the MYTO Billing started in April, 2009, were captured.

2.1.3 TCN

The TCN settlement report which shows payments to be made to TCN for wheeling and System Operations and also the calculation of payments by the TCN to the market during the year is shown in table 2.1.3. It can be seen that a total of **N18.723bn** was due to TCN out of which it should pay out **N4.817bn** as CHQ, Regulatory, Pension and Ancillary Services charges.

The net income for TCN during the year was N13.906bn.

2.2 Tariff Equalization Report

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. From the table, it can be seen that whereas payments into the pool was N4.472bn, total drawls was N6.047bn leaving an equalization deficit of N1.575bn during the year.

Equalisation drawls were made upfront, therefore a total equalisation drawls of **N6.047bn** means that some stakeholders had to forefiet part of their dues from the market.

With respect to prices, the ratio of equalisation inflow against outflow was **2:5** while energy-wise it was **36:64**. It follows that the energy balance should have tilted more in favour of the paying companies for a possible equalisation equilibrium during the year.

2.3 PHCN/Ajaokuta and NIOMCO Itakpe Energy Generation Reconciliation

The component of Ajaokuta generation injected into the grid was netted off with Ajaokuta consumption and part of the consumption by NIOMCO Itakpe during the year.





Table 2.3 shows that the net energy due to be paid for by Ajaokuta Steel Company and NIOMCO Itakpe during the year was **64,686,000KWh**.

2.4 Energy Billed by the DISCOS, and billed to the International Connection and the Special Customers

Table 2.4 shows the total monthly energy billed during the year. Fig. 2.4 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.

Energies billed in the months of May and November were more than the energies received in those months. This is not suppose to be so. The indication is that there were lots of over-estimated billing during those months.

The total energy billed during the year was 16,651,733,511.38Kwh or an average of 1,387,644,459.28Kwh per month. This was against the total energy of 18,025,230,560.00Kwh received during the year. This shows that a total of 1,373,497,048.62Kwh 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 the total distribution 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 **8.26**%. Again, this figure seem to have been affected by the large scale estimations in the disco bills.

2.5 Revenue Billed by the DISCOS, and billed to the International Connections and the Special Customers

Table 2.5 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

The total revenue billed during the year was N120,631,434,842.62 or a monthly average of N10,052,619,570.22.

With the total energy of **16,651,733,511.38Kwh** billed, it follows that the operating average price of electricity to consumers (including VAT and MMF) during the year was **N7.25/Kwh**.





3.0 ADMINISTRATION OF MARKET COLLECTION AND PAYMENTS

3.1 Revenue Collection and Income Distribution

Table 3.1 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 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 required to settle the market during the year was **N170.870bn**.

Whereas, a total revenue of **N161.968bn** was expected from the DISCOS (including the subsidy expected) for the energy supplied to them, actual revenue collected by the DISCOS was **N133,821bn** (including the subsidy received).

For the energy supplied to the large power consumers, including the International Connections, a total revenue of **N8.902bn** was expected. But the sum of **N7.414bn** was collected bringing the total collection for the market equal to **N141.235bn**.





Against the revenue requirement of **N170.870bn** only the sum of **N141.235bn** was collected including the sum of **N43.925bn** received during the year as part of the subsidy due. This created a revenue gap of **N29.635bn** for the market to clear.

Table 3.1 also shows how the N141.235bn (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 N42.046bn, actual allocation to the DISCOS was N55.121bn. 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 13.828.37bn 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 N33.321bn, only the sum of N14.950bn was available to them. Out of the available sum of N14.950bn to the GENCOS, Afam received a surplus payment of N694.97mn, while Sapele received a surplus payment of N47.80mn. With the surplus payment of N742.77mn (to Afam and Sapele) out of the





available **N14.950bn**, the GENCOS were left with a settlement deficit of **N19.115bn**.

Also, the required settlement for the IPPs was **N45.806bn** but only **N32.320bn** was paid leaving the IPPs with a settlement deficit of **N13.505bn**.

Again, the required settlement for Other Stakeholders was **N49.816bn**. but the sum of **N38.844bn** was available to them. Out of the available sum of **N38.844bn** to Other Stakeholders, CHQ received a surplus payment of **N836.28mn**, MO received a surplus of **N73.78mn**, a surplus of **N972.93mn** was paid for GAS for the year.

Total surplus payment on other stakeholders was **N6.534bn**. With this out of the available sum of **N38.844bn**, the Other Stakeholders were left with a settlement deficit of **N17.505bn**.

The settlement shortfall is mainly due to the fact that all the expected subsidy for the year was not received, and the fact that collection from the DISCOS was lower than expected as well as the surplus settlements in respect of DISCOS, some GENCOS etc.





Total settlement required as per MYTO was N170.870bn but actual settlement was N141.235bn (which includes surplus payments and payments which were not provided for by MYTO totalling N21.124bn).

Therefore, to settle the market fully, including all the collection inefficiencies, the sum of **N50.758bn** would be required.

In other to arrive at the actual settlement shortfall (see table 3.1), the settlement deficits and those allocations which were not provided for by MYTO but actually dispensed, were captured.

This is why the settlement shortfall was higher than the revenue gap by about **N21.124bn**.

3.2 DISCO Evaluation Report

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 which shows the DISCO Evaluations that the best performed DISCOS during the year were Eko and Ikeja with 99% performance while the least performed was Benin with just about 64%. All the other DISCOS fell between Eko/Ikeja and Benin Electricity Distribution





Companies. On the average, the DISCOS collected **83.43**% of the expected revenues while **16.57**% 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 to the various DISCOS. But it should be noted that the more the revenue collected, the more the associated subsidy. Subsidies were released for the months January – September, 2009 while those for October – December were not 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 remaining subsidy being able to close the gap between actual revenue and expected revenue.

Fig. 3.2 is a graphical representation of the DISCO Evaluation Report during the year.

3.3 DISCO Wholesale Payment Performance Report

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

Table 3.3 shows that Benin and Yola Distribution Companies paid less than 50% of its invoices. On the average, about 66.64% of the DISCO invoices





was paid while **33.36**% was not paid. With this, even with the MYTO Subsidy, the market could not have been fully settled for 2009.

Fig. 3.3 represents the wholesale payment performance of the DISCOS graphically.

3.4 DISCO Collection Against Operating Costs

This report compares the DISCO revenues from cash collection with what they retained for staff salaries and minor opex during the year. It can be seen from table 3.4 that Yola Distribution Company retained about 71% of its cash collection for their own operations.

On the average, **41.19**% of total DISCO collections was retained by the DISCOS. Only **58.93**% got to the wholesale market to meet other obligations, including payments to the GENCOS and IPPs.

The DISCOS were suppose to retain **41.07**% going by the **58.93**% transferred to Market Operator but a total sum of **N162.740mn** was also transferred to Yola Distribution Company and this contributed the excess of **0.12**% of DISCO collection that was retained. Making the percentage retained by the DISCOS to rise to **41.19**%

Fig. 3.4 represents the situation graphically.





4.0 ADMINISTRATION OF THE SPECIAL CUSTOMERS

4.1 Payment Status of Ajaokuta Steel Company and NIOMCO Itakpe

The net energy due to be paid for by Ajaokuta Steel Company and NIOMCO Itakpe during the year was **64,686,000.00KWh**. Table **4.1** shows that the invoices issued Ajaokuta and Itakpe during the period was **N583,266,054.00**. Nothing was paid but there was payment adjustment of N42,418,110.00 in favour of Ajaokuta. Cumulative outstanding against Ajaokuta and NIOMCO Itakpe at the end of the year was N1,169,095,978.50.

4.2 Payment Status of Delta Steel Company

The total energy supplied Delta Steel Company during the year was 149,149,800.00KWh. According to table 4.2, the total invoices issued during the period was N1,550,009,370.00. The sum of N240,000,000.00 was paid. Cumulative outstanding against Delta Steel Company at the end of the year was N3,141,593,195.00 including outstanding brought forward from 2008.





5.0 ADMINISTRATION OF THE PPAS AND CONNECTION AGREEMENTS

5.1 Status of the IPPs and Operation of the PPAs

Table 5.1.1 shows that Agip nominated an average capacity of **476.70Mw** but delivered an average **425.78Mw** 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. The invoice received from Agip for the capacity nominated and energy delivered during the year was **\$161.00m**. Payment made to Agip during the year was **\$27.004m**. Cumulative outstanding in favor of Agip as at **2009** including brought forward from **2008** was **\$318.050m**. Annual reconciliation to determine the amount due for payment considering the outages was yet to be conducted.

According to table **5.1.2**, AES nominated an average capacity of **295.40Mw** but delivered an average of **220.83Mw** during the year. The company issued invoices in the total sum of **\$68.191m** as capacity charge during the year. Payment made to AES during the year was **\$69.617m**. Cumulative outstanding to AES at the end of the year including brought forward was





\$1.244m. Payment during the year included the arrears brought forward from 2008.

From table **5.1.3**, Shell (Afam VI) nominated an average capacity of **441.00Mw** but delivered an average of **320.55Mw** during the year. The company issued invoices in the total sum of **\$52.713m** as capacity and energy charges but was paid the total sum of **\$26.356m**. Cumulative outstanding to Shell at the end of the year was **\$26.356m**

NESCO invoice of **N42.952m** for energy supplied during the year according to table **5.1.4** was paid. There was no outstanding in favor of NESCO at the end of the year.

5.2 Operation of the Connection Agreements

Table 5.2 shows the power and energy supplied to NIGELEC and CEB during the year. Table 5.2.1 shows that an average of **\$1.0\$Mw** and a total of **534,743.20Mwh** was supplied NIGELEC while table 5.2.2 shows that an average of **\$0.00Mw** and a total of **65\$,099.00Mwh** was supplied CEB during the year.





Total invoices issued NIGELEC was \$17.347m while total payment made was \$21.483m. Total outstanding balance in favor of PHCN from NIGELEC during the year (including receivable brought forward) was \$3.167m.

Total invoice issued CEB for electricity it received during the year was \$29.780m. The sum of \$27.203m was paid. Total outstanding against CEB at the end of the year (including brought forward) was \$7.718m.





6.0 UTILIZATION AND PAYMENTS FOR GAS

All thermal plants including AES consumed a total of **108,516.12MMScf** of gas supplied by NGC and Shell during the year. Invoices issued during the year by the gas suppliers was **N2.559bn**. The sum of **N4.739bn** was paid, bringing the cumulative outstanding against PHCN to be **N9.789bn**.

Table 6.1 shows the quantity of gas consumed with the corresponding energy generated by the various thermal plants.

Figure 6.1a shows the cost of gas consumed for the generation of a unit of electrical energy (that is **N/Kwh**) while figure 6.1b shows the number of electrical energy generated from a unit of gas consumed. This has a close relationship with the efficiency of the machines.

From the figures, it can be shown that the Sapele machines were the most efficient in terms of **N/Kwh** and **Kwh/Mscf**.

Table 6.2 shows the monthly invoices issued with the corresponding payments made by the various thermal plants.





7.0 UPDATE ON THE ACTIVITIES FOR THE INITIATION OF THE TRANSITIONAL MARKET

7.1 Conditions Precedent to the Initiation of the Transitional Market Stage

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;
- 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.





7.2 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	In progress	
11	Notification by the Market Operator of the initial MO Payments Calendar	In progress	





8.0 OUTSTANDING ISSUES

8.1 Metering of the Transmission Station Consumptions

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 2010 budget.

8.2 Inter Company Boundary Metering

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 2010 budget.

8.3 Telemetering

Project to automate the reading of the trading point meters nation-wide. Pilot has been successfully completed. Project is captured in the 2010 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

TRANSMISSION REGION	GENERATOR	DISTRIBUTOR	TYPE OF INTERFACE	NO	STATUS	REMARKS
	NESCO		GEN/DIST	4	OK	GANAWURI METER BURNT
		JOS	TRANS/DIST	31	OK	
		JOS/YOLA	DIST/DIST	2	NOT OK	1 YET TO BE METERED
ВАИСНІ		JOS/KADUNA	DIST/DIST	1	OK	
A AL		JOS/ABUJA	DIST/DIST	1	OK	
œ ·		JOS/KANO	DIST/DIST	2	OK	
		NIGELEC	PHCN/NIGELEC	1	OK	
		YOLA	TRANS/DIST	32	OK	
	SAPELE		GEN/TRANS	3	OK	
_	DELTA		GEN/TRANS	5	OK	
≧	AGIP		GEN/TRANS	4	OK	
BENIN	GEREGU		GEN/TRANS	3	OK	
8	02.1200	BENIN	TRANS/DIST	42	OK	
		DEMIN	DIST/DIST	1	OK	
			GEN/TRANS	0	- OK	
			GEN/TRANS	0		
	OJI-RIVER			0		
ENUGU	OJI-RIVER		GEN/DIST			
)n		ENUCH	GEN/DIST TRANS/DIST	0	OV	
Z		ENUGU	TRANS/DIST	53	OK NOT OK	A VET TO DE METERER
		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	45	OK	
KADUNA		NIGELEC	PHCN/NIGELEC	3	OK	
Ď		KADUNA/KANO	DIST/DIST	1	OK	
₽		KANO	TRANS/DIST	40	OK	
\$		KANO/KADUNA	DIST/DIST	1	OK	
		KANO/YOLA	DIST/DIST	1	OK	
	EGBIN		GEN/TRANS	6	OK	
	AES		GEN/TRANS	2	OK	
	OLORUNSOGO	IKEJA	TRANS/DIST	80	OK	
SC		CEB	PHCN/CEB	1	OK	
\mathbf{g}		IKEJA/IBADAN	DIST/DIST	1	NOT OK	YET TO BE METERED
LAGOS		IKEJA/EKO	DIST/DIST	2	NOT OK	YET TO BE METERED
_		EKO	TRANS/DIST	62	OK	
		EKO/IBADAN	DIST/DIST	1	NOT OK	YET TO BE METERED
		EKO/IKEJA	DIST/DIST	13	NOT OK	YET TO BE METERED
C			GEN/TRANS	0		JE METERED
ОЅНОСВО			GEN/TRANS	0		
90	омотоѕо	IBADAN	TRANS/DIST	79	OK	
Ξ	Office 1000	IBADAN/BENIN	DIST/DIST	1	NOT OK	YET TO BE METERED
SC				2	NOT OK	
	AEAM	IBADAN/IKEJA	DIST/DIST CEN/TRANS			YET TO BE METERED
PORTHARCOURT	AFAM		GEN/TRANS	6	OK OK	
Ď	AFAM VI		GEN/TRANS	2	OK OK	
)	OMOKU		GEN/TRANS	1	OK	
Ž.	RST		GEN/DIST	0		
НΑ	ELEME		GEN/DIST	0		
۲Tا		PHC/JOS	DIST/DIST	1	NOT OK	YET TO BE METERED
OF		PORT-HARCOURT	TRANS/DIST	46	OK	
Ь		PHC/ENUGU	DIST/DIST	2	NOT OK	YET TO BE METERED
	SHIRORO		GEN/TRANS	4	OK	
30	JEBBA		GEN/TRANS	2	OK	
SHIRORO	KAINJI		GEN/TRANS	3	OK	
Ĕ		ABUJA	TRANS/DIST	53	OK	
HS		ABUJA/KADUNA	DIST/DIST	4	NOT OK	YET TO BE METERED
		ABUJA/BENIN	DIST/DIST	3	OK	
	TOTAL			659		
	IOIAL			000		





Table 1.1.2 Activity Report on Grid Metering

REGION	STATION	COMPLAINTS AND OBSERVATIONS	ACTION TAKEN	REMARKS
	Jos	ENERGY METERS ON TORO AND MAKERI 33KV FEEDERS FAULTY	FAULTY ENERGY METERS REPLACED	METERS ARE NOW OK
ВАИСНІ	GOMBE	MALLAM-SIDI ENERGY METER FAULTY	ENERGY METER REPLACED	METER OK
ш.	MAIDUGURI	ALL THE ENERGY METERS AT THE STATION ARE FAULTY AS A RESULT OF LOW VOLTAGE	FAULTY ENERGY METERS REPLACED	METERS ARE NOW OK
	UKPILLA	NO READING ON CEMENT FEEDER METER. METERING C.T. FAULTY	FAULTY C.T. REPLACED.	METER OK
BENIN	SAPELE	ENERGY METERS ON LINES S3B, S4B AND S4W FAULTY	FAULTY ENERGY METERS REPLACED	METER OK
BE	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
	AHOADA	T1 INCOMER ENERGY METER FAULTY	METER REPLACED	ОК
ENUGU	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
ENC	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
	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
KADUNA	GUSAU	ENERGY METER ON MARU 33KV FEEDER FAULTY	FAULTY METER REPLACED	METERS NOW OK
KAE	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





	ОТА	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
S		C.T. OF STEEL ROLLING MILL FEEDER SUSPECTED FAULTY, AND NEEDS REPLACEMENT	FAULTY C.T. REPLACED	FEEDER METER NOW OK
LAGOS	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
		T3 INCOMER ENERGY METER FAULTY	FAULTY ENERGY METER REPLACED	METER OK
	PORTHARCOURT MAINS	ENERGY METERS ON FEEDER 1, ABULOMA, UNIPORT NOT RECORDING ENERGY DELIVERED ACCURATELY.	FAULTY ENERGY METERS REPLACED	METER OK
OURT	PORTHARCOURT TOWN	T1B, T2B ENERGY METERS FAULTY RE		METERS OK
PORTHARCOURT	PORTHARCOURT TOWN	ENERGY METER ON SECRETARIAT 33KV FEEDER FAULTY	FAULTY ENERGY METER REPLACED	METER OK
POR	UYO	RED PHASE C.T. COIL OFENERGY 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
	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
SHIRORO	APO	AIRPORT FEEDERS K21 AND K23 COMMISSIONED	ENERGY METERS INSTALLED ON THE CIRCUITS	METERS OK
HS	JEBBA	MOKWA 33KV, 5A C.T-CARRING BREAKER FAULTY AND REPLACED WITH 1A TYPE	THE 1A ENERGY METERS REPLACED WITH 5A TYPE	METER OK
	- CLUBA	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
		AFAM I-V	53.33	55.77	65.00	50.00	47.03	31.50	35.48
뇽		DELTA	237.13	272.21	273.94	251.03	214.10	241.13	207.58
GOVERNMENT OF	٩L	EGBIN	972.26	1071.43	1078.71	997.33	850.97	946.00	1085.81
Z WE	THERMAL	GEREGU	348.39	300.00	275.81	184.48	344.00	414.00	414.00
GOVERN	置	SAPELE	90.00	90.00	133.39	159.33	154.52	144.00	160.00
GO/		OMOTOSO	266.13	294.29	269.71	227.05	262.50	253.75	257.66
		OLORUNSOGO	263.71	261.30	297.53	257.10	260.08	270.00	300.00
FEDERAL	0	JEBBA	540.00	488.21	537.74	446.90	340.81	298.67	320.00
田田	нурко	KAINJI	452.48	442.32	433.42	374.90	279.19	261.47	241.13
	Н	SHIRORO	440.32	417.86	430.65	450.00	311.77	262.33	343.87
		AES	218.58	239.39	231.89	239.76	206.30	258.44	225.72
~		AGIP	453.61	453.79	416.23	437.17	471.26	371.13	473.45
IDEPENDENT POWER PRODUCERS	AL	AFAM VI (SHELL)	153.59	247.29	262.37	279.69	320.77	300.50	212.03
ZE P	THERMAL	IBOM POWER	-	-	-	-	-	-	-
ENDENT POV	붙	AJAOKUTA	-	-	-	-	-	-	-
PR		ELEME			•			•	
DEF		OMOKU	65.16	84.36	99.19	106.17	122.58	108.33	100.00
		T/AMADI	-	-	-	-			-
	HYDRO	NESCO	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	TOTAL		4,564.69	4,728.22	4,815.58	4,560.91	4,195.88	4,171.25	4,386.73

-										
OWNERSHIP	TECHNOLOGY	GENERATOR	AUG	SEPT	OCT	NOV	DEC	AVE	% Contribution	
		AFAM	45.00	16.67	11.29	44.17	82.03	44.77	0.98	
冶		DELTA	182.17	167.67	205.26	226.73	251.55	227.54	5.00	
Ä	ΙF	EGBIN	902.00	1012.00	880.00	902.00	1007.74	975.52	21.45	
N M	THERMAL	GEREGU	414.00	414.00	414.00	391.00	414.00	360.64	7.93	
SOVERNI	롣	SAPELE	160.00	154.33	92.90	130.10	156.45	135.42	2.98	
\ \Q \ \Q \ \\ \Q \ \\ \Q \ \\ \Q \ \\ \		OMOTOSO	276.25	300.00	293.95	272.50	253.69	268.90	5.91	
FEDERAL GOVERNMENT OF NIGERIA		OLORUNSOGO	300.00	300.00	300.00	300.00	300.00	284.14	6.25	
)ER	Ç	JEBBA	366.83	407.07	407.81	370.00	399.29	410.28	9.02	
田田	HYDRO	KAINJI	210.73	329.37	376.94	436.43	463.74	358.51	7.88	
	£	SHIRORO	422.33	450.17	387.13	370.00	425.81	392.69	8.63	
		AES	254.06	222.18	203.71	178.36	185.73	222.01	4.88	
~		AGIP	419.97	470.00	461.97	414.00	466.94	442.46	9.73	
IDEPENDENT POWER PRODUCERS	AL	AFAM VI (SHELL)	447.37	409.70	406.58	365.17	454.68	321.65	7.07	
CEL	THERMAL	IBOM POWER		-	*	-	11.94	1.00	0.02	
ENDENT POV	뽇	AJAOKUTA	-	-	-	-	-	-	-	
P. S. S.		ELEME		-	-	-	-	-	-	
DEF		OMOKU	100.00	99.17	90.32	56.67	76.13	92.34	2.03	
_		T/AMADI	-	-	-	-	-	-	-	
	HYDRO NESCO		10.00	10.00	10.00	10.00	10.00	10.00	0.22	
	TOTAL		4,510.71	4,762.33	4,541.86	4,467.13	4,959.72	4,547.86	100.00	
HYDRO :	HYDRO : THERMAL = 26 : 74 FGN : IPP = 76 : 24									





Fig. 1.2.1

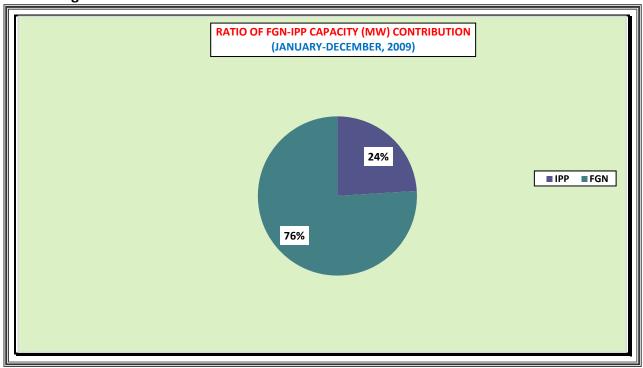
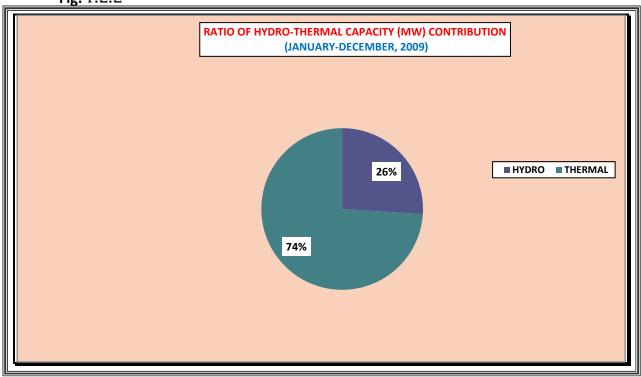


Fig. 1.2.2







1.3 Energy Generated

Table 1.3 Energy (Mwh) Generated by the Generators

OWNERSHIP	TECHNOLOGY	GENERATOR	JAN	FEB	MAR	APR	MAY	JUN	JUL
		AFAM	11,477.00	5,155.00	3,336.00	5,994.00	12,382.00	13,870.00	15,639.00
F.		DELTA	163,785.70	160,664.00	183,,001.20	156,688.00	125,424.00	145,607.30	105,399.00
GOVERNMENT OF NIGERIA		EGBIN	362,791.00	321,792.00	349,223.00	333,674.00	285,172.00	181,605.00	149,738.00
, AME		GEREGU	58,576.20	53,318.90	61,987.40	48,220.60	48,220.60	-	
GOVERN	THERMAL	SAPELE	48,720.00	95,784.00	94,670.00	50,835.00	38,001.00	60,226.00	84,744.00
GOV	ÆRI	OMOTOSO	13,433.00	29,877.00	47,464.00	32,031.00	23,903.00	4,010.00	38,849.00
	łL	OLORUNSOGO	41,306.00	5,533.00	3,449.70	19,148.10	5,737.00	-	
FEDERAL	0	JEBBA	224,509.00	216,882.00	258,266.00	210,382.20	208,644.08	184,341.00	148.842.00
핃	HYDRO	KAINJI	299,830.00	248,430.00	274,637.00	211,558.90	175,486.91	130,984.00	89,422.00
	Н	SHIRORO	185,682.00	139,236.00	167,235.00	131,535.40	145,990.00	77,053.00	141,505.00
		AES	146,906.30	147,758.30	160,155.90	162,017.60	129,928.40	156,144.40	112,725.80
ÆR		AGIP	317,118.00	289,420.00	276,175.00	249,352.45	292587.28	245,857.00	310,448.00
PENDENT POWER PRODUCERS	AL	AFAM VI (SHELL)	75,485.51	104,444.90	142,683.40	68,642.67	146,672.80	182,754.79	132,438.83
INDEPENDENT PRODUCE	THERMAL	AJAOKUTA	-	-	-	-	-	-	-
SOF	뿓	ELEME	-	-	-	-	-	-	-
E E	·	OMOKU	28,108.00	35,807.00	42,751.00	33,983.00	32,816.20	41,636.55	45,310.70
2		T/AMADI	2,630.00	2,853.08	3,365.00	1,870.00	2,810.00	3,518.00	3,246.00
	_		502.21	407.88	453.64	576.02	576.02	705.33	705.33
	TOTAL		1,980,859.92	1,857,143.06	2,068,853.24	1,716,508.94	1,656,019.39	1,428,312.37	1,379,013.56

OWNERSHIP	TECHNOLOGY	GENERATOR	AUG	SEPT	ОСТ	NOV	DEC	TOTAL	AVE	%
		AFAM	18,082.00	4,591.00	6,656.00	18,316.00	36,644.00	152,142.00	12,678.50	0.72
ų.		DELTA	91,349.60	75,241.90	89,081.20	151,415.10	135,039.00	1,582,696.90	131,891.41	6.94
GOVERNMENT OF NIGERIA	AL	EGBIN	179,673.40	208,395.00	224,732.00	337,580.00	390,025.00	3,324,400.40	277,033.37	15.67
W.	THERMAL	GEREGU		10,364.10	39,960.80	46,028.20	30,649.40	378,993.70	31,582.81	1.79
GOVERN	王	SAPELE			29,050.00	68,146.00	24,073.00	594,249.00	49,520.75	2.80
GO NIGE		OMOTOSO	24,082.00	24,699.00	28,141.00	58,770.00	50,575.00	375,634.00	31,302.83	1.77
3AL		OLORUNSOGO	•		•	6,275.00	237,856.00	81,448.80	6,787.40	0.38
FEDERAL	0	JEBBA	185,801.00	276,000.00	277,397.00	247,358.00	237,856.00	2,676,258.28	223,021.52	12.61
Œ	нурко	KAINJI	101,140.00	206,410.00	226,096.00	253,310.00	287,183.00	2,504,487.81	208,707.32	11.80
	Ξ	SHIRORO	285,819.00	300,945.00	262,294.00	220,597.00	221,695.00	2,279,587.00	189,965.58	10.74
		AES	131,263.40	128,344.60	125,707.50	108,450.60	122,376.70	1,631,779.50	135,981.63	7.69
e:		AGIP	205,394.00	205,539.00	193,348.00	168,307.00	313,115.00	3,066,660.73	255,555.06	14.46
INDEPENDENT POWER PRODUCERS	MAL	AFAM VI (SHELL)	276,557.73	223,594.00	246,760.00	204,812.80	314,656.98	2,119,504.41	176,625.37	9.99
ENT	THERMAL	AJAOKUTA			•	•		•	•	0.00
PENDENT PO	F	ELEME			•	•		•	•	
DEP		OMOKU	40,886.92	41,499.00	36,882.40	17,491.60	17,491.60	414,663.97	34,555.33	1.95
Z		T/AMADI		917.00				21,209.08	1,767.42	0.10
	NESCO	NESCO	2,232.98	1,738.38	2,150.98	1,605.47	1,605.47	13,259.71	1,104.98	0.06
	TOTAL		1,542,282.03	1,708,277.98	1,788,256.88	1,908,462.77	2,182,985.15	21,216,975.29	1,768,081.27	100.00



HYDRO: THERMAL = 35:65

FGN: IPP = 66:34



 $\textbf{Fig.}\ 1.3.1$

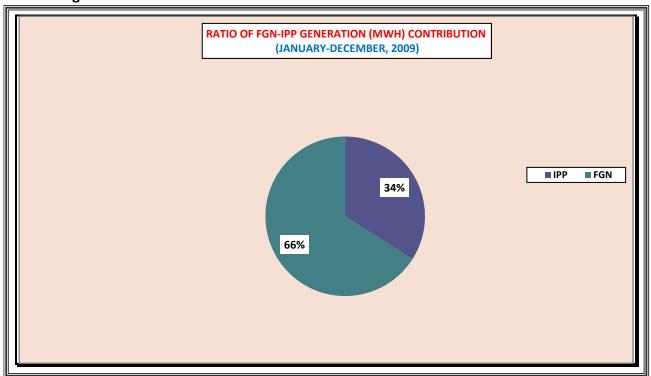
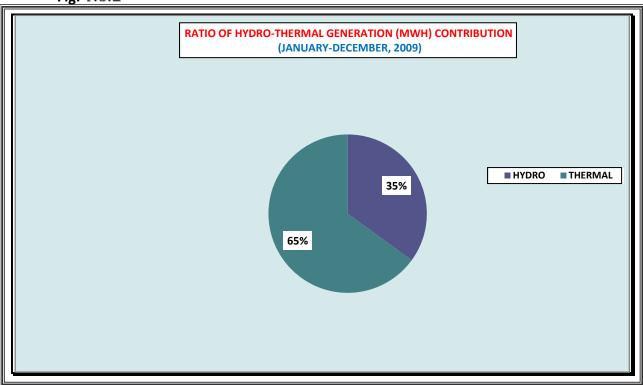


Fig. 1.3.2







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
		AFAM	11,194.00	5,155.00	3,336.00	5,994.00	12,382.00	13,870.00	15,639.00
L.		DELTA	137,050.75	158,415.26	179,247.79	152,677.06	125,319.10	141,127.54	101,489.81
0 5	뒫	EGBIN	338,010.60	251,663.00	321,465.90	333,393.90	237,273.00	140,420.00	176,003.00
WE	THERMAL	GEREGU	57,946.00	53,035.00	61,588.00	47,716.00	29,767.00	-	-
ERN	崖	SAPELE	1,550.00	-	-	-	-	-	-
GOVERNMENT OF NIGERIA		омотоѕо	11,758.97	28,207.00	45,058.00	30,471.00	22,604.00	18,144.00	21,450.00
SAL		OLORUNSOGO	34,982.00	-	12,957.00	20,246.00	47,067.00	0.00	0.00
FEDERAL	0	JEBBA	221,110.00	213,480.00	254,210.00	207,230.00	202,460.00	178,860.00	144,290.00
世	HYDRO	KAINJI	299,226.80	247,914.80	274,057.83	211,558.90	175,486.91	130,340.97	88,834.40
	£	SHIRORO	184,506.30	138,150.00	165,865.60	131,535.40	145,990.60	75,708.30	140,337.70
		AES	146,915.60	147,725.00	160,100.00	161,907.70	129,852.20	155,888.10	112,581.10
H.		AGIP	311,016.20	284,453.20	267,896.00	250,102.80	293,467.70	239,329.60	302,419.60
NDEPENDENT POWER PRODUCERS		AFAM VI (SHELL)	60,459.84	80,809.00	117,715.20	76,260.68	160,413.60	183,975.50	142,867.35
DUC		AJAOKUTA	-	•	-				-
ROI		ELEME	-	-	-	-	-	-	-
DEF		OMOKU							
≥		T/AMADI							
	HYDRO	NESCO							
	TOTAL		1,815,727.06	1,609,007.26	1,863,497.32	1,629,093.44	1,582,083.11	1,277,664.01	1,245,911.96

OWNERSHIP	TECHNOLOGY	GENERATOR	AUG	SEPT	ОСТ	NOV	DEC	TOTAL	AVE	%
		AFAM	18,082.00	4,591.00	6,487.20	18,316.00	36,347.50	151,393.70	12,616.14	0.77
R		DELTA	91,307.52	82,378.47	89,115.87	145,684.33	132,799.30	1,536,612.80	128,051.07	7.77
LN:	ΙΑΓ	EGBIN	162,614.00	176,341.00	213,572.00	310,414.00	342,802.00	3,003,972.40	250,331.03	15.19
NME	THERMAL	GEREGU		-	50,056.00	45,511.00	30,249.00	375,868.00	31,322.33	1.90
GOVERNMENT NIGERIA	롣	SAPELE	-	•	25,085.00	62,239.00	24,073.00	112,947.00	9,412.25	0.57
GO/NIGI		OMOTOSO	22,695.00	24,230.50	41,061.00	78,824.50	32,925.71	377,429.68	31,452.47	1.91
SAL		OLORUNSOGO	-	•	•	6,257.00	•	121,509.00	10,125.75	0.61
FEDERAL	30	JEBBA	144,290.00	276,000.00	270,330.00	240,260.00	231,950.00	2,584,470.00	215,372.50	13.07
H	нурко	KAINJI	100,588.70	205,918.70	225,524.60	252,786.30	286,605.20	2,467,844.11	208,237.01	12.64
	Ξ	SHIRORO	284,723.50	299,742.20	260,950.50	219,303.20	220,382.50	2,267,195.80	188,932.98	11.47
		AES	131,212.00	128,315.00	125,671.00	108,476.00	122,401.00	1,631,044.70	135,920.39	8.25
er Er		AGIP	198,184.10	200,459.20	188,311.90	162,555.70	307,181.30	3,005,377.30	250,448.11	15.20
IDEPENDENT POWER FEDERAL GOVERNMENT OF SET STATES OF SET	THERMAL	AFAM VI (SHELL)	276,330.61	223,426.15	245,832.60	220,617.85	314,373.58	2,103,081.97	175,256.83	10.64
ENT	Ë	AJAOKUTA	-	•	•	-	•	•	-	-
ROC	Ė	ELEME	-	•	•	-	•	-	-	-
EPE		OMOKU	-	•		-	-			-
□		T/AMADI	-	•	•	-	•	•	-	-
	HYDRO	NESCO				-			-	-
	TOTAL 1,430,027.43				1,741,997.67	1,871,244.88	2,082,090.09	19,769,746.46	1,647,478.87	100.00
HYDRO: THERMAL = 37:63 FGN: IPP = 66:34										





Fig. 1.4.1

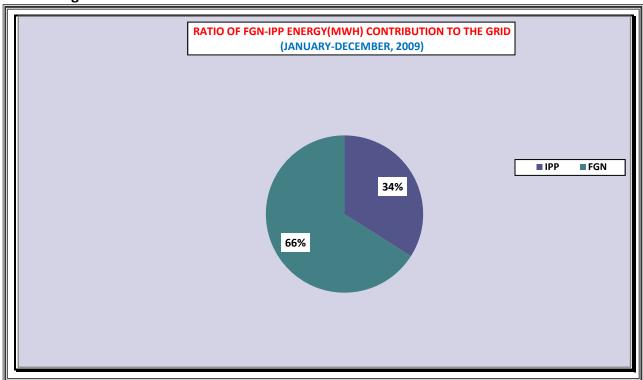
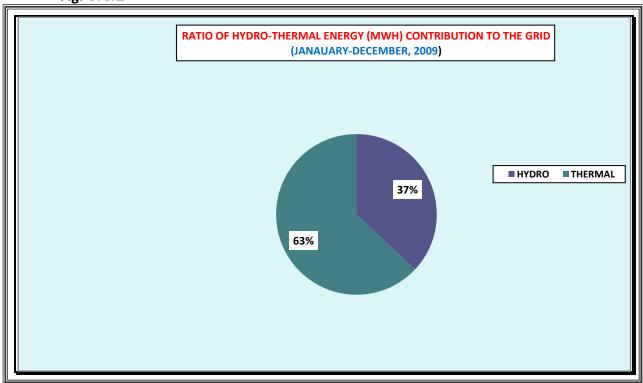


Fig. 1.4.2







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
		AFAM	152,142.00	151,393.70	748.30	0.49
		DELTA	1,582,696.90	1,536,612.80	46,084.10	2.91
P.	귉	EGBIN	3,324,400.40	3,003,972.40	320,428.00	9.64
MEN	THERMAL	GEREGU	378,993.70	375,868.00	3,125.70	0.82
GOVERNI	폰	SAPELE	594,249.00	112,947.00	481,302.00	80.99
NIGI		* omotoso	375,634.00	377,429.68	(1,795.68)	(0.48)
FEDERAL GOVERNMENT OF NIGERIA		* OLORUNSOGO	81,448.80	121,509.00	(40,060.20)	(49.18)
臣	0	JEBBA	2,676,258.28	2,584,470.00	91,788.28	3.43
	нурко	KAINJI	2,504,487.81	2,498,844.11	5,643.70	0.23
	<u> </u>	SHIRORO	2,279,587.00	2,267,195.80	12,391.20	0.54
		AES	1,631,779.50	1,631,044.70	734.80	0.05
K		AGIP	3,066,660.73	3,005,377.30	61,283.43	2.00
SS SS	IAL	AFAM VI (SHELL)	2,119,504.41	2,103,081.97	16,422.44	0.77
ENTI	THERMAL	AJAOKUTA	-	-	-	-
PEND	-	ELEME	-	-	-	-
INDEPENDENT POWER PRODUCERS		омоки	-	-	-	-
_		T/AMADI	-	-	-	-
	HYDRO	NESCO		-		-
	TOTAL		20,767,842.53	19,769,746.46	998,096.07	4.81

* For investigation by the Station Managers.





1.6 Energy Extracted from the Grid

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

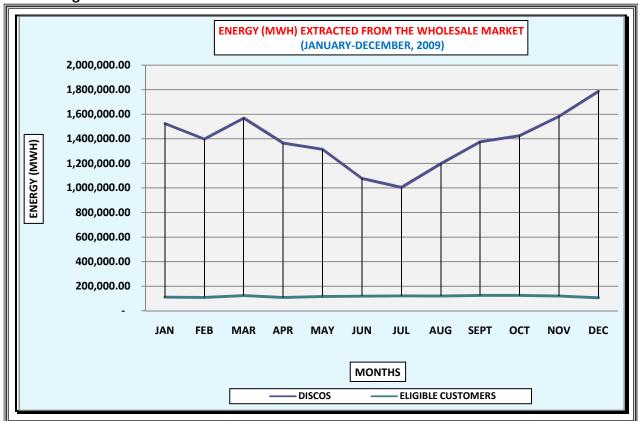
TYPE	DISCOS	JAN	FEB	MAR	APR	MAY	JUN	JUL
	ABUJA	187,870.69	174,293.83	198,003.97	175,930.1	169,941.28	131,732.44	130,693.97
	BENIN	207,694.34	184,143.97	200,309.29	187,717.2	190,675.26	159,857.57	175,260.54
	EKO	145,155.29	130,246.97	176,447.53	128,948.30	123,900.43	76,651.19	62,643.62
	ENUGU	174,043.93	166,598.96	176,227.00	156,244.10	161,200.70	159,762.10	139,422.05
	IBADAN	183,720.57	180,150.63	202,913.57	181,756.80	173,194.83	151,759.32	150,603.87
DISCOS	IKEJA	211,307.26	201,786.25	232,914.98	195,848.50	179,114.63	127,839.50	120,917.72
DISC	JOS	81,042.54	70,043.00	72,178.71	65,731.10	62,420.40	50,794.76	45,542.50
	KADUNA	125,553.47	117,118.34	115,712.59	107,578.80	95,415.20	85,472.83	75,709.82
	KANO	92,714.91	80,797.34	88,355.99	77,822.40	67,875.70	51,898.45	38,147.60
	P/H	85,126.85	69,068.05	70,558.56	61,564.10	65,418.02	64,493.94	64,493.94
	YOLA	29,701.40	23,938.14	34,298.83	25,855.90	24,763.62	17,227.92	14,419.97
	SUB TOTAL	1,523,931.25	1,398,185.48	1,567,921.02	1,364,997.20	1,313,920.07	1,077,490.02	1,004,379.46
	CEB	56,110.00	50,163.00	56,263.00	54,461.00	54,832.00	52,757.00	53,515.00
60	NIGELEC	33,061.90	36,417.70	46,111.20	47,506.90	48,973.40	45,480.50	46,197.00
E E	SUB TOTAL	46,197.00	86,580.70	102,374.20	101,967.90	103,805.40	98,237.50	99,712.00
IGIB	AJAOKUTA	6,634.00	6,231.00	6,552.00	5,373.00	5,436.00	4,579.00	4,419.00
ELIGIBLE	DELTA	14,443.20	14,894.40	15,081.60	1,180.80	7,387.20	16,723.20	17,371.20
J	ITAKPE	124.80	124.80	205.20	133.2	103.20	56.40	43.20
	SUB TOTAL	21,202.00	21,340.20	21,838.80	6,687.0	12,926.40	21,358.60	21,833.40
ТО	TAL	1,634,305.15	1,506,106.38	1,692,134.02	1,473,652.10	1,430,651.87	1,197,086.12	1,125,924.86

TYPE	DISCOS	AUG	SEPT	ОСТ	NOV	DEC	TOTAL	AVE	%
	ABUJA	161,139.56	170,375.10	196,091.86	197,012.25	218,169.33	2,111,254.33	175,937.86	11.71
	BENIN	176,740.60	201,113.48	185,191.04	191,841.80	222,760.15	2,283,305.25	190,275.44	12.67
	EKO	100,750.91	129,913.74	124,310.16	183,588.22	201,462.40	1,584,018.75	132,001.56	8.79
	ENUGU	149,918.12	161,437.68	163,602.22	169,354.84	204,668.43	1,982,480.15	165,206.68	11.00
	IBADAN	179,614.33	191,133.02	187,078.99	207,463.00	238,692.92	2,228,081.81	185,673.48	12.36
DISCOS	IKEJA	154,035.67	186,714.34	188,211.93	247,344.03	260,647.71	2,306,682.51	192,223.54	12.80
DIS	JOS	52,814.75	67,894.82	79,091.26	76,115.05	92,930.88	816,599.79	68,049.98	4.53
	KADUNA	83,569.87	106,029.26	116,398.54	108,996.58	115,014.36	1,252,569.62	104,380.80	6.95
	KANO	49,245.00	68,161.65	68,161.65	82,780.04	91,611.93	91,611.93	72,388.36	4.82
	P/H	72,449.38	70,602.30	77,493.07	89,815.32	102,790.79	880,398.17	73,366.51	4.88
	YOLA	17,295.52	22,658.28	28,711.22	28,716.11	36,914.89	304,501.84	25,375.15	1.69
	SUB TOTAL	1,197,573.71	1,376,033.67	1,425,429.64	1,583,027.24	1,785,663.79	16,618,552.56	1,384,879.38	92.20
	CEB	51,934.00	54,416.00	56,518.00	56,836.00	60,294.00	658,099.00	54,841.58	3.65
ω	NIGELEC	47,215.90	49,641.50	50,850.20	43,372.10	39,914.90	534,743.20	44,561.93	2.97
ILE AER	SUB TOTAL	99,149.90	104,057.50	107,368.20	100,208.10	100,208.90	1,192,842.20	99,403.52	6.62
ELIGIBLE	AJAOKUTA	4,445.00	4,621.00	4,976.00	4,987.00	5,335.00	63,588.00	5,299.00	0.35
ELIGIBLE	DELTA	16,497.60	16,785.60	13,416.00	15,369.00		149,149.80	13,559.07	0.83
	ITAKPE	10.80	46.80	49.20	60.00	50.40	1,098.00	91.50	0.01
	SUB TOTAL	20,953.40	20,953.40	18,441.20	20,416.00	5,385.40	213,835.80	18,949.57	1.19
TO	OTAL	1,317,677.01	1,501,544.57	1,551,239.04	1,703,651.34	1,891,258.09	18,025,230.56	1,503,232.47	100.00





Fig. 1.6





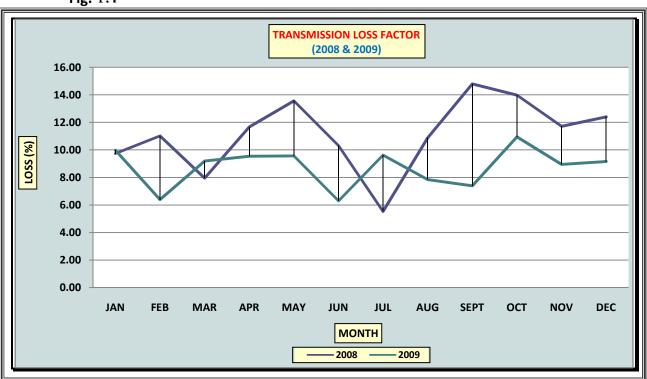
1.7 Comparison of Energy Transmitted and Energy Delivered

Table 1.7 Comparison of Energy Transmitted and Energy Delivered

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
ENERGY INJECTED (MWH	1,815,727.06	1,609,007.26	1,863,497.32	1,629,093.44	1,582,083.11	1,277,664.01
ENERGY EXTRACTED (MWH)	1,634,305.15	1,506,106.38	1,692,134.02	1,473,652.11	1,430,651.87	1,197,086.12
LOSS (MWH)	181,421.91	102,900.88	171,363.30	155,441.33	151,431.24	80,577.89
LOSS (%)	9.99	6.40	9.20	9.54	9.57	6.31

	JUL	AUG	SEPT	ост	NOV	DEC	TOTAL
ENERGY INJECTED (MWH	1,245,911.96	1,430,027.43	1,621,402.22	1,741,997.67	1,871,244.88	2,082,090.09	19,769,746.46
ENERGY EXTRACTED (MWH)	1,125,924.86	1,317,677.01	1,501,544.57	1,551,239.04	1,703,651.34	1,891,258.09	18,025,230.56
LOSS (MWH)	119,987.10	112,350.42	119,857.65	190,758.63	167,593.54	190,832.00	1,744,515.90
LOSS (%)	9.63	7.86	7.39	10.95	8.96	9.17	8.82

Fig. 1.7







2.0 ADMINISTRATION OF MARKET SETTLEMENTS (BILLING AND CHARGES)

2.1.1 Disco Settlement Report

Table 2.1.1 DISCOS Settlement Report

	GEN	IERATION CH (=N=M)	ARGES	OTHER CHARGES (=N=M)							
	CAPACITY	ENERGY	TOTAL GENERATION CHARGES				NERC		CAP.	PEN.	
DISCOS	AMOUNT	AMOUNT	(A)	TCN	MO	NERC	LICENCE	CHQs	BUILDING	CHARGES	
ABUJA	6,094.41	2,891.43	8,985.84	2,092.98	11.72	89.57	52.28	476.05	61.12	421.50	
BENIN	6,621.60	3,106.96	9,728.56	2,260.59	12.66	95.49	71.37	514.68	66.44	457.09	
EKO	4,483.32	2,213.05	6,696.36	1,554.03	8.71	68.73	62.28	354.07	44.40	314.00	
ENUGU	5,726.79	2,702.48	8,429.27	1,961.02	10.97	82.96	57.84	374.41	56.24	392.36	
IBADAN	6,556.62	3,028.31	9,584.93	2,236.81	12.47	95.12	72.46	502.04	65.50	444.43	
IKEJA	6,582.17	3,200.33	9,782.50	2,274.72	12.77	112.43	77.59	522.41	65.88	461.96	
JOS	2,341.97	1,127.63	3,469.60	807.39	4.53	34.59	37.04	184.15	23.39	163.54	
KADUNA	3,530.55	1,737.23	5,267.78	1,223.26	6.92	52.48	28.83	258.17	35.90	254.90	
KANO	2,406.71	1,221.45	3,628.15	841.66	4.76	36.64	30.69	200.81	24.51	176.37	
P/H	3,451.62	1,200.49	4,652.10	877.18	4.88	37.73	28.19	194.24	25.35	173.87	
YOLA	855.17	425.64	1,280.81	297.30	1.67	12.81	14.94	69.03	8.58	60.86	
TOTAL	48,650.92	22,854.99	71,505.91	16,426.94	92.05	718.56	533.52	3,650.06	477.31	3,320.87	

				OTHER	CHARGES (=N=M)	CONTD				GRAND TOTAL (GENERATION CHARGES	
DISCOS	EQ. CHARGES	CHARGES VAT REPAYMENT FUND MMF FUND CASH ODF (B)									
ABUJA	438.00	540.33	120.00	1,196.54	422.36	(153.70)	1,196.54	187.78	7,153.08	16,138.92	
BENIN	(120.45)	454.47	146.32	2,104.15	354.70	(709.71)	2,104.15	323.91	8,135.86	17,864.41	
EKO	1,945.13	556.34	245.08	1,061.95	464.15	(509.59)	1,061.95	179.30	7,410.53	14,106.90	
ENUGU	(939.50)	452.04	107.47	2,515.19	350.88	(512.70)	2,515.19	182.56	7,606.91	16,036.18	
IBADAN	(340.08)	568.75	121.14	1,621.33	455.65	(703.91)	1,621.33	319.80	7,092.84	16,677.76	
IKEJA	2,511.85	737.16	240.00	807.44	591.27	(818.08)	807.44	338.51	8,743.33	18,525.83	
JOS	(611.30)	185.40	120.00	1,686.90	144.07	(119.67)	1,686.90	248.11	4,595.03	8,064.64	
KADUNA	(298.41)	263.23	117.60	827.95	203.02	(124.15)	827.95	325.88	4,003.51	9,271.30	
KANO	(308.76)	203.82	94.51	1,003.26	162.48	(74.88)	1,003.26	344.32	3,743.45	7,371.60	
P/H	(851.77)	213.66	120.00	411.78	168.67	(176.58)	411.78	296.46	1,935.44	6,587.55	
YOLA	(280.12)	66.85	44.78	-	52.87	(76.63)	-	158.21	431.14	1,711.96	
TOTAL	1,144.57	4,242.05	1,476.90	13,236.47	3,370.12	(3,979.61)	13,236.47	2,904.84	60,851.13	132,357.04	





2.1.2 GENCOS Settlement Report

Table 2.1.2 GENCOS Settlement Report

		INFLOW (=N=M)							OUTF (=N:						GRAND
	CAPACITY	ENERGY	TOTAL INFLOW (A)	NERC	TCN	СНД	МО	RESERVED FUND	EQUAL. FUND	FUEL	PENSION CHARGE	PENSION FUND	LOAN	TOTAL OUTFLOW (B)	TOTAL (INFLOW MINUS
GENCOS	AMOUNT	AMOUNT	O N	NE	Ĺ	3	2	RESE	EQI FL	H.	PEN CH/	PEN	רכ	OT DUO)	OUTFLOW) (=N=M) A - B
AFAM	342.30	176.37	518.67	0.42	5.40	4.55	0.06	-	-	94.12	21.85	(10.32)	-	116.09	402.58
DELTA	2,327.19	1,614.39	3,941.58	10.14	129.59	109.38	1.45	-	-	742.46	189.72	-	170.05	1,352.79	2,588.80
EGBIN	5,524.67	3,498.43	9,023.09	22.71	290.27	245.00	3.24	-	-	1,753.86	368.75	(0.18)	-	2,683.66	6,339.44
SAPELE	1,169.41	299.78	1,469.19	1.35	17.31	14.61	0.19	6.42	9.62	131.71	18.68	-	-	199.90	1,269.29
JEBBA	1,481.47	871.29	2,352.76	9.32	119.14	100.55	1.33	-	-	318.05	89.28	(1.07)	32.18	668.77	1,683.99
SHIRORO	3,824.91	2,314.70	6,139.61	12.37	158.14	133.47	1.76	-	-	1,018.13	272.77	(3.22)	79.29	1,672.71	4,466.89
KAINJI	3,650.33	2,605.51	6,255.84	17.62	225.12	190.01	2.51	-	-	1,095.60	284.91	(23.19)	17.27	1,809.84	4,445.99
GEREGU	3,596.39	2,174.29	5,770.68	5.94	75.89	64.06	0.85	11.56	17.34	1,096.94	287.76	(0.50)	-	1,559.83	4,210.85
0M0TOSHO	1,037.72	442.97	1,480.69	0.86	23.31	19.67	0.26	11.61	17.41	205.03	49.67	-	-	327.82	1,152.87
OLORUNSOGO	757.96	108.42	866.37	1.03	13.14	11.09	0.15	6.54	9.82	39.54	7.48	-	-	88.79	777.59
AJAOKUTA STEEL	-	18.29	18.29	-	-	-	•	•		-	-	-	-		18.29
TOTAL	23,712.35	14,124.42	37,836.78	81.77	1,057.30	892.39	11.80	36.13	54.19	6,495.45	1,590.87	(38.48)	298.79	10,480.20	27,356.58

2.1.3 TCN Settlement Report

Table 2.1.3 TCN Settlement Report

	INFLOW (=N=M)		OUTFLOW (=N=M)							
NAME OF COMPANY	TOTAL INFLOW (A)	NERC	CHQs	PENSION CHARGE	LOAN REFUND	PENSION FUND	ANCILLARY CHARGES	TOTAL OUTFLOW (B)	NET INCOME (INFLOW MINUS OUTFLOW) (=N=M) (A - B)	
TCN	18,722.75	307.42	1,903.74	2,283.40	187.35	(14.60)	149.55	4,816.856	13,905.91	





2.2 Tariff Equalization Report

Table 2.2 Equalization Table

						EQ	UALIZATIO (N/MWH)	DN			
	TOTAL			JAN - JUN			JUL - DEC				
DISCOS	ENERGY RECEIVED (MWH)	% OF TOTAL ENERGY	ENERGY (MWH)	EQUALI ZATION RATE	PAYMENT/ CHARGES (=N=M)	ENERGY (MWH)	EQUALI ZATION RATE	PAYMENT/ CHARGES (N=NM)	TOTAL PAYMENTS (=N=M)	TOTAL CHARGES (=N=M)	SURPLUS /DEFICIT (=N=M)
ABUJA	2,111,254.33	12.70	1,037,772.26	-0.03	31.13	1,073,482.07	-0.08	85.88	117.01		
BENIN	2,283,305.25	13.74	1,130,397.64	0.21	(237.38)	1,152,907.61	0.19	(2,190.52)		(456.44)	
EKO	1,584,018.75	9.53	781,349.70	-1.06	828.23	802,669.05	-1.29	1,035.44	1,863.67		
ENUGU	1,982,480.15	11.93	994,076.81	0.57	(566.62)	988,403.34	0.63	(622.69)		(1,189.32)	
IBADAN	2,228,081.81	13.41	1,073,495.68	0.37	(397.19)	1,154,586.13	0.29	(334.83)		(732.02)	
IKEJA	2,306,682.51	13.88	1,148,811.11	-1.01	1,160.30	1,157,871.40	-1.15	1,331.55	2,491.85		
JOS	816,599.79	4.91	402,210.53	0.93	(374.06)	414,389.26	1.25	(517.99)		(892.04)	
KADUNA	1,252,569.62	7.54	646,851.19	0.37	(239.33)	605,718.43	0.5	(302.86)		(542.19)	
KANO	868,660.34	5.23	459,464.77	0.74	(340.00)	409,195.57	0.97	(396.92)		(736.92)	
P/H	880,398.17	5.30	416,229.51	1.09	(453.69)	464,168.66	1.46	(677.69)		(1,131.38)	
YOLA	304,501.84	1.83	155,785.85	1	(155.79)	148,715.99	1.42	(211.18)		(366.96)	
TOTAL	16,618,552.56								4,472.54	(6,047.28)	(1,574.74)

Equalization inflow against	outflow
Energy Ratio	36.12 : 63.88
Price Ratio	2.10 : 5.28





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	6,758,800	-	6,758,800
FEB	6,445,800	-	6,445,800
MAR	6,757,200	-	6,757,200
APR	5,506,200	-	5,506,200
MAY	5,539,200	-	5,539,200
JUN	4,635,400	-	4,635,400
JULY	4,462,200	-	4,462,200
AUGUST	4,455,800		4,455,800
SEPTEMBER	4,667,800	-	4,667,800
OCTOBER	5,025,200		5,025,200
NOVEMBER	5,047,000		5,047,000
DECEMBER	5,385,400		5,385,400
TOTAL	64,686,000	-	64,686,000





2.4 Energy Billed (Kwh)

Table 2.4 Energy Billed (Kwh) by the DISCOS, and billed to the International Connections and the Special Customers

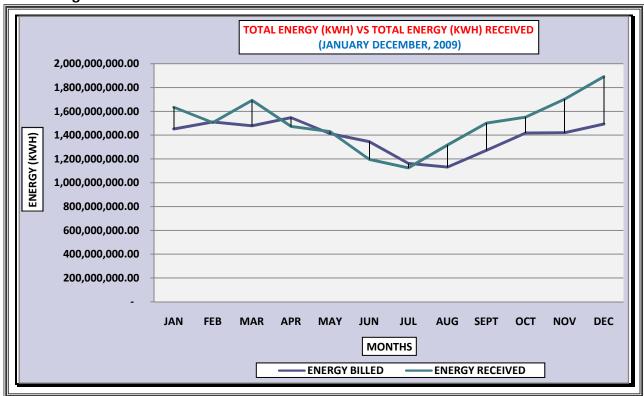
ZONE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY
ABUJA	151,018,713.00	157,061,724.00	153,947,665.00	153,957,622.00	149,055,949.00	146,955,537.00	139,760,045.00
BENIN	174,532,381.54	180,528,938.42	166,638,661.17	154,787,763.67	143,484,106.72	150,242,920.73	127,762,585.00
EKO	128,861,510.00	128,861,510.00	126,007,063.00	165,207,347.00	123,357,132.00	117,833,140.00	75,251,755.00
ENUGU	178,156,292.00	175,068,329.00	177,875,455.00	174,435,728.00	158,545,685.00	161,750,008.00	158,714,931.00
IBADAN	158,677,699.00	171,883,672.00	167,604,124.00	189,667,133.00	169,877,671.00	158,796,263.00	137,136,098.00
IKEJA	190,728,022.00	206,108,761.00	186,066,023.00	214,887,398.00	187,278,382.00	163,960,624.00	110,171,661.00
JOS	67,581,348.00	63,218,865.00	65,073,455.00	59,078,481.00	57,124,206.00	47,063,266.00	42,634,946.00
KADUNA	107,881,943.00	110,987,614.00	113,333,301.00	118,777,681.00	107,168,415.00	98,009,030.00	89,655,659.00
KANO	77,266,456.00	83,424,749.00	75,886,813.00	80,180,597.00	72,467,647.00	60,298,361.00	48,121,740.00
P-H	82,567,246.00	90,487,880.00	97,739,178.00	100,651,191.00	103,152,416.00	97,314,639.00	96,638,902.00
YOLA	24,896,499.60	28,584,951.50	25,057,965.00	27,331,686.40	24,349,765.20	23,670,527.40	15,900,800.60
SUB-TOTAL	1,342,168,110.14	1,403,789,367.92	1,355,229,703.17	1,438,962,628.07	1,295,861,374.92	1,225,894,316.13	1,041,749,122.60
CEB	56,110,000.00	50,163,000.00	56,263,000.00	54,461,000.00	54,832,000.00	52,757,000.00	53,515,000.00
NIGELEC	33,061,900.00	36,417,700.00	46,111,200.00	47,506,900.00	48,973,400.00	45,480,500.00	46,197,000.00
SUB TOTAL	89,171,900.00	86,580,700.00	102,374,200.00	101,967,900.00	103,805,400.00	98,237,500.00	99,712,000.00
AJAOKUTA	6,634,000.00	6,231,000.00	6,552,000.00	5,373,000.00	5,436,000.00	4,579,000.00	4,419,000.00
DELTA STEEL	14,443,200.00	14,894,400.00	15,081,600.00	1,180,800.00	7,387,200.00	16,723,200.00	17,371,200.00
ITAKPE	124,800.00	214,800.00	205,200.00	133,200.00	103,200.00	56,400.00	43,200.00
SUB TOTAL	21,202,000.00	21,340,200.00	21,838,800.00	6,687,000.00	12,926,400.00	21,358,600.00	21,833,400.00
GRAND TOTAL	1,452,542,010.14	1,511,710,267.92	1,479,442,703.17	1,547,617,528.07	1,412,593,174.92	1,345,490,416.13	1,163,294,522.60

ZONE	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL E NERGY BILLED	AVE. ENERGY BILLED
ABUJA	139,601,600.00	146,735,559.00	153,509,369.00	154,733,688.00	155,664,383.00	1,802,001,854.00	150,166,821.17
BENIN	138,860,306.90	149,057,692.76	159,723,310.77	152,217,881.59	156,677,561.66	1,854,514,110.93	154,542,842.58
EKO	61,702,226.00	98,276,205.00	123,077,860.00	117,926,278.00	166,059,226.00	1,439,993,626.00	119,999,468.83
ENUGU	133,634,698.00	143,397,197.00	151,932,183.00	159,283,368.00	146,744,552.00	1,919,538,426.00	159,961,535.50
IBADAN	136,516,400.00	164,990,232.00	172,465,985.00	176,939,446.00	184,365,472.00	1,988,920,195.00	165,743,349.58
IKEJA	111,613,219.00	142,893,703.00	173,712,041.00	178,507,982.00	211,234,963.00	2,077,162,779.00	173,096,898.25
JOS	47,766,231.00	60,536,301.00	68,698,873.00	63,270,586.00	72,137,604.00	714,184,162.00	59,515,346.83
KADUNA	88,256,641.00	88,606,495.00	104,461,147.00	102,686,697.00	102,963,214.00	1,232,787,837.00	102,732,319.75
KANO	36,679,566.00	45,908,734.00	61,268,396.00	69,951,865.00	76,070,070.00	787,524,994.00	65,627,082.83
P-H	103,775,931.00	91,809,983.00	102,313,012.00	102,525,721.00	94,542,692.00	1,163,518,791.00	96,959,899.25
YOLA	13,401,372.80	15,500,095.70	21,315,197.05	22,559,442.10	22,340,433.10	264,908,736.45	22,075,728.04
SUB TOTAL	1,011,808,191.70	1,147,712,197.46	1,292,477,373.82	1,300,602,954.69	1,388,800,170.76	15,245,055,511.38	1,270,421,292.62
CEB	51,934,000.00	54,416,000.00	56,518,000.00	56,836,000.00	60,294,000.00	658,099,000.00	54,841,583.33
NIGELEC	47,215,900.00	49,641,500.00	50,850,200.00	43,372,100.00	39,914,900.00	534,743,200.00	44,561,933.33
SUB TOTAL	99,149,900.00	104,057,500.00	107,368,200.00	100,208,100.00	100,208,900.00	1,192,842,200.00	99,403,516.67
AJAOKUTA	4,445,000.00	4,621,000.00	4,976,000.00	4,987,000.00	5,335,000.00	63,588,000.00	5,299,000.00
DELTA STEEL	16,497,600.00	16,785,600.00	13,416,000.00	15,369,000.00		149,149,800.00	12,429,150.00
ITAKPE	10,800.00	46,800.00	49,200.00	60,000.00	50,400.00	1,098,000.00	91,500.00
SUB TOTAL	20,953,400.00	21,453,400.00	18,441,200.00	20,416,000.00	5,385,400.00	213,835,800.00	17,819,650.00
GRAND TOTAL	1,131,911,491.70	1,273,223,097.46	1,418,286,773.82	1,421,227,054.69	1,494,394,470.76	16,651,733,511.38	1,387,644,459.28





Fig. 2.4







2.5 Revenue Billed

Table 2.5 Revenue Billed (=N=) by the DISCOS, and billed to the International Connections and the Special Customers

			•				
ZONE	JAN	FEB	MAR	APR	MAY	JUN	JUL
ABUJA	1,152,456,743.31	1,118,780,956.11	1,226,621,363.52	1,197,144,723.97	1,178,826,109.07	1,170,910,394.09	1,137,901,886.17
BENIN	979,733,054.23	1,007,064,133.65	932,289,683.97	868,217,518.13	829,444,580.29	845,821,035.57	845,821,035.57
EKO	966,321,070.00	1,037,330,578.00	980,152,738.00	1,205,482,549.00	967,737,188.00	938,185,285.00	662,778,461.00
ENUGU	1,076,303,237.27	1,052,730,511.50	1,061,126,270.94	1,040,220,505.42	744,758,848.34	965,826,710.18	954,124,804.60
IBADAN	1,091,911,867.48	1,091,911,867.48	1,155,877,476.58	1,251,433,707.18	1,169,927,917.06	1,134,485,767.06	993,970,570.19
IKEJA	1,468,129,605.67	1,539,259,020.89	1,454,877,980.92	1,625,868,880.26	1,456,621,809.33	1,310,883,949.65	984,725,699.74
JOS	365,271,478.04	345,071,558.60	350,558,820.09	324,789,434.61	319,496,644.28	265,820,074.09	280,712,502.57
KADUNA	732,088,910.05	736,919,369.04	756,323,130.01	796,758,951.42	703,921,287.61	670,317,622.58	649,032,663.43
KANO	540,389,695.59	582,288,784.43	548,667,825.94	558,821,818.11	523,631,309.51	465,923,564.04	448,493,942.59
P-H	598,187,305.00	638,172,337.95	659,496,215.18	677,884,917.41	757,877,292.22	654,360,515.38	640,705,329.24
YOLA	194,089,028.00	156,298,476.99	136,417,651.60	147,037,252.07	133,879,126.62	130,350,733.38	88,750,412.63
SUB TOTAL	9,164,881,994.64	9,383,560,334.02	9,262,409,156.75	9,693,660,257.58	8,786,122,112.33	8,552,885,651.02	7,605,739,547.54
CEB	378,552,816.32	343,343,031.90	379,458,667.50	368,789,753.51	370,986,339.48	358,701,102.78	363,188,944.45
NIGELEC	166,033,743.53	183,968,199.14	218,572,155.57	224,449,042.32	233,465,097.85	221,193,616.07	221,524,182.68
SUB TOTAL	544,586,559.85	527,311,231.04	598,030,823.07	593,238,795.83	604,451,437.33	579,894,718.85	584,713,127.13
AJAOKUTA	63,287,490.00	59,469,018.00	62,754,657.00	51,772,812.00	51,910,971.00	44,121,630.00	42,706,671.00
DELTA STEEL	142,243,710.00	142,243,710.00	153,520,710.00	25,509,750.00	83,351,310.00	174,159,510.00	175,860,510.00
ITAKPE	1,456,350.00	2,500,050.00	2,176,230.00	1,497,300.00	1,263,570.00	913,920.00	830,130.00
SUB TOTAL	207,343,290.00	212,493,498.00	216,579,867.00	78,779,862.00	136,525,851.00	219,195,060.00	219,397,311.00
GRAND TOTAL	9,916,811,844.49	10,123,365,063.06	10,077,019,846.82	10,365,678,915.41	9,527,099,400.66	9,351,975,429.87	8,409,849,985.67

ZON	IE	AUG	SEPT	OCT	NOV	DEC	TOTAL REVENUE BILLED	AVERAGE REVENUE BILLED
ABU	JA	1,111,510,647.58	1,211,919,992.53	1,252,625,625.72	1,306,946,654.01	1,024,789,029.61	14,090,434,125.69	1,174,202,843.81
BEN	IN	895,169,886.73	847,556,402.92	1,008,293,011.09	1,003,055,045.72	960,047,094.51	10,941,234,722.19	911,769,560.18
EKO		692,451,127.00	946,879,564.00	1,143,330,714.00	1,081,193,954.00	1,412,244,502.00	12,034,087,730.00	1,002,840,644.17
ENU	GU	993,299,317.37	1,042,867,617.05	1,061,902,569.00	1,130,202,772.02	1,043,106,317.70	12,166,469,481.39	1,013,872,456.78
IBAD	DAN	1,171,100,148.38	1,351,503,333.86	1,402,576,264.36	1,483,820,842.72	1,519,224,302.03	14,895,476,803.76	1,241,289,733.65
IKEJ	A	1,188,111,499.60	1,410,344,092.64	1,647,490,334.58	1,651,752,077.18	1,882,127,730.82	17,620,192,681.28	1,468,349,390.11
JOS		309,935,473.54	384,494,432.34	430,188,159.00	400,006,984.11	447,514,598.33	4,223,860,159.60	351,988,346.63
KAD	UNA	759,865,762.77	765,776,393.73	810,266,393.73	827,566,477.53	851,429,680.60	9,060,266,642.50	755,022,220.21
KAN	0	415,228,928.58	447,164,208.70	543,127,394.84	609,045,170.05	623,194,209.67	6,305,976,852.05	525,498,071.00
P-H		862,697,888.75	651,514,390.98	805,385,017.35	828,933,255.37	756,720,990.98	8,531,935,455.81	710,994,621.32
YOL	Α	90,746,034.12	100,335,639.53	134,148,693.26	139,985,059.37	135,073,082.56	1,587,111,190.13	132,259,265.84
SUB	TOTAL	8,490,116,714.42	9,160,356,068.28	10,239,334,176.93	10,462,508,292.08	10,655,471,538.81	111,457,045,844.40	9,288,087,153.70
CEB		353,828,422.37	368,523,311.74	380,968,374.63	382,851,154.06	404,646,435.00	4,453,838,353.74	371,153,196.15
NIGE	LEC	226,671,662.47	238,313,557.64	241,199,698.68	213,485,777.53	198,398,487.00	2,587,275,220.48	215,606,268.37
SUB	TOTAL	580,500,084.84	606,836,869.38	622,168,073.31	596,336,931.59	603,044,922.00	7,041,113,574.22	586,759,464.52
AJA	OKUTA	42,785,064.00	35,426,664.00	36,760,878.00	22,370,187.00	51,149,112.00	564,515,154.00	47,042,929.50
DEL.	TA STEEL	170,104,830.00	177,165,870.00	141,512,910.00	157,724,070.00	•	1,550,009,370.00	140,909,942.73
ITAK	(PE	98,700.00	5,471,970.00	781,620.00	912,030.00	849,030.00	18,750,900.00	1,562,575.00
SUB	TOTAL	212,988,594.00	218,064,504.00	179,055,408.00	181,006,287.00	51,998,142.00	2,133,275,424.00	177,772,952.00
GRA	ND TOTAL	9,283,605,393.26	9,985,257,441.66	11,040,557,658.24	11,239,851,510.67	11,310,514,602.81	120,631,434,842.62	10,052,619,570.22





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

	100	71C O. I		OVOITAG	CONCOL	ion and	111001110	Distribut				
BENEFICIARY	ENERGY		REVENUE E				ACTUAL REVENU (=N=M)	E	REVENUE	REQUIRED	ACTUAL	SETTLEMENT
	RECEIVED	MO	DISCOS MYTO BASED INCOME	PROVISION FOR EQUALISATION	TOTAL		SUBSIDY	TOTAL	GAP	SETTLEMENT	SETTLEMENT	SHORTFALL
DISCOS	(MWH) 2,111,254.33	15,171.22	5,315.39	EQUALISATION	20,486.60	11,488.60	4,324.87	15.813.47	(=N=M) 4.673.14	(=N=M) 5,315.39	(=N=M) 4,682.44	(=N=M) 632.94
ABUJA BENIN	2,283,305.25	15,550.89	5,799.57	-	21,350.46	9,617.50	4,068.28	13,685.78	7,664.68	5,789.59	6,441.95	(652.36)
	1,584,018.75	13,191.36	3,936.76	-	17,128.12	11,894.22	5.020.04	16,914.26	213.87	3,936.76	6,518.87	(2,582.11)
EKO	1,982,480,15	12,905,19	5,030.52	-	17,126.12	9,219.09	4.436.28	13,655.37	4,280.34	5,006.03	6,137.02	(1,131.00)
ENUGU	2,228,081,81	,	,		20,631.28	12.243.40	6.273.61		2,114.27	5,593.64		
IBADAN	, -,	15,020.44	5,610.83	-	,	,	-,	18,517.01	,		8,519.68	(2,926.04)
IKEJA	2,306,682.51	18,780.57	5,783.53	-	24,564.10	15,626.29	8,677.58	24,303.86	260.23	5,783.53	8,943.59	(3,160.06)
JOS	816,599.79	5,353.48	2,105.25	-	7,458.73	3,903.25	2,174.24	6,077.49	1,381.23	2,088.44	2,948.14	(859.70)
KADUNA	1,252,569.62	8,703.18	3,194.87	-	11,898.05	5,528.68	3,202.63	8,731.31	3,166.75	3,183.69	3,370.92	(187.22)
KANO	868,660.34	5,959.56	2,218.58	-	8,178.14	4,353.91	2,456.31	6,810.22	1,367.92	2,203.16	3,066.34	(863.18)
P/H	880,398.17	5,666.97	2,286.33	-	7,953.29	4,593.98	2,453.78	7,047.76	905.53	2,266.90	2,876.30	(609.40)
YOLA PROVISION FOR	304,501.84	2,043.42	765.23	-	2,808.65	1,426.45	837.89	2,264.34	544.31	759.06	1,616.35	(857.29)
EQUALIZATION	-	-	-	1,574.74	1,574.74				1574.74			ĺ
SUB-TOTAL	16,618,552.56	118,346.27	42,046.86	1,574.74	161,967.87	89,895.36	43,925.51	133,820.87	28,147.00	41,926.18	55,121.61	632.94
NIGELEC	534,743.20	3,326.26	-	-	3,326.26	3,592.07	-	3,592.07	(265.81)	-	-	-
CEB	658,099.00	4,119.92	-	-	4,119.92	3,402.21	-	3,402.21	717.71	-	-	-
AJAOKUTA	63,588.00	396.67	-	-	396.67	-	-	-	396.67	-	-	-
ITAKPE	1,098.00	23.34	-	-	23.34	-	-	-	23.34	-	-	-
DELTA	163,558.72	1,035.78	-	-	1,035.78	195.00	-	195.00	840.78	-	-	-
LAGOS STATE		-	_	_	,	225.00	-	225,.00	(225.00)	-	_	-
SUB TOTAL	1,421,086.92	8,901.97	-		8,901.97	7,414.28	-	7,414.28	1,487.69	_	-	-
TOTAL	18,039,639.48	127,248.24	42,046.86	1,574.74	170,869.84	97,309.64	43,925.51	141,235.15	29,634.69	41,926.18	55,121.61	632.94
POWER STATIONS	ENERGY SENT OUT	121,210121	12,010100	1,01 111 1	,	01,000101	10,020101	111,200110		11,020110	00,121101	
FGN												
AFAM	151,393.70	-	174.38	-	•	-	-	-	-	404.14	1,099.11	(694.97)
DELTA	1,536,612.80	-	-	-	-	-	-	-	-	3,398.12	1,659.44	1,738.68
EGBIN	3,003,972.40	-	78.89	-	-	-	-	-	-	8,151.62	3,584.42	4,567.21
GEREGU	375,868.00	-	95.49							1,475.07	517.68	957.39
SAPELE	112,947.00	-	-	-	-	-	-	-	-	1,161.08	1,208.88	(47.80)
омотоѕно	377,429.68	-		-	-	-	_	-	-	1,160.96	283.61	877.35
OLORUNSOGO	121,509.00	_		_	_	-	-	-	-	821.28	210.96	610.32
JEBBA	2,584,470.00	_	-	_	_	-	-	-	-	5,804.95	2,249.49	3,555.46
KAINJI	2,498,844.11	_	1,175.11	_	_	-	-	-	-	5,709.25	2,281.67	3,427.58
SHIRORO	2,267,195.80	_	.,	_	-	_	-	-	-	5,235.00	1,854.45	3,380.55
SUB-TOTAL	13,030,242.49	-	1,523.87	-		-	-		-	33,321.47	14,949.71	19.114.53
IPP	10,000,=1=110		1,0_0101							00,0=1111	,	
SHELL	2,103,081.97	-	-	-		-	-	-	-	14,847.44		
AGIP	3,005,377.30	-	-	-		-	-	-	-	22,220.67	32,300.95	13,505.39
AES	1,631,044.70	-	-	-		-	-	-	-	8,738.24	· 1	1
NESCO	11,681.63	-	-	-	-	-	-	-	-	-	18.90	(18.90)
SUB-TOTAL	6,739,503.97	_	-	-	-	-	_	-	-	45,806.34	32,319.85	13,505.39
OTHERS	,,											
TCN	-	-	-	-	1	-	-	-	-	16,406.46	11,812.08	4,594.38
ANCILIARYSERVICES	-	-	-	-		-	-	-	-	195.53	114.92	80.61
CHQ	-	-	-	-		-	-	-	-	6,450.89	7,287.17	(836.28)
NERC	-	-	-	-		-	-	-	-	1,033.57	868.74	164.83
NERC LICENCE	-	-	-	-	-	-	-	-	-	589.57	231.57	358.00
MO	-	-	-	-		-	-	-	-	105.83	179.61	(73.78)
GAS	-	-	-	-	-	-	-	-	-	8,249.40	9,222.33	(972.93)
VAT	-	-	-	-	-	-	-	-	-	4,201.21	1,591.55	2,609.66
RESERVE/PROD	-	-	-	-	-	-	-	-	-	-	1,452.79	(1,45279)
EQUALIZATION	-	-	-	-	-	-	-	-	-	1,574.74	600.76	973.98
CAPACITY BULDING	-	-	-	-	-	-	-	-	-	706.81	246.41	460.40
GRATUITY	-	-	_	_	-	-	-	-	-	4,812.41	1,243.56	3,568.85
LOAN REPAYMENT	-	-	_	-	-	_	-	-	-	1,745.40	206.60	1,538.80
ODF	-	-	_	-	-	_	-	-	-	3,744.02	588.05	3,155.97
DOMICILIARY	-	-	-	-	-	_	-	-	-		2,296.84	(2,296.84)
MMF	-	-	-	-		_	-	-	-	-	-,200.04	(=,=50.04)
PENSION FUND	-	_	-	_	-	_	_	_	_	_	-	-
RESERVE	-	-	-	-	-	-	-	-	-	-	900.00	(900.00)
BANK CHARGES	-	-	-	-	-	-	-	-	-	-	1.00	(1.00)
SUB-TOTAL	_	_	-	-	-	_	-	_	_	49,815.85	38,843.98	17,505.49
GRAND TOTAL		127,248.24	43,570.73	1,574.74	170.869.84	97.309.64	43,925.51	141,235.15	29.634.69	170,869.84	141,235.15	50,758.35
U.S. I.S. IOTAL		,10.2-1	.0,010.10	.,0.4.14	,500.04	0.,500.04	.0,020.01	, 200. 10		,555.54	,	00,.00.00



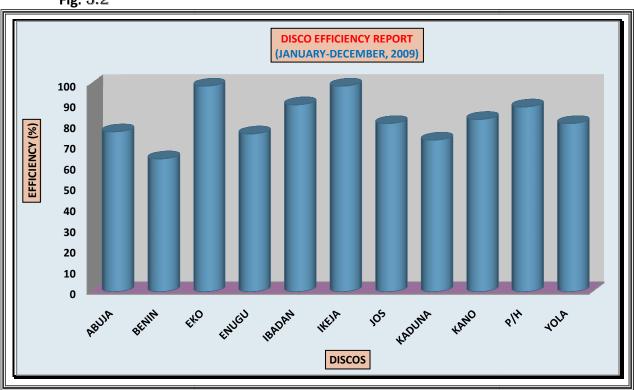


3.2 Disco Evaluation Report

Table 3.2 Expected Revenue Vs Actual Collection

DISCOs	EXPECTED REVENUE (=N=)	ACTUAL COLLECTION (INCLUDING SUBSIDY) (=N=)	EFFICIENCY (%)	RANKING
ABUJA	20,486,602,225.35	15,813,466,092.84	77%	6TH
BENIN	21,350,460,157.92	13,685,783,716.84	64%	9TH
EKO	17,128,121,692.30	16,914,256,241.29	99%	1ST
ENUGU	17,935,713,579.64	13,655,374,209.40	76%	7TH
IBADAN	20,631,278,367.09	18,517,005,572.99	90%	2ND
IKEJA	24,564,097,728.09	24,303,864,720.23	99%	1ST
JOS	7,458,728,733.44	6,077,493,206.76	81%	5TH
KADUNA	11,898,054,187.76	8,731,305,160.50	73%	8TH
KANO	8,178,139,267.37	6,810,219,034.78	83%	4TH
PORTHARCOURT	7,953,290,767.99	7,047,759,939.48	89%	3RD
YOLA	2,808,651,716.67	2,264,341,453.31	81%	5TH
TOTAL	160,393,135,423.62	133,820,869,348.42		

Fig. 3.2





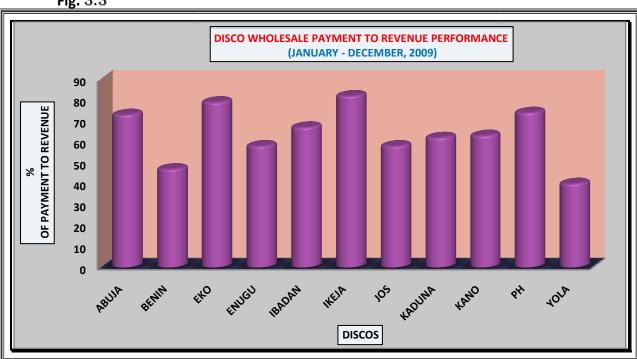


3.3 Disco Wholesale Payment Performance Report

Table 3.3 DISCO Wholesale Payment Performance Report

DISCOs	INVOICE =N=	PAYMENT TO MARKET OPERATOR (INCLUDING SUBSIDY) =N=	PAYMENT EFFICIENCY %	RANKING
ABUJA	15,171,216,990.29	11,131,024,446.99	73%	4TH
BENIN	15,550,893,192.40	7,243,829,550.17	47%	9TH
EKO	13,191,361,827.36	10,395,382,622.27	79%	2ND
ENUGU	12,905,189,273.69	7,518,353,400.94	58%	8TH
IBADAN	15,020,443,658.00	9,997,325,691.34	67%	5TH
IKEJA	18,780,569,087.48	15,360,274,959.56	82%	1ST
JOS	5,353,478,908.75	3,129,350,736.39	58%	8TH
KADUNA	8,703,180,108.00	5,360,382,052.09	62%	7TH
KANO	5,959,555,141.82	3,743,883,127.88	63%	6TH
PORTHARCOURT	5,666,965,248.15	4,171,460,804.20	74%	3RD
YOLA	2,043,418,636.86	810,731,060.64	40%	10TH
TOTAL	118,346,272,072.80	78,861,998,452.47		

Fig. 3.3





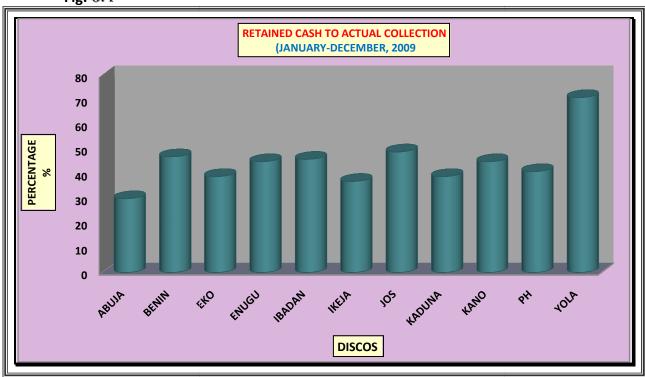


3.4 Disco Collection Against Operating Cost

Table 3.4 DISCO Collection Against Operating Cost

DISCOS	ACTUAL COLLECTION .=N=	TRANSFER TO MARKET OPERATOR .=N=	RETAINED BY DISCO .=N=	% RETAINED	RANKING
ABUJA	15,813,466,092.84	11,131,024,446.99	4,682,441,645.85	30%	1ST
BENIN	13,685,783,716.84	7,243,829,550.17	6,441,954,166.67	47%	7TH
EKO	16,914,256,241.29	10,395,382,622.27	6,518,873,619.02	39%	3RD
ENUGU	13,655,374,209.40	7,518,353,400.94	6,137,020,808.46	45%	5TH
IBADAN	18,517,005,572.99	9,997,325,691.34	8,519,679,881.65	46%	6TH
IKEJA	24,303,864,720.23	15,360,274,959.56	8,943,589,760.67	37%	2ND
JOS	6,077,483,206.76	3,129,350,736.39	2,948,142,470.37	49%	8TH
KADUNA	8,731,305,160.50	5,360,382,052.09	3,370,923,108.41	39%	3RD
KANO	6,810,219,034.78	3,743,883,127.88	3,066,335,906.90	45%	5TH
PORTHARCOURT	7,047,759,939.48	4,171,460,804.20	2,876,299,135.28	41%	4TH
YOLA	2,264,341,453.31	810,731,060.64	1,616,351,025.13	71%	9TH
TOTAL	133,820,869,348.42	78,861,998,452.47	55,121,611,528.41		

Fig. 3.4







4.0 SETTLEMENT ADMINISTRATION OF THE SPECIAL CUSTOMERS

4.1 Payment Status on Ajaokuta Steel Company and NIOMCO Itakpe

Table 4.1 Payment Status on Ajaokuta and NIOMCO Itakpe

	ELECTRICITY DELIVERED TO AJAOKUTA AND NIOMCO ITAKPE		INVOICE	PAYMENT MADE	OUTSTANDING	CUMMULATIVE
MONTHS	CAPACITY (MW)	ENERGY (MWH)	(=N=)	(=N=)	(=N=)	OUTSTANDING (=N=)
B/F DEC, 2008						628,248,034.50
JANUARY	12.46	6,758.8	64,743,840.00	-	64,743,840.00	692,991,874.50
FEBRUARY	12.51	6,445.80	61,969,068.00		61,969,068.00	754,960,942.50
MARCH	13.03	6,757.20	64,930,887.00	-	64,930,887.00	819,891,829.50
APRIL	11.63	5,506.20	53,270,112.00	-	53,270,112.00	873,161,941.50
MAY	10.53	5,539.20	53,174,541.00	ADJ. 42,418,110.00	10,756,431.00	883,918,372.50
JUNE	10.33	4,635.40	45,035,550.00	-	45,035,550.00	928,953,922.50
JULY	10.45	4,462.20	43,536,801.00		43,536,801.00	972,490,723.50
AUGUST	8.78	4,455.80	42,883,764.00	•	42,883,764.00	1,015,374,487.50
SEPTEMBER	12.67	4,667.80	40,898,634.00	-	40,898,634.00	1,056,273,121.50
OCTOBER	9.97	5,025.20	37,542,498.00	-	37,542,498.00	1,093,815,619.50
NOVEMBER	10.51	5,047.00	23,282,217.00	-	23,282,217.00	1,117,097,836.50
DECEMBER	10.13	5,385.40	51,998,142.00	-	51,998,142.00	1,169,095,978.50
TOTAL	11.08	64,686.00	583,266,054.00	42,418,110.00	540,847,944.00	1,169,095,978.50

4.2 Payment Status on Delta Steel Company Aladja Warri

Table 4.2 Payment Status on Delta Steel Company

	ELECTRICIT	Y DELIVERED		PAYMENT		CUMMULATIVE
MONTHS	CAPACITY (MW)	ENERGY (MWH)	INVOICE (=N=)	MADE (=N=)	OUTSTANDING (=N=)	OUTSTANDING (=N=)
B/F DEC, 2008						1,831,583,825.00
JANUARY	37.63	14,443.20	142,243,710.00	125,000,000.00	17,243,710.00	1,848,827,535.00
FEBRUARY	44.93	14,894.40	148,856,190.00	-	148,856,190.00	1,997,683,725.00
MARCH	53.38	15,081.60	153,520,710.00	-	153,520,710.00	2,151,204,435.00
APRIL	42.24	1,180.80	25,509,750.00	-	25,509,750.00	2,176,714,185.00
MAY	49.15	7,387.20	83,351,310.00	-	83,351,310.00	2,260,065,495.00
JUNE	70.27	16,723.20	174,159,510.00	-	174,159,510.00	2,434,225,005.00
JULY	58.75	17,371.20	175,860,510.00	-	175,860,510.00	2,610,085,515.00
AUGUST	64.51	16,497.60	170,104,830.00	25,000,000.00	145,104,830.00	2,755,190,345.00
SEPTEMBER	77.18	16,785.60	177,165,870.00	-	177,165,870.00	2,932,356,215.00
OCTOBER	61.44	13,416.00	141,512,910.00	30,000,000.00	111,512,910.00	3,043,869,125.00
NOVEMBER	57.98	15,369.00	157,724,070.00	60,000,000.00	97,724,070.00	3,141,593,195.00
DECEMBER	-	-	-	-	-	3,141,593,195.00
TOTAL	51.46	149,149.80	1,550,009,370.00	240,000,000.00	1,310,009,370.00	3,141,593,195.00





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
	NOMINATED (MW)	476.70	476.70	476.70	476.70	476.70	476.70	476.70
AGIP	DELIVERED (MW)	453.61	453.79	416.23	437.17	471.26	371.13	473.45
	DELIVERED (GWH)	311.02	284.46	267.90	250.10	293.47	239.33	302.42
	NOMINATED (MW)	300.90	300.90	294.30	294.30	294.30	294.30	294.30
AES	DELIVERED (MW)	218.58	239.39	231.89	239.76	206.30	258.44	225.72
	DELIVERED (GWH)	174.33	147.73	160.10	161.92	129.85	155.89	112.58
	NOMINATED (MW)	441.00	441.00	441.00	441.00	441.00	441.00	441.00
SHELL	DELIVERED (MW)	153.59	247.29	262.37	279.69	320.77	300.50	212.03
	DELIVERED (GWH)	60.46	80.81	142.68	117.72	160.41	183.98	142.87
NESCO	DELIVERED (GWH)	5.02	4.08	4.54	5.76	5.76	7.05	7.05

		AUG	SEPT	ОСТ	NOV	DEC	TOTAL	AVE
	NOMINATED (MW)	476.70	476.70	476.70	476.70	476.70		476.70
AGIP	DELIVERED (MW)	419.97	470.00	461.97	237.40	443.43		425.78
	DELIVERED (GWH)	198.18	200.46	188.31	162.56	307.18	3,005.39	250.45
	NOMINATED (MW)	294.30	294.30	294.30	294.30	294.30		295.40
AES	DELIVERED (MW)	254.06	222.18	203.71	164.18	185.73		220.83
	DELIVERED (GWH)	131.21	128.32	125.67	108.48	122.40	1,658.48	138.21
	NOMINATED (MW)	441.00	441.00	441.00	441.00	441.00		441.00
SHELL	DELIVERED (MW)	447.37	409.70	406.58	372.41	434.32		320.55
	DELIVERED (GWH)	276.56	223.59	245.82	220.62	314.37	2169.89	180.82
NESCO	DELIVERED (GWH)	1.74	2.23	2.15	1.61	1.81		4.07





Table 5.1.1 Payment Status on Agip PPA

MONTH	INVOICE (\$)	PAYMENT (\$)	OUTSTANDING (\$)
1/1/2009			184,053,916.62
JANUARY	14,038,044.35	7,019,022.18	7,019,022.17
FEBRUARY	13,511,168.73	6,755,584.37	6,755,584.36
MARCH	13,387,360.25	6,693,681.13	6,693,679.12
APRIL	13,071,393.73	6,535,696.87	6,535,696.87
MAY	13,730,054.67	-	13,730,054.67
JUNE	13,330,634.42	-	13,330,634.42
JUL	13,557,283.87	-	13,557,283.87
AUG	13,094,089.41	-	13,094,089.41
SEPT	13,034,058.91	-	13,034,058.91
ОСТ	13,325,883.72	-	13,325,883.72
NOV	12,919,236.15	-	12,919,236.15
DEC	14,000,673.60		14,000,673.60
TOTAL	160,999,881.81	27,003,984.55	318,049,813.88

Table 5.1.2 Payment Status on AES PPA

	Table Street Laymont Status Strikes 171							
MONTH	INVOICE (\$)	PAYMENT (\$)	OUTSTANDING (\$)					
1/1/2009			2,669,724.98					
JANUARY	5,682,615.00	4,257,000.00	1,425,615.00					
FEBRUARY	5,682,615.00	5,682,615.00	-					
MARCH	5,682,615.00	5,682,615.00	-					
APRIL	5,682,615.00	5,682,615.00	-					
MAY	5,682,615.00	8,533,845.00	(2,851,230.00)					
JUNE	5,682,615.00	5,682,615.00	-					
JUL	5,682,615.00	5,682,615.00	-					
AUG	5,682,615.00	5,682,615.00	-					
SEPT	5,682,615.00	5,682,615.00	-					
ОСТ	5,682,615.00	5,682,615.00	-					
NOV	5,682,615.00	5,682,615.00	-					
DEC	5,682,615.00	5,682,615.00	-					
TOTAL	68,191,380.00	69,616,995.00	1,244,109.98					





Table 5.1.3 Payment Status on SHELL PPA (AFAM VI)

MONTH	INVOICE (\$)	PAYMENT (\$)	OUTSTANDING (\$)
JANUARY	1,439,817.94	719,908.97	719,908.97
FEBRUARY	2,035,119.49	1,017,559.75	1,017,559.74
MARCH	2,392,208.36	1,196,104.18	1,196,104.18
APRIL	1,089,328.57	544,664.29	544,664.28
MAY	3,469,170.96	1,734,585.48	1,734,585.48
JUNE	6,386,818.09	3,193,409.05	3,193,409.04
JUL	3,712,077.35	1,856,038.68	1,856,038.67
AUG	7,386,865.09	3,693,432.55	3,693,432.54
SEPT	5,659,988.91	2,829,994.46	2,829,994.45
ОСТ	4,804,434.87	2,402,217.44	2,402,217.43
NOV	5,994,992.32	2,997,496.16	2,997,496.16
DEC	8,342,103.64	4,171,051.82	4,171,051.82
TOTAL	52,712,925.59	26,356,462.83	26,356,462.76

Table **5.1.4** Payment Status on NESCO PPA

MONTH	INVOICE (=N=)	PAYMENT (=N=)	OUTSTANDING (=N=)
1/1/2009			
JAN	2,551,095.54	2,551,095.54	
FEB	2,350,242.72	2,350,242.72	
MARCH	2,175,032.16	2,175,032.16	
APRIL	2,600,735.13	2,600,735.13	
MAY	2,590,460.41	2,590,460.41	
JUNE	2,656,326.65	2,656,326.65	
JUL	5,191,195.54	5,191,195.54	
AUG	4,291,634.34	4,291,634.34	
SEPT	4,928,898.87	4,928,898.87	
ОСТ	4,973,912.37	4,973,912.37	
NOV	4,152,675.56	4,152,675.56	
DEC	4,490,580.15	4,490,580.15	
TOTAL	42,952,789.44	42,952,789.44	





5.2 Operation of the Connection Agreement

Table **5.2.1** Operation of the Connection Agreement – NIGELEC

	ELECTRICITY DELIVERED			PAYMENT		CUMMULATIVE	
MONTHS	CAPACITY (MW	ENERGY (MWH)	INVOICE (\$)	MADE (\$)	OUTSTANDING (\$)	OUTSTANDING (\$)	
B/F DEC, 2008						7,303,364.00	
JANUARY	66.63	33,061.90	1,108,021.00	3,049,145.00	(1,941,124.00)	5,362,240.00	
FEBRUARY	77.00	36,417.70	1,227,975.00	-	1,227,975.00	6,590,215.00	
MARCH	80.88	46,111.20	1,488,007.00	1,126,924.06	361,082.94	6,951,297.94	
APRIL	83.26	47,506.90	1,527,045.00	747,860.52	779,184.48	7,730,482.42	
MAY	83.24	48,973.40	1,561,535.00	-	1,561,535.00	9,292,017.42	
JUNE	85.20	45,480.50	1,479,457.00	5,466,525.00	(3,987,068.00)	5,304,949.42	
JULY	82.00	46,197.00	1,481,668.00	1,607,278.00	(125,610.00)	5,179,339.42	
AUGUST	83.16	47,215.90	1,516,097.00	-	1,516,097.00	6,695,436.42	
SEPTEMBER	85.15	49,641.50	1,593,964.00	-	1,593,964.00	8,289,400.42	
OCTOBER	84.40	50,850.20	1,613,268.00	-	1,613,268.00	9,902,668.42	
NOVEMBER	82.93	43,372.10	1,427,903.00	3,665,859.00	(2,237,956.00)	7,664,712.42	
DECEMBER	79.06	39,914.90	1,322,459.00	5,820,244.86	(4,497,785.8)	3,166,926.56	
TOTAL	81.08	534,743.20	17,347,399.00	21,483,836.44	(4,136,437.44)	3,166,926.56	

Table **5.2.2** Operation of the Connection Agreement – CEB

MONTHS	ELECTRICITY CAPACITY (MW)	Y DELIVERED ENERGY (MWH	INVOICE PAYMENT (\$) MADE (\$)		OUTSTANDING (\$)	CUMMULATIVE OUTSTANDING (\$)		
B/F DEC, 2008						5,140,753.46		
JANUARY	80	56,110.00	2,531,956.50	-	2,531,956.50	7,672,709.96		
FEBRUARY	80	50,163.00	2,296,455.30	5,145,662.00	(2,849,206.70)	4,823,503.26		
MARCH	80	56,263.00	2,538,015.30	2,531,931.50	6,083.80	4,829,587.06		
APRIL	80	54,461.00	2,466,656.10	2,296,405.30	170,250.80	4,999,837.86		
MAY	80	54,832.00	2,481,347.70	2,537,990.30	(56,642.60)	4,943,195.26		
JUNE	80	52,757.00	2,399,178.00	-	2,399,178.00	7,342,373.26		
JULY	80	53,515.00	2,429,195.00	7,347,057.00	(4,917,862.00)	2,424,511.26		
AUGUST	80	51,934.00	2,366,587.00	2,366,587.00 -		4,791,098.26		
SEPTEMBER	80	54,416.00	2,464,874.00	2,429,170.00	35,704.00	4,826,802.26		
OCTOBER	80	56,518.00	2,548,113.00	-	2,548,113.00	7,374,915.26		
NOVEMBER	80	56,836.00	2,560,706.00	2,366,562.00	194,144.00	7,569,059.26		
DECEMBER	80	60,294.00	2,697,642.90	2,548,088.00	149,554.90	7,718,614.16		
TOTAL	80	658,099.00	29,780,726.80	27,202,866.10	2,577,860.70	7,718,614.16		





6.0 GAS ADMINISTRATION AND SETTLEMENT

6.1 Gas Consumption Against Energy Generated

Table 6.1 Gas Consumption Against Energy Generated

Table 342 Odd Odnodniphon Igamot Energy Odnorated								
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
EGBIN	38,362.42	31.00	1,189,235.02	59,461.75	1,248,696.77	3,324,400.40	0.3756	86.66
AES	21,618.61	31.00	670,176.91	33,508.85	703,685.76	1,631,779.50	0.4312	75.48
SAPELE	6,353.80	31.00	196,967.80	9,848.39	206,816.19	594,249.00	0.3480	93.53
DELTA II	2,286.27	31.00	70,874.37	3,543.72	74,418.09	122,693.00	0.6065	53.67
DELTA III	7,733.85	31.00	239,749.35	11,987.47	251,736.82	384,192.30	0.6552	49.68
DELTA IV	17,870.44	31.00	553,983.64	27,699.18	581,682.82	1,075,811.60	0.5407	60.20
AFAM	2,192.74	31.00	67,974.94	3,398.75	71,373.69	152,142.00	0.4691	69.38
GEREGU	5,071.19	31.00	157,206.89	7,860.34	165,067.23	378,993.70	0.4355	74.73
омотоѕо	6,086.57	31.00	188,683.67	9,434.18	198,117.85	375,634.00	0.5274	61.72
OLORUNSOGO	940.23	31.00	29,147.13	1,457.36	30,604.49	81,448.80	0.3758	86.93
TOTAL	108,516.12		3,363,999.72	168,199.99	3,532,199.71	8,121,344.30		

Fig. 6.1.1

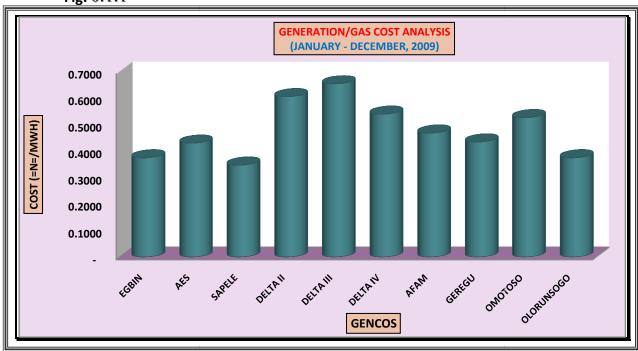
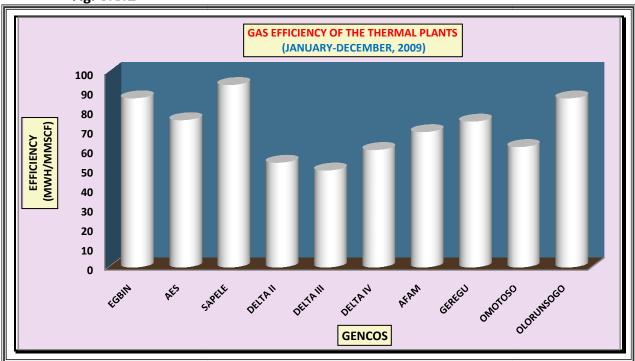






Fig. 6.1.2



6.2 Gas Invoice and Payment

Table 6.2 Gas Invoicing and Payments

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MONTHS	AFAM, DELTA, EGBIN & SAPELE	ОМОТОЅО	OLORUNSOGO	GEREGU	TOTAL	PAYMENTS (=N=)	OUTSTANDING (=N=)
B/F (2008)							11,969,161,579.11
JANUARY	234,559,025.66	4,841,060.27	14,363,928.50	25,328,783.91	279,092,798.34	200,000,000.00	12,048,254,377.45
FEBRUARY	201,256,496.65	10,937,845.23	2,679,790.74	19,646,076.78	234,520,209.40	•	12,282,774,586.85
MARCH	228,585,376.91	16,719,650.10	1,511,355.67	23,097,135.35	269,913,518.03	305,000,000.00	12,247,688,104.88
APRIL	202,267,791.24	11,697,233.91	6,876,235.26	21,368,479.63	242,209,740.04	167,000,000.00	12,322,897,844.92
MAY	169,784,977.20	8,848,342.09	2,140,210.26	14,520,305.49	195,293,835.04	187,000,000.00	12,331,191,679.96
JUNE	159,581,596.85	7,172,010.37	-	-	166,753,607.22	280,000,000.00	12,217,945,287.18
JULY	121,745,272.95	8,343,542.53	•	-	130,088,815.48	1,000,000,000.00	11,348,034,102.66
AUGUST	139,462,469.11	9,137,338.40	•	-	148,599,807.51	-	11,496,633,910.17
SEPTEMBER	160,122,660.74	10,003,225.81	ı	4,616,303.22	174,742,189.77	•	11,671,376,099.94
OCTOBER	-	•	•	-	207,302,338.75	-	11,878,678,438.69
NOVEMBER	-	-	-		261,748,610.84	-	12,140,427,049.53
DEC	_	-	-		248,414,068.96	2,600,000,000.00	9,788,841,118.49
TOTAL	1,617,365,667.31	87,700,248.71	27,571,520.43	130,999,258.41	2,558,679,539.38	4,739,000,000.00	9,788,841,118.49

