



THE PRESIDENCY
FEDERAL REPUBLIC OF NIGERIA
PRESIDENTIAL TASK FORCE ON POWER

2013

YEAR IN REVIEW

THE PRESIDENCY
PRESIDENTIAL TASK FORCE ON POWER

**NIGERIA POWER SECTOR
REFORM ROADMAP**



Power Reform Roadmap
Monitor | Evaluate | Fast Track

December 2013

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Cover photograph: (L-R) Engr. Dagogo-Jack (Chairman PTFP), Professor Chinedu Nebo (Minister of Power), Hajiya Zainab Kuchi (Minister-of-State for Power), and Barr. Emeka Wogu (Minister for Labour and Productivity), at the Nigeria Power Sector Reform Roadmap 2.0 Retreat in February 2013

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MESSAGE FROM THE CHAIRMAN



As we review the performance of the Presidential Task Force on Power (PTFP) and, indeed, the entire power sector reform activities in 2013, I will refer to my comment in the 2012 Year-in-Review report where I stated that 2013 “bears all the marks of the most critical year for the power reform since, we must kick-off the Transitional Electricity Market this year marking the onset of a privatised Nigerian **Electricity Supply Industry.**” The declaration of the Transitional Electricity Market (TEM) by the Honourable Minister of Power was not achieved in 2013 as planned and has been shifted to occur in

the second quarter of 2014. However, the successful privatisation and handover of the Power Holding Company of Nigeria assets became a significant historic landmark for the reform.

It is my humble belief that this forewarning galvanized the required motivation from all stakeholders to enable us to achieve most of our 2013 goals.

A very significant event in 2013 was the Presidential Power Reform Transactions Signing Summit coordinated by the PTFP which brought together the parties for the major power reform transactions to execute pending agreements as well as issue payment certificates to the successful bidders for the 25% payment made. The signing of the first ever Power Purchase Agreement PPA with a private developer was the high point of the day. This event was well received by the investor community as evidence of President Jonathan's political will and the irreversibility of the power Reform agenda. The event was also designed to put pressure on the successful bidders to double pace in sourcing funding for the 75% balance due later in that year.

It is to the credit of the entire power team, under the leadership of President Goodluck Ebele Jonathan GCFR, that against all predictions of doom, the nation witnessed on November 1, 2013, the successful handover of the key government assets in the generation and distribution segments. This singular event kick-started a fully privatised electricity market that will be capable of self-financing its growth and injecting entrepreneurial creativity into the sector, as required for rectifying the decades-old gap between electricity demand and supply.

A major lesson learnt in 2013 is that to succeed with such a huge complex and multi-faceted programme, the sector operatives were required to be focused (with the full undiminished political will of Mr. President) through the remaining phases of the power reform agenda, which meant consistent synergy across the different stakeholders who had contributions to the reform.

Of significant note is that, although the original 2010 Power Reform Roadmap did not clearly provide for the divestment of the ten (10) National Integrated Power Project (NIPP) power plants, (with a total capacity of over 4700MW) the successful handling of the privatisation of the Power Holding Company of Nigeria (PHCN) successor companies generated so much investor confidence worldwide that the Government was encouraged to implement the NIPP power plants divestment plan on the strength of this confidence. It is envisaged that the divestment of all ten power plants will be concluded before the end of 2014.

In the service delivery front, 2013 sadly witnessed a drop in electricity delivered to consumers, the key causes for this shortfall being frequent gas outages from vandalism and constraints in the effective transmission wheeling capacity.

2014 Highlights

In 2014, the key focus should be to proactively deal with all the factors necessary to gradually move the new privatised electricity market from the current state of infancy to one of steady **sustainable growth and maturity**. I believe that the nation's hope of progressing this new electricity market, from its current inception phase to where investments would begin to be fully mobilised (to deliver and close the supply gap) will be seriously dependent on the success of the said proactive market nurturing activities in 2014.

In my opinion key market nurturing and stabilisation factors include:

1. Successful transition from the Interim Market Rules regime to the Transitional Electricity Market regime with critical corrections and provisions made.
2. An effective alignment of gas supply and power generation requirements.
3. Comprehensive transmission infrastructure planning, funding, and project delivery.
4. Reduction of revenue losses at the DISCO level and sanctity of commercial contracts.
5. Close and effective market nurturing oversight from the Ministry of Power.
6. Conclusion of pending Power Purchase Agreements (PPAs) by the Nigerian Bulk Electricity Trading Company (NBET) and the effective entry of NBET into the market.
7. Close monitoring of Labour relations in the industry.

As with the just concluded privatisation phase of the power reform programme, this next phase, (which I call the market nurturing phase) has known project owners and drivers – namely, the Federal Ministry of Power, the Bureau of Public Enterprises (BPE), the Nigerian Electricity Regulatory Commission (NERC), the Nigerian Bulk Electricity Trading Company (NBET), the Transmission Company of Nigeria (TCN), Niger Delta Power Holding Company (NDPHC), Nigerian National Petroleum Cooperation (NNPC), Gas Aggregation Company of Nigeria (GACN), Upstream Gas suppliers and the Nigerian Gas Company (NGC). It is critical that these project owners and drivers continue to work in concert, in 2014, with an unwavering focus on their obligations and responsibilities for ensuring that all the objectives of the power sector reform are met. It is instructive that the Chief Executives of all the above entities are members of the PTFP Board which is designed as a collaboration platform for reform facilitation.

PTFP, as a presidential power reform entity, shall continue to monitor processes and outputs, in order to enable and facilitate the timely implementation of actions critical to achieving stability in the new electricity market.

It is my further recommendation that the Presidential Action Committee on Power (PACP), which the President chairs, should give consideration to establishing a more intensive meeting agenda in 2014. This is necessary for the principal reason that (going by power reform experiences of other countries) the first 12-20 months of reform, is often the period that poses the greatest risk of reform breakdown or reversal.

Accordingly, I believe a robust and close presidential level guard-watch of the new industry will help preserve the landmark achievement of this administration in the power sector, thereby preventing a situation in which such accomplishment gets frittered away by avoidable acts of omission or commission.

The following pages contain a report of the 2013 activities of the PTFP. In 2014, the PTFP expects to sustain its monitoring and evaluation activities, as well as increase its engagement with the sector on critical issues. In particular, we hope to establish an effective market activity information retrieval system aimed at providing early warning alerts and pro-active solutions for market sustainability as envisaged under the Electricity Power Sector Reform Act (EPSRA) 2005.

On behalf of my team, I thank Mr President for giving us the opportunity to be part of this historic **transformational project of reforming our country's power sector designed to reverse decades of**

electricity deficit and in the process unlock our development potentials and leap frog our economy to take its rightful place in the world.

Best Wishes,

Engr. Beks Dagogo-Jack, *FNSE*
Chairman, Presidential Task Force on Power

December 2013

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GLOSSARY

BPE	Bureau of Public Enterprises
BPP	Bureau of Public Procurement
DISCO	Distribution Company
DSO	Distribution Substation Operator
ECN	Energy Commission of Nigeria
FEC	Federal Executive Council
GACN	Gas Aggregation Company of Nigeria
GENCO	Generation Company
GSA	Gas Supply Agreements
GTA	Gas Transportation Agreements
IPP	Independent Power Producers
IRP	Interim Rule Period
KW	Kilowatt
MHI	Manitoba Hydro International
MMscfd	Million Standard Cubic Feet Per Day
MW	Megawatts
MYTO 2	Multi-Year Tariff Order 2
NBET	Nigerian Bulk Electricity Trading Company
NDPHC	Niger Delta Power Holding Company
NELMCO	Nigerian Electricity Liability Management Company
NEPA	National Electric Power Authority
NERC	Nigerian Electricity Regulatory Commission
NESI	Nigerian Electricity Supply Industry
NGC	Nigerian Gas Company
NIPP	National Integrated Power Projects
NNPC	Nigerian National Petroleum Corporation
NPDC	Nigerian Petroleum Development Company
PACP	Presidential Action Committee on Power
PHCN	Power Holding Company of Nigeria
PRG	Partial Risk Guarantee
PTFP	Presidential Task Force on Power
REA	Rural Electrification Agency
TCN	Transmission Company of Nigeria
TEM	Transitional Electricity Market
WAPCo	West African Gas Pipeline Company

OUR PROFILE

The Presidential Task Force on Power was established by the President Goodluck Jonathan administration, in June 2010, to drive the implementation of the reform of Nigeria's power sector. It brings together all the agencies that have a role to play in removing legal and regulatory obstacles to private sector investment in the power industry. It also has the mandate to monitor the planning and execution of various short-term projects in generation, transmission, distribution and fuel-to-power that are critical to meeting the stated service delivery targets of the power reform roadmap.

The PTFP collaborates closely with various ministries and agencies that have specific contributions to the reform process, including the Federal Ministry of Power, the Federal Ministry of Finance, Ministry of Petroleum Resources, the Bureau of Public Enterprises (BPE), the Nigerian Electricity Regulatory Commission (NERC), the Nigerian National Petroleum Corporation (NNPC), the Bureau of Public Procurement, National Gas Company Limited (NGC) and the Power Holding Company of Nigeria (PHCN) to mention a few.

President Goodluck Jonathan reconstituted the PTFP Board, with Engr. Reynolds Bekinbo Dagogo-Jack as Chairman, on September 5, 2012.

The Presidential Task Force Board of Directors is charged with setting and maintaining the direction of the Task Force. They are responsible for implementing PTFP's mandate while providing overall leadership and its strategic direction. All Board Members have been instrumental in setting policy for the Task Force as well as ensuring it has all the necessary resources and capabilities to achieve its objective.

PRESIDENTIAL TASK FORCE ON POWER (PTFP) EXECUTIVE BOARD MEMBERS

Engr. Beks Dagogo-Jack FNSE CHAIRMAN		
Amb. (Dr.) Godknows Igali OON PERMANENT SECRETARY FEDERAL MINISTRY OF POWER	CHIEF EXECUTIVE OFFICER ABUJA ELECTRICITY DISTRIBUTION CO.	CHIEF EXECUTIVE OFFICER EKO ELECTRICITY DISTRIBUTION CO.
CHIEF EXECUTIVE OFFICER UGHELLI POWER PLC	CHIEF EXECUTIVE OFFICER GEREGU POWER PLC	CHIEF EXECUTIVE OFFICER SHIRORO HYDRO ELECTRIC POWER
Engr. Don Priestman CHIEF EXECUTIVE OFFICER TRANSMISSION COMPANY OF NIGERIA	Engr. Kunle Allen CHIEF EXECUTIVE OFFICER GAS AGGREGATION CO. OF NIGERIA	Mr. James A. Olotu MANAGING DIRECTOR NIGER DELTA POWER HOLDING COMPANY
Mr. Rumundaka Wonodi MANAGING DIRECTOR/CEO NIGERIAN BULK ELECTRICITY TRADING PLC	Mr. Ibrahim Babagana REP - DIRECTOR-GENERAL BUREAU OF PUBLIC ENTERPRISES	Mr. Eyo O. Ekpo COMMISSIONER - MARKET, COMPETITION AND RATES, NIGERIAN ELECTRICITY REGULATORY COMMISSION
Engr. Saidu Mohammed MANAGING DIRECTOR NIGERIAN GAS COMPANY	Mr. Keith Hammond INFRASTRUCTURE ADVISER DEPT. FOR INTERNATIONAL DEV. (DFID)	Mr. Barry Dyson POWER TEAM LEAD NIGERIA INFRASTRUCTURE ADVISORY FACILITY (NIAF)
	Engr. Tukur T. Aliyu SECRETARY TO THE BOARD	

PRESIDENTIAL ACTION COMMITTEE ON POWER

The Presidential Action Committee on Power (PACP) was established by President Goodluck Jonathan to provide leadership and guidance for the speedy development of Nigeria's power sector as well as determine the policy direction and strategic reform focus. It was recently reconstituted on September 5, 2012 to oversee the implementation of the Federal Government's agenda for power sector reform and ensure the reform momentum is sustained.



2013 SERVICE DELIVERY

Service Delivery Status Update

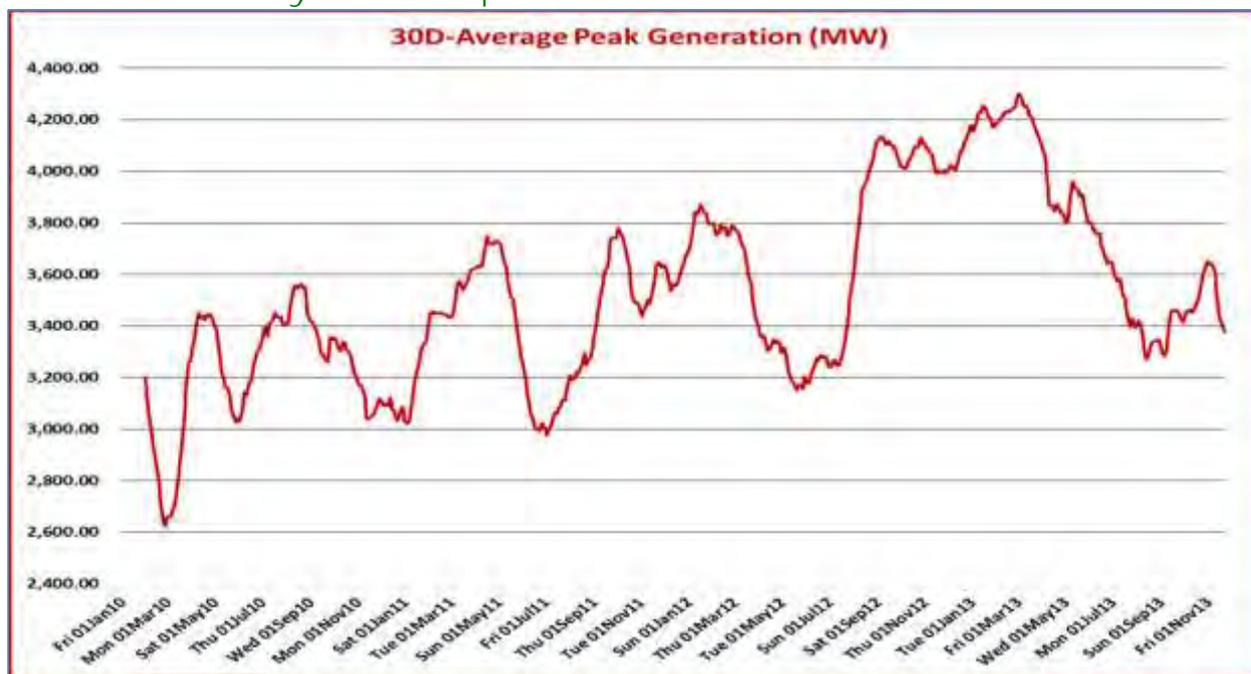


Figure 1: 30-Day Average Peak Generation (MW)

Chart is the 30-Day Average of the Daily Peak Generation from Jan-2010 to Nov-2013. As can be observed:

- A 7-month period above 4,000 MW from August 2012 to April 2013 coinciding with the best period of service delivery since the launch of Roadmap in August 2010.
- Chart peaked in March 2, 2013 at 4,301 MW and from that point has been in a decline to September 2013 losing effectively 1,000 MW.
- This losing streak has been the longest and the deepest since the launch of the Roadmap.
- In 2013, NDPHC has commissioned approximately 1,000 MW of generation capacity to the grid. Yet despite this, and the ongoing capacity rehabilitation at PHCN, service delivery has collapsed and shows few signs (yet) of improving.

Service Delivery Roadmap Scorecard

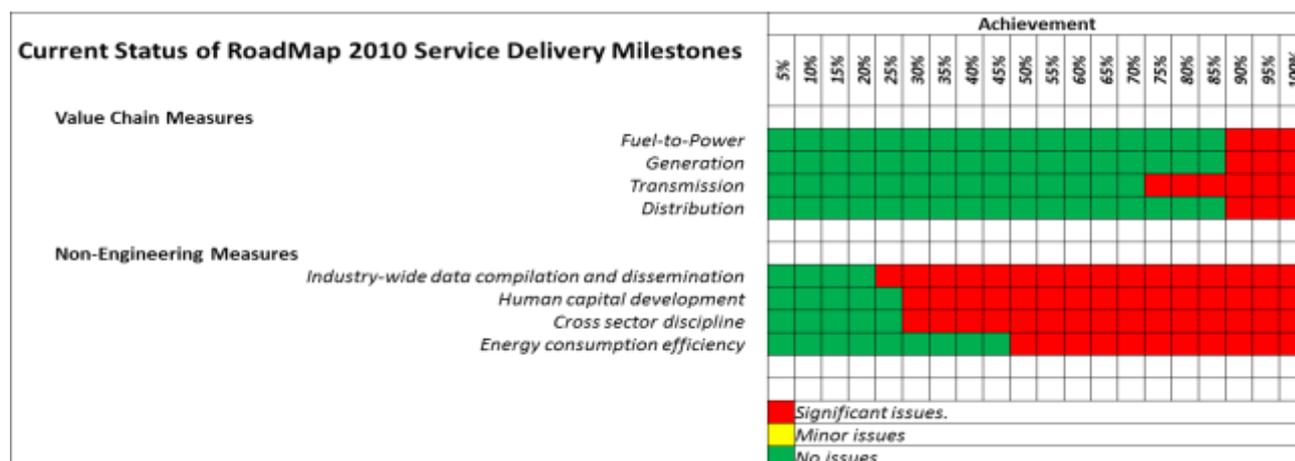


Figure 2: Current Status of Roadmap 2010 Service Delivery Milestones

Fuel-to-Power

This service delivery imperative is pursued through the realisation of extractable capacities in each of the value chain segments beginning from gas supply, as described below.

As a result of vandalism of the Escravos-Lagos Pipeline (ELP) A gas infrastructure and crude oil bunkering both in the east and western part of the Niger Delta, some of the achievements of the year 2012 were not fully realized. This was due to a loss of about 120 million standard cubic feet per day (MMscfd) from the NNPC/Chevron Joint Venture Escravos Gas Plant and the inability to utilize the additional 70 MMscfd of gas from newly completed projects. It also affected the completion of two additional new gas supply lines from the existing Utorogu gas plant (40 MMscfd) and the new Utorogu gas plant with a capacity of 150 MMscfd though the additional gas expected was 80 MMscfd on allowing for decommissioning of Ughelli Gas Plant with a capacity of 70 MMscfd.

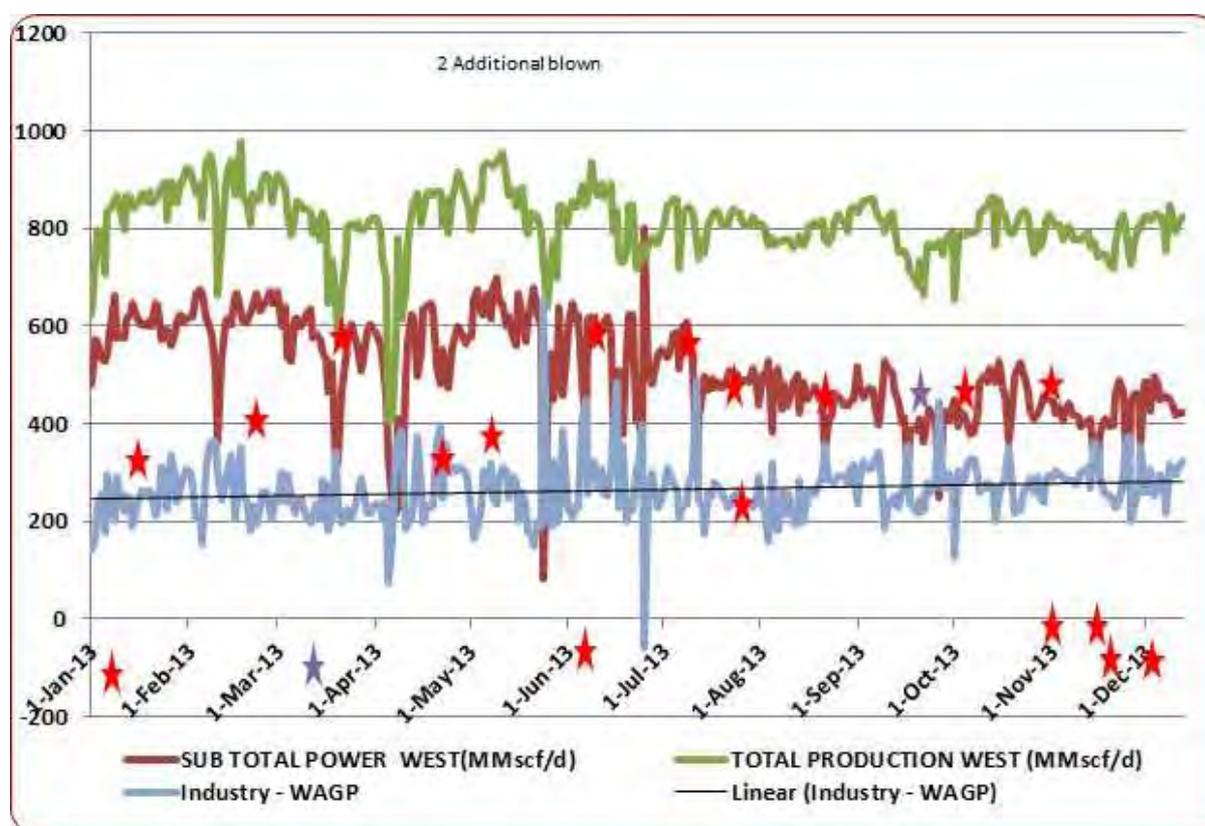


Figure 3: Gas Supply Report

Achievements

The completed Fuel-to-Power 2013 agreements and projects are:

- Gas Supply Agreements (GSA) were signed for Egbin, Sapele, Geregu PHCN, Omotosho PHCN, Olorunsogo PHCN and Ughelli Delta PHCN power plants
- Gas Transportation Agreements (GTA) were also signed for Egbin, Sapele, Geregu PHCN, Omotosho PHCN, Olorunsogo PHCN and Ughelli Delta PHCN power plants
- Chevron Abiteye/Escravos pipeline and 70 MMscfd gas supply facilities
- NPDC Oredo 35 MMscfd additional gas supply facilities
- Return of Oben to 90 MMscfd capacity from 45 MMscfd with improved gas supply quality
- Commencement of utilization of 40 MMscfd by Alaoji Power Plant
- Warri - Oben Node 30" X 48 km pipeline

- Imo River - Alaoji 24" X 24 km permanent gas pipeline

Issues Outstanding

By the end of 2013, it is expected that NPDC will complete the installation of 22km of 12" pipeline linking Oredo to Pan Ocean Ovade gas plant for future supply of 100 MMscfd of gas to the ELP network. NNPC Gas Infrastructure Division is also expected to complete the installation of PS4 to PS5 pipeline on the ELP C pipeline to ease the low pressure condition at Olorunsogo Power Plant.

In 2013, out of the projected additional 325 MMscfd of new gas supply capacity in the West only 105 MMscfd was realized, though 70 MMscfd became inaccessible due to vandalism as indicated above. Out of the balance of 220 MMscfd, access to 120 MMscfd has been delayed also due to vandalism, inadequate and non-timely funding as well as unsatisfactory contractor performance. The balance of 100 MMscfd was also not available due to delayed approvals. The delayed 220 MMscfd is now projected for delivery in mid to late 2014 subject to resolution of vandalism related to ELP A pipeline operation.

100 MMscfd projected for delivery in the East was not realized due to delay in the completion of the Northern Option Gas pipeline (NOPL) arising from community disturbances and interface management issues among stakeholders even though the gas is available. NOPL is now projected for completion in mid-2014. Utilization of the gas is subject to completion of power transmission infrastructure out of Alaoji.

NIPP power plants Gas Supply Agreements (GSA) and Gas Transportation Agreements (GTA) (projected for signature in 2013) were not achieved and are now expected to be concluded and active in 2014. It is to be noted that stranded gas in Omoku (60 MMscfd) and Gbarain (80 MMscfd) is yet to be utilized as planned in 2013 but should be used in 2014 subject to completion of the power plants and power evacuation facilities.

Generation

In 2013, generation capacity from the successor power companies was maintained with significant capacity increases recorded from the completion of some NIPP projects, albeit below the levels of projected capacity additions. As shown on the generation profile (Figure 7), actual generation to the grid reduced considerably between the second and third quarter of the year largely due to the vandalism of major gas pipelines in the south-east and south-west of the country.

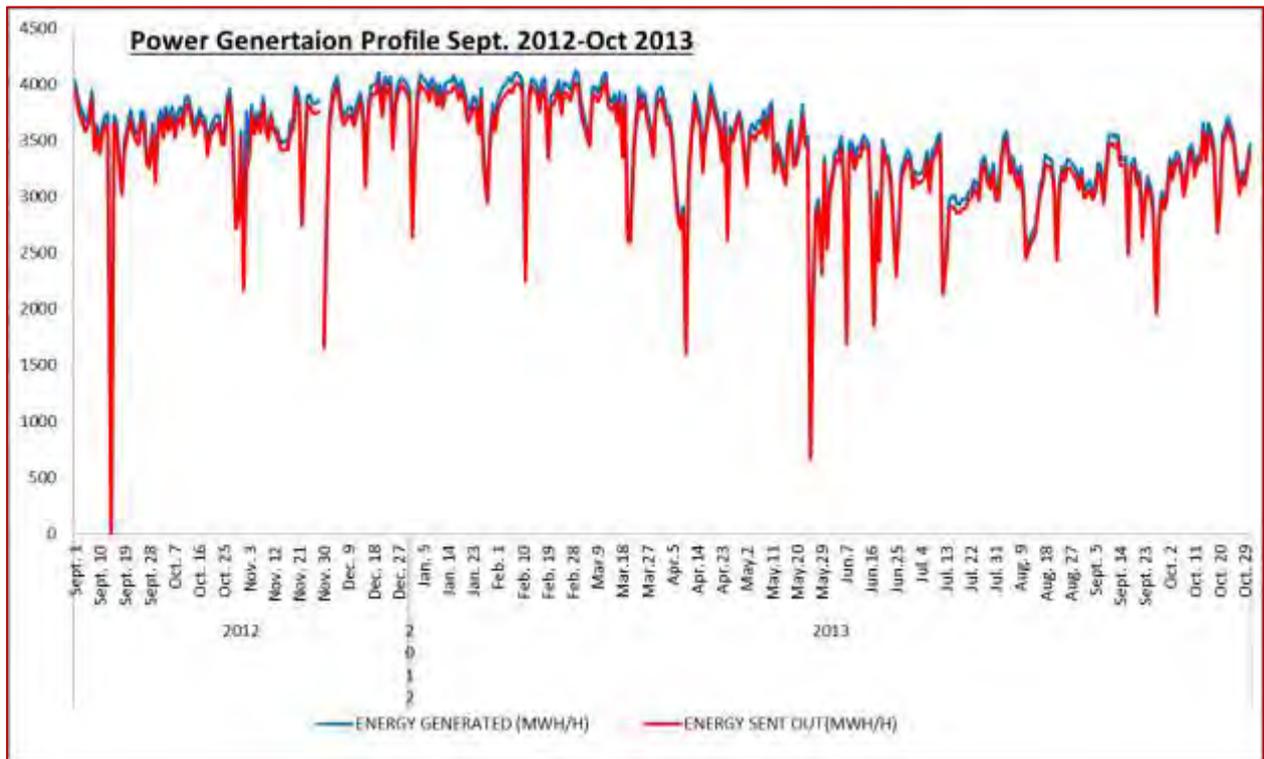


Figure 4: Power Generation Profile for September 2012 to October 2013

Achievements

Projections for installed capacity for December 2013 were made but not attained as shown in Table 1 below. The shortfall in installed generation was primarily due to the non-completion of some forecasted NIPP power plants like Gbarain, Omoku, and Egbema amongst others.

Measure	Projected	Achieved
Installed Generation Capacity (MW)	8,664	6,953
Available Generation Capacity (MW)	6,579	4,598
Actual Generation (MW)	4,671	3,800

Table 1: Power Sector Generation - December 2013 Projection and Attainment

New High Attained	Value
Maximum Installed Available Capability (MW) to date (January 14, 2013)	6,965.00
Maximum Energy Generated (MWH) to date (February 28, 2013)	99,127.81

Table 2: New Highs Attained in 2013

Issues Outstanding

Available generation capacity fell short of the projection as a result of:

- The non-completion of the repair of Egbin's ST06 caused by additional work requirements that needed additional funding and negotiations with the new owners
- The non-completion of Geometric Power IPP
- Non timely-completion of Ibom Power IPP and non-completion of repairs to a number IPPs such as, Trans Amadi, Omoku, etc.,

The actual generation in 2013 was hampered by the paucity of gas and fragility of the transmission infrastructure. As previously stated, for a good part of the year, gas transmission lines were sabotaged leading to even lower levels of actual generation.

Several generation highs in the history of Nigeria were recorded during the course of the year as indicated in Table 2 above. This included the highest maximum installed available capacity of 6,965MW and the highest maximum energy generated in a single day which was recorded as 99,127.81MWH.

Transmission

The Transmission Company is now managed by a management contractor, Manitoba Hydro International (MHI), who has full control with responsibility for improving company performance in accordance with prudent electric and utility practices. The management contract has submitted most of its required milestone delivery reports that include recommendation for improving Transmission Company business performance.

Achievements

Nigeria's power sector transmission infrastructure continues to be a challenge although modest improvements have been realized this year.

- The commissioning of the Ajaokuta to Gwagwalada to Katampe 330 kV transmission line by the National Integrated Power Projects (NIPP).
- This transmission line created the second system loop; which is also the first time in Nigerian history that power has been supplied to Abuja, Shiroro, Jebba, Ganmo and Osogbo areas from two separate transmission line sources. This loop significantly enhances power supply reliability to these areas. Another major construction achievement is
- The commissioning of the second Benin to Onitsha 330 kV transmission line.
- Prior to the commissioning of this transmission line, the system risked blackout every time the then standalone transmission line tripped since heavy power flow needed to be transferred over this line from east to west given most generation is in the East and most load is in the west.

While year 2013 capital expansion funding has been modest; however favourable developments occurred:

- The identification of funding sources by the Federal Ministry of Power and Federal Ministry of Finance for infusing capital into the TCN. This will be used for capacity expansion and unfettered wheeling of electric power from generator to customer across the transmission system;
- The Federal Executive Council (FEC) has pledged to provide \$1.6 billion dollars towards transmission system enhancements following the sale of NIPP constructed power plants. Refer to Table below.

Issues Outstanding

- As part of its efforts, the management contractor is preparing the strategy to ring fence and unbundle the Transmission Service Provider, System Operator and Market Operator functions as stand-alone business units.

Breakdown of Additional Funding Sources Assigned to TCN	
A	African Development Bank Tranche I - US\$ 100.0M:
	African Development Bank Tranche II - US\$ 50.0M:
B	World Bank (NEGIP) - US\$ 200.0M:
	World Bank (NEGIP) - US\$ 90.0M:
C	Eurobond - US\$ 135.0M:
D	Agence A FDB - US\$170.0M:
E	Niger Delta Power Holding Company Ltd: (NDPHC) US\$1.6B:
F	Islamic Development Bank - US\$ 150.0M:
G	Chinese XD Loan US\$ 500.0M:
	World Bank China Loan US\$ 700.0M:
	Others: Pivot Chinese Loan US\$ 2.5B:

Table 3: TCN Capital Funding Requirement and Funding Sources for 2013

Distribution

As a result of the PHCN divestment, there was no budgetary provision for distribution projects in the 2013 appropriation. The focus, therefore, was to ensure that all the fully-funded distribution projects were completed.

Distribution network capacity at December 2012 was 7,350M; a target of 10,918MW was projected for December 2013 based on some on-going fully funded distribution projects, NIPP distribution projects that were at advance stage of completion, and other intervention projects.

A couple of other initiatives were implemented to ensure sustainability in service delivery during the transition period.

These included:

- Multi-Year Tariff Order (MYTO) intervention on critical O&M Materials
- The PTFP Transitional Maintenance Intervention Funding Scheme (TMIFS)
- Integration of multiple vending options by the DisCos to provide some level of comfort and convenience to the customers and increase collection efficiency

Achievements

About 80% (2,854MW) of the targeted capacity was to be realised from the NIPP Distribution projects while the other 20% (714MW) was scheduled to be achieved from the former PHCN successor companies' projects.

Table 4 below shows the summary of status of distribution network capacity achieved in December, 2013.

DISCO	Baseline Distribution Capability Jan-2013 (MW)	Additional Capacity Intervention Projects (MW)	Additional Commissioned Projects (MW)	Capacity NIPP	Distribution Capacity Dec-2013 (MW)
Abuja	633	89	30		752
Benin	625	62	68		755
Eko	1,019	64	288		1,371
Enugu	757	65	90		912
Ibadan	1,057	60	96		1,213
Ikeja	1,058	83	84		1,225
Jos	448	71	12		531
Kaduna	415	35	40		490
Kano	483	48	72		603
P/Harcourt	681	23	132		836
Yola	174	5	6		185
Total	7,350	605	918		8,873

Table 4: Status of Distribution Network Capacity – December 2013

Issues Outstanding

The shortfall between the targeted capacity and the actual capacity achieved was as a result of project slippages.

The slippages occurred due to the following issues:

- Lack of adequate 33KV bays and switchgears at transmission bulk power substations (132/33KV S/S) to connect newly completed distribution projects to the grid.
- Funding constraints.
- Slow pace of work especially for the NIPP contracts.
- Delay in delivery of substation equipment to be supplied to the Engineering Procurement and Construction (EPC) contractors handling NIPP Projects by nominated subcontractors.
- Lack of Distribution Substation Officers (DSO) to man the newly completed NIPP Injection Substations.
- Poor project management/bureaucracy issues with NIPP Projects.

The Transmission Company of Nigeria (TCN) is currently addressing the interface issues in their new procurement plan.

NIPP distribution issues are being monitored by the PTFP project management team on NIPP while the project management team on Distribution provides support to them when there are interface issues with the DisCos.

Additional issues mentioned above are expected to be remedied by the new owners

Validation and Monitoring of MYTO Funded Distribution Projects

In previous years (2010 – 2012), disbursement of MYTO subsidy funds for project intervention was based on need assessments, jointly carried out between PTFP and the utility companies. Contrary to this approach, funds were released from the Federal Ministry of Power to the DisCos without prior evaluation and impact assessment of projects to be funded. These projects were integrated into the joint PTFP-Nigeria Infrastructure Advisory Fund (NIAF) project data base and form part of the delivered capacities in the Table above.

PTFP-Transitional Maintenance Intervention Funding Scheme (TMIFS)

The lack of budgetary provision in 2013 adversely affected capacity to maintain service delivery during the transition period. As a result, the PTFP initiated the Transitional Maintenance Intervention Funding Scheme (TMIFS) as a stop-gap measure to ameliorate any decline in service delivery.

- PTFP obtained an approval and a Certificate of **“No Objection”** from the Bureau of Public Procurement (BPP) to remit the funds to beneficiary DisCos for direct procurement of critical projects after a thorough needs assessment under a water-tight project implementation model.
- Projects were implemented under a collaborative project performance agreement between the PTFP and the beneficiary DisCos to ensuring delivery in line with expected timelines and outcomes. (The Q3 2013 intervention program is in progress and it is expected to be rounded up by year end.)

The metrics in Table 5 below shows the outlook of the funds utilised for the TMIFS projects:

Disco	Million Naira	Status
<u>Q1-2013 Fund Utilisation</u>		
Abuja	35	Commissioned
Kano	70	Commissioned
Ikeja	100	Commissioned
Q1-2013 Total	205	
<u>Q2-2013 Fund Utilisation</u>		
Enugu	35	Commissioned
Kaduna	70	Commissioned
P/Harcourt	37	Commissioned
Q2-2013 Total	142	
<u>Q3-2013 Fund Utilisation</u>		
Kaduna	51	In Progress
Q3-2013 Total	51	

Table 5: TMIFS Funded Distribution Projects in 2013

National Integrated Power Plants (NIPP)

Launched in 2005 as a fast track, power capacity boosting intervention programme, the National Integrated Power Projects (NIPP) was expected to add 4770 MW to the national grid and also to expand the network commensurately.

The NIPP projects comprise of:

- 10 power plants and associated gas projects
- 118 transmission and
- 297 distribution projects

Gas and Generation

Achievements

At 2013 year-end:

- Six of these plants had been commissioned (fully or partially) and had been connected to the national grid (18 GTs and 1 ST).

Issues Outstanding

- Work at three power plants; Egbema, Omoku and Gbarain are still outstanding while Alaoji (2GTs completed) generation has since commenced.
- The Calabar power plant has been completed and is awaiting gas and the completion of associated gas infrastructure. The plant is expected to commence firing in part by quarter one, 2014.

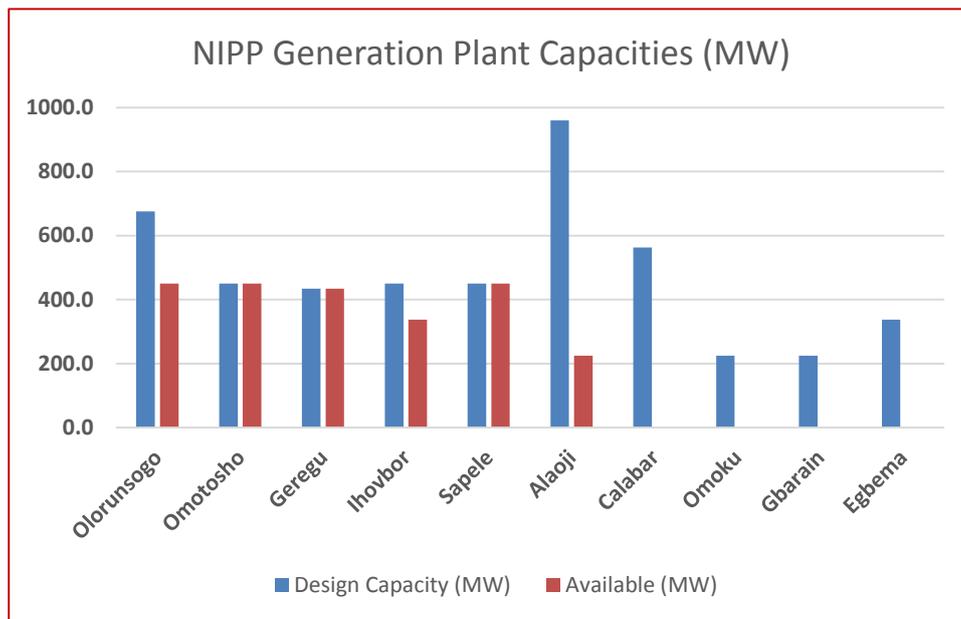


Figure 5: NIPP Plant Status at December 2013

Transmission

There are 118 NIPP transmission projects, comprising of 69 transmission substations and 49 transmission line projects.

Achievements

At 2013 year-end:

- About 24% of the transmission sub-station projects are 100% completed
- About 25% of the ongoing transmission sub-station projects can be classified as 80% (or above) complete
- About 20% of the transmission line projects are completed and commissioned
- Only about 14% of the transmission line projects are 80% (or above) complete.

In terms of cumulative MVA completion and contribution:

- The NIPP cumulative additional transformation capacity stood at 2,220MVA at December 2012. In 2013, 1,480MVA was added increasing capacity to 3,700MVA.

Issues Outstanding

Most of the transmission projects have slipped their delivery timelines, mainly due to:

- Right-of-way' (way leave), community/security issues especially the East-North loop
- Poor contractor performance, project and contractor management

Going forward, it is projected that up to a further 4,050MVA transformation capacity will be added in 2014

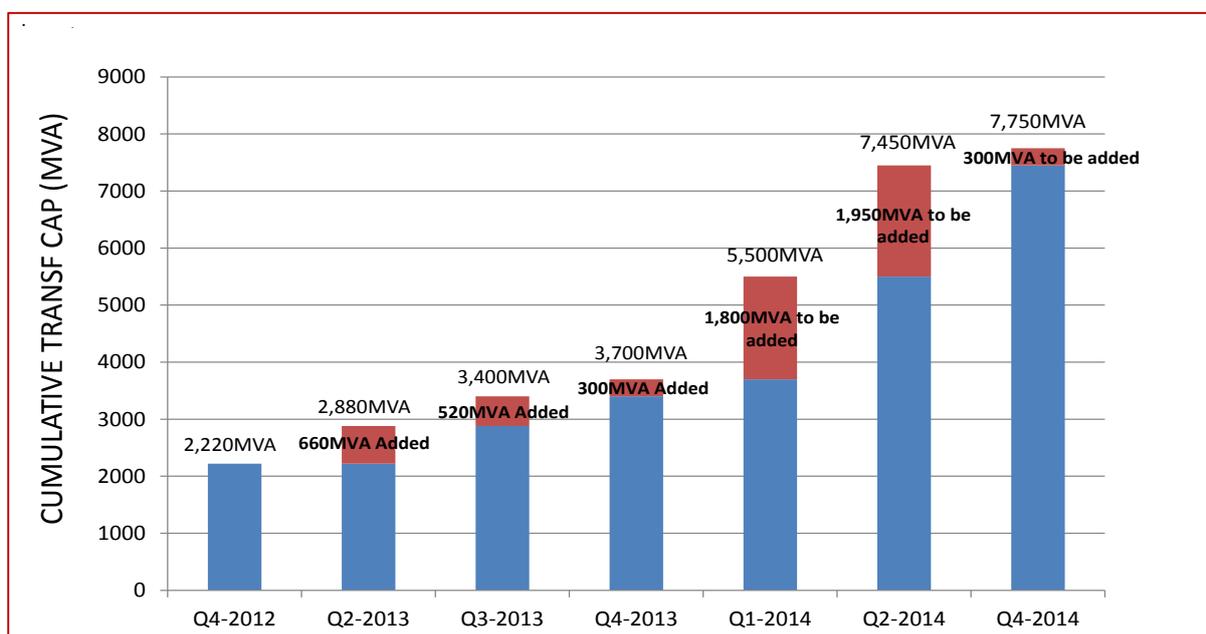


Figure 6: NIPP transmission cumulative MVA contribution

Distribution

Achievements

- Of the 297 NIPP distribution projects with total transformation capacity of 3750MVA, about 1147.5 MVA (30.6 %) is completed and is in full operation.
- Although an additional 345 MVA has been completed, this is **not in service due to lack of DSO's** to operate the sub-stations.
- Also 35 NIPP distribution projects are affected by lack of bays at transmission interface with distribution and if the bays are not constructed these projects will not be effectively utilised.
- 95 projects are up to 80% and above completed.

Issues Outstanding

Generally, work has progressed with the NIPP power projects and the impact of this intervention programme will definitely be felt strongly in the year 2014. It is also hoped that most of the identified constraints impacting these projects will be addressed especially in the advent of the new electricity market. These include;

- Contractor performance and project completion philosophy
- Alignment of the project value chain : Gas-Generation-Transmission-Distribution
- Community and way leave challenges
- Indebtedness by the Market Operator

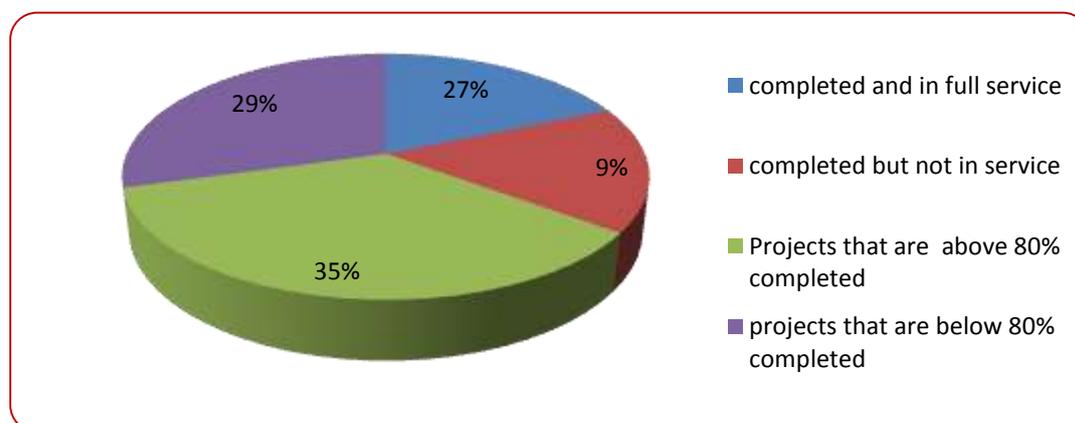


Figure 7: Status of Distribution Projects (by number) as at end of 2013

Market/Energy Efficiency and Renewables

As part of the President's power sector reform and in furtherance of the Electricity Power Sector Road Map (as regards renewable energy and energy efficiency), the Market/Energy Efficiency and Renewable Energy unit (MEER) was set up at the PTFP in the second quarter of 2013.

The main objectives of this new unit are:

- To ensure revised energy efficiency and renewable energy targets set out in the Roadmap for the Power Sector Reform Revision 1 are met.
- To track every unit of electricity generated, transmitted, and distributed, with the aim of identifying areas of losses, and in turn advice on performance improvement.
- To monitor and evaluate performance of the various sectors in electric power delivery.
- As part of integrated resource planning for the power sector, to advise on distributed grid and off-grid development of renewable energy in Nigeria.
- To advise on the establishment of a sustainable funding mechanism for renewable energy sector in Nigeria.
- Since its establishment, the unit has been able to achieve its mandate in many ways, particularly in the area of collaborations and engagements with other stakeholders in the sector. Some of which include the National Coordinator, Renewable Energy, Ministry of Environment; the Energy Commission of Nigeria (ECN) and the Rural Electrification Agency (REA). This is with a view to ensuring a coincidence of cross sector objectives in the development of renewable energy and implementation of energy efficiency measures within the power sector.

Projects and Initiatives

- As a result of our engagements with the ECN and review of the pilot program on energy efficient lighting, Terms of Reference (TOR) for a more representative pilot was developed to deal with some of the anomalies identified in the previous pilot program.
- As a result of engagement with the Ministry of Environment and other stakeholders in the development of renewable energy, a TOR for the implementation of sustainable renewable energy implementation was developed. The expected outcome of these projects will be improved overall access to electricity in a manner that will ensure that energy requirements

both on-grid and off-grid in rural and urban locations are met, ultimately resulting in improved economic and social well-being of the people.

- As a result of interactions with the Market Operator that revealed substantial pre- Transitional Electricity Market (TEM) issues, a TOR for a grid metering infrastructure audit as a means of ensuring a more robust grid metering and market operator invoice regime was also developed.
- It has been reported that government agencies are responsible for up to 30% of the debt owed the power sector; so many reasons have been adduced for this. In order to ensure that this does not affect the electricity market after TEM, a TOR was developed for DisCo debt management post TEM. This will ensure that all stakeholders are aware of current stage of the reform in the power sector and required transactional procedures.
- As a means of improving hours of supply availability during the period before TEM and as an aftermath of the DisCo stress test, a schedule of overloaded feeders and feeders with less than 7 hours of power supply was developed to aid development of intervention schemes for infrastructure improvements.

2013 REFORM UPDATES

Reform Status Update

With the handover of the successor companies to their new owners in November 2013, the **majority of the Roadmap's** reform milestones can be seen as being effectively completed. However, this handover took place before full commercialisation could be achieved; and as a result, the market was in an undefined role. With the order from NERC – *The Rules for the Interim Period between completion of Privatization and the start of the TEM* – having been issued formally, **defining market behaviour during this "Interim Period", the market is expected to function in an orderly manner before the announcement of the Transitional Electricity Market (TEM) by the Honourable Minister of Power.**

In this period various aspects of the market will be tested and calibrated to ensure that formal commercialisation will produce a market that is both viable and sustainable.

Reform Roadmap Scorecard

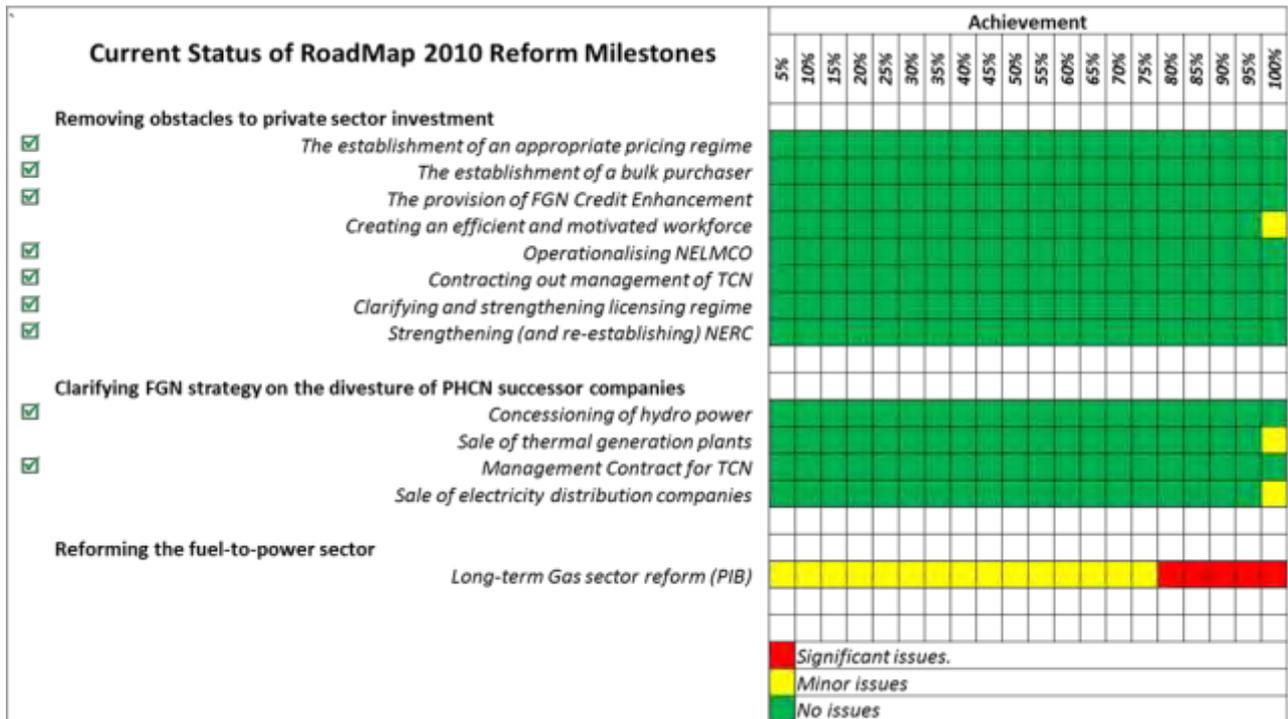


Figure 8: Current Status of Roadmap 2010 Reform Milestones

Outstanding Reform Tasks

Afam, Kaduna and Labour payments to fully conclude outstanding issues, with medium to long-term availability of gas arising mainly from vandalism of crude oil and gas pipeline infrastructure, lack of placement of commercial agreements and no early commitment for gas offtake and transportation.

Reform Implementation Milestones

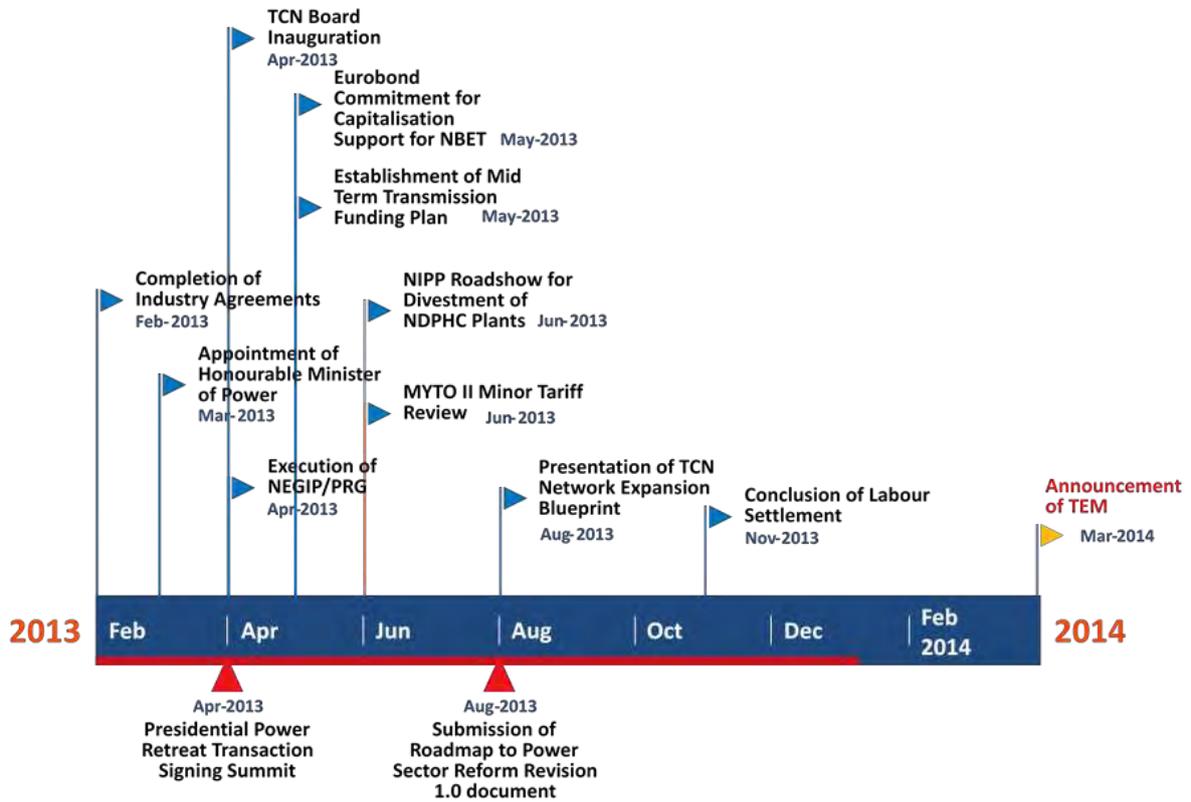


Figure 9: Timeline of Privatisation Milestones

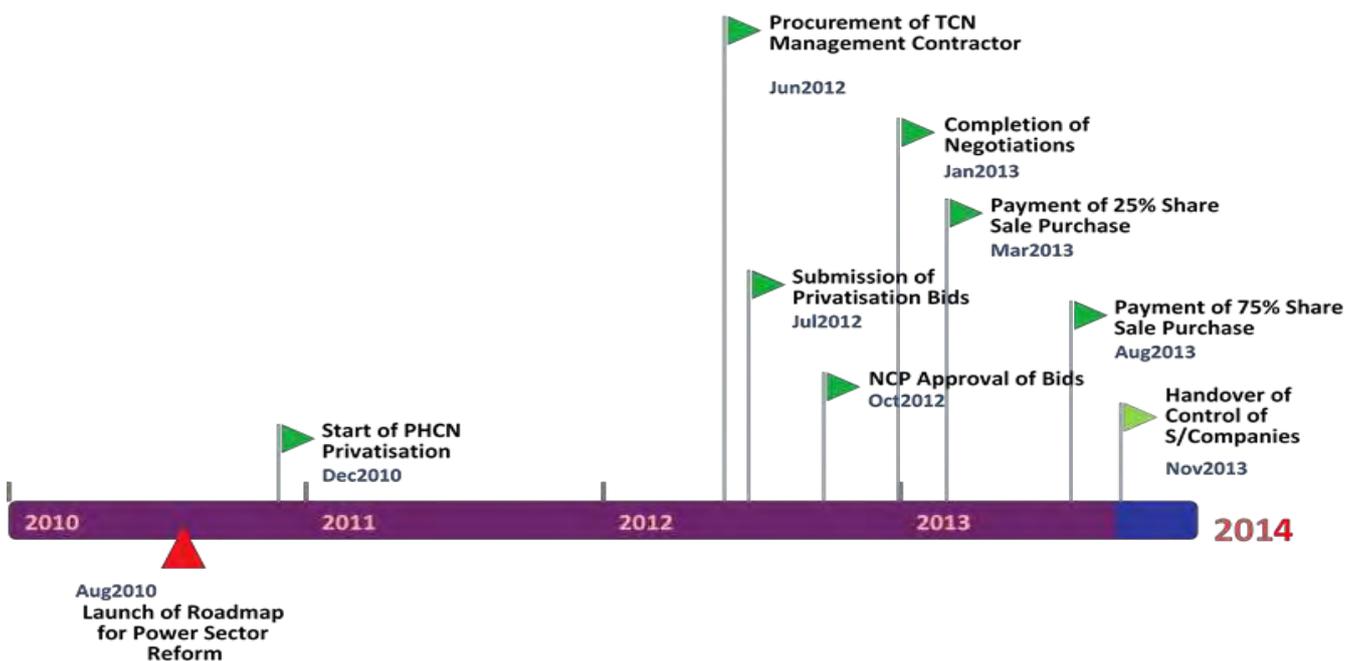


Figure 10: Timeline of Reform Milestones in 2013

Regulatory and Transactions Monitoring

The power sector reform that was initiated on the bedrock of the Electric Power Sector Reform Act, 2005 (EPSRA) has continued on an irreversible trajectory, with the attainment of additional milestones that will establish the environment for a private sector driven electricity market. Importantly, the commercial framework and the private ownership of the Power Holding Company of Nigeria (PHCN) successor companies are substantially in place. However, like any nascent arrangement, there continues to be issues, such as the need for increased gas supply, increased transmission wheeling capacity, consistency and ready availability of subsidy payments and re-evaluation of the electricity tariff, etc., that still require attention.

Never the less, the successor companies are in private hands and the sector is progressing towards a point, whereby the Minister of Power may declare the Transition Electricity Market (TEM), as mandated by EPSRA. The following is a review of the milestones that were reached in 2013.

Formal Handing over of PHCN to Successor Companies

One of the main goals of the reform, as well as the 2010 Roadmap for Power Sector Reform, is the creation of a sustainable, private sector driven power sector, as an alternative to that which existed prior to the onset of the reform. To this end, the Federal Government of Nigeria has divested the ownership and management of the unbundled successor companies and transferred ownership of the legacy assets to private ownership, with the formal handover of share certificates on September 30th 2013, as well as the physical handover of assets on November 1st 2013. The handover of the successor companies did not include the Afam Power Plc. or the Kaduna Distribution Company, Plc. Both successor companies were put out for bid again, due to some challenges associated with the first transaction effort. However, negotiations have recently concluded with the preferred bidders with transaction close expected to occur within the first and second quarters of 2014.

Interim Rules

Subsequent to the physical handover of the successor companies, there continues to be a number of challenges associated with the sector. Specifically, low revenue collections, minimal or no information on the Aggregate Technical Commercial and Collection (ATC&C) losses, non-cost reflective nature of the Multi-Year Tariff Order II (MYTO II), etc. These challenges, if unaddressed, have the potential for undermining the sector reform, given the associated uncertainties. Thus, under an initiative driven by the Nigerian Electricity Regulatory Commission (NERC), in consultation with the industry stakeholders, a set of guidelines were established to provide a framework for sector market participants. These guidelines (Interim Rules), have been issued as a NERC Order, and are expected to remain in existence for the period of November 1 through March 1, 2014, when the declaration of TEM is expected to occur. The objectives of the Interim Rules are to minimize commercial uncertainty of the market, as well as provide the time needed for the resolution of the outstanding issues (completion of the loss baseline report by the Distribution Companies (DisCo), the validation of the TEM enablers and any potential adjustment to the electricity tariff).

Resolution of Labour Issues

The government has demonstrated great commitment in resolving labour issues in the power sector reform and privatisation by successfully paying out the labour entitlements, in order to necessitate a hitch-free take over and management of the assets by the new owners. The peaceful physical handing over of all PHCN power assets to the new private owners was successfully achieved on November 1st, 2013. This has since been followed by the planned downsizing of the

workforce. A new climate of private sector driven industrial relations is gradually emerging in the burgeoning power sector. The successful handover was predicated by the completion of over 93% payment of severance and pension benefits to the 47,000 PHCN workforce. The Task Force is still focusing efforts with the ongoing activities of the Presidential Implementation Panel to speed up the clearance of outstanding staff with verification issues.

The Inauguration of a TCN Supervisory Board

In order to ensure that the Transmission Company of Nigeria (TCN) is financially, technically and commercially viable, as necessary for it to play its critical role in the electricity value chain, the government procured the services of Manitoba Hydro International (MHI) in 2012. A major **enabler of MHI's ability to implement the requirements of its performance-based contract** is the Board of TCN. Accordingly, the TCN board was inaugurated in February, 2013, ensuring that the required governance structure is in place. It is expected that MHI, in partnership with its Board, will work towards the objectives of strengthening the wheeling capacity, robustness, flexibility and stability of the transmission network.

Capitalisation of the Bulk Trader

A cornerstone of the Roadmap to Power Sector Reform and the EPSRA is the provision of a securitization arrangement, bulk supply and re-sale capacity by a distinct entity, as necessary to provide confidence to the electricity market. Accordingly, the Nigerian Bulk Electricity Trading, Plc. (NBET) was incorporated and established to handle these responsibilities. In support of the role of NBET, the government has approved and provided capitalisation of over \$700 million for it to provide credit enhancement as a counter party to the Power Purchase Agreements (PPA) with the successor generation companies and IPPs, as well as meet its operational requirements.

Novation of Legacy Agreements

In furtherance of the **government's** plan that all players in the market play their roles appropriately, a key to an efficacious and sustainable electricity market, legacy PPA agreements are being novated from PHCN/NELMCO to NBET. In addition, to ensure that NELMCO is made fully operational to address management of the liabilities associated with the privatization effort, contracts relating to the non-core PHCN assets and liabilities have been successfully executed between NELMCO and PHCN, thereby transferring same completely to NELMCO.

Completion of Transitional Electricity Market (TEM) Condition Precedents

As a pre-condition for establishing the commercial framework for the market, as well as the declaration of TEM, the Condition Precedents (CP) has substantively been put in place. These CPs include grid metering, execution of industry agreements, completion of a market settlement system, etc.. An assessment of the implementation of the TEM CPs has recently been completed, with planning for a program to address areas of deficiencies on-going.

Completion of Egbin Transaction

In addition to the privatization of the 17 PHCN successor companies, the government embarked on the sale of Egbin Power Plc. (Egbin). Thus, the sale of Egbin was completed in 2013, with the **sale of 70 percent of Egbin's equity to KEPCO/SAHARA.**

Commencement of the Sale of National Integrated Power Project Generation Plants

The Niger Delta Power Holding Company commenced the sale of its 10 generating plants, with an expectation for transaction completion in the second quarter of 2014. To date, evaluation of the received technical proposals have been completed, with the expectation (subject to approval by the appropriate bodies) of progression to the next phase of the transaction, opening of the financial bids.

2013 ACTIVITIES AND ACHIEVEMENTS

Activity	Date	Description
Events Organised		
• PTFP Power-MDA Conference	Feb-2013	Conference of various Power Sector MDAs to discuss sector development ambitions and issues
• Nigeria Power Sector Reform Roadmap Technical Retreat	Feb-2013	Conference of reform MDAs to review Roadmap progress
• Presidential Power Reform Transaction Signing Summit	Apr-2013	Summit to highlight progress of contractual and commercial developments in sector reform.
• PTFP Management Retreat	May-2013	In-house retreat to discuss operational strategies
Document Development & Production		
• Roadmap for Power Sector Reform Revision 1.0	Oct-2013	Technical revision of the 2010 Roadmap for Power Sector Reform given the developments in the sector
Transitional Maintenance Intervention Funding Scheme		
• Projects in six discos	Jul-2013 onwards	Intervention program designed by PTFP to maintain service delivery levels despite no capital budget in 2013.
Project Inspections and Monitoring		
• On-site inspections and meetings	Jan-2013 onwards	PTFP has engaged in a total of 53 site inspections and meetings regarding gas and power sector projects
Capacity Building		
• Courses	Apr-2013 onwards	PTFP staff have attended 19 courses related to power sector reform and for skills acquisition

Activity	Date	Description
Participation in Sector Events & Activities		
• Payment of 25% for successor companies	Feb-2013	Ceremony of receipt of initial payment from new owners of successor companies in PHCN divestment
• Roadshow for NIPP generation assets	Feb-2013	Global roadshow presenting the privatisation of the newly-constructed NDPHC generation plants
• Presidential commissioning of NIPP generation assets	Oct-2013 onwards	Presidential commissioning of selected NDPHC generation plants
• Ceremonial handover of successor companies	Oct-2013	Handover of share certificates and licenses to new owners of successor companies after final payment.
• Operational handover of successor companies	Nov-2013	Formal handover of operations to new owners of the successor companies in PHCN divestment
• Various sector conferences and seminars.	Sep-2012 onwards	Various conferences and seminars highlighting the developments and opportunities of the Nigerian Power Sector to domestic and international audiences
• Joint Risk Assessment of Privatisation Process	Sep-2012 onwards	Continuous dialogue maintained with BPE to anticipate possible scenarios and to generate a proactive contingency framework for addressing these risks.
• Preparation of the Industry for Entry into Transitional Electricity Market (TEM)	Sep-2012 onwards	To maintain commercialisation and reform momentum, PTFP engaged with multiple MDAs and other agencies – World Bank, AfDB – to help fast-track pending decisions and reduce bureaucracy in various contract relations and activities.

Activity	Description
Participation in Sector Development	
<ul style="list-style-type: none"> Participation in Dom-Gas Committee 	<p>Joint committee of gas and power stakeholders to coordinate the development of gas to power supply and transportation.</p>
<ul style="list-style-type: none"> Creation of Gas to Power Operational Coordination Team 	<p>Coordination meetings were held by PTFP with NGC, NCC, and the System Operator to align the supply of gas with turbine availability to optimise power production into the grid.</p>
<ul style="list-style-type: none"> Power Sector Memoranda Of Understanding 	<p>PTFP worked with the Ministry of Power to develop various MoUs with foreign power companies interested in power generation and transmission.</p>
<ul style="list-style-type: none"> Development with TCN of Transmission Network Expansion Blueprint 	<p>Verification and validation of projects for inclusion into the Transmission Network Expansion Blueprint (presented to PACP in August-2013) to ensure alignment with current and expected distribution company capabilities to 2017</p>
<ul style="list-style-type: none"> Production of Network Stress Test Analysis Report Overstay Power Equipment in Lagos 	<p>PTFP conducted an analysis of the network to establish the power uptake capability of each DisCo and by extension the potential unconstrained capacity of the network.</p> <p>PTFP worked with MoP, Nigerian Army, NDPHC, PMU and DisCos in the release and distribution of the Overtime PHCN/NIPP Electrical Materials/Equipment at PHCN Central Store Oshodi and Ikorodu Customs Terminal Lagos.</p>

OUTLOOK FOR 2014

2014 Goal

To *Monitor*, to *Facilitate*, to *Catalyse* the Viability of The Market and the Sustenance and Growth of Sector Service Delivery.

2014 Outputs

The following will be core Outputs of PTFP Activities in 2014:

- Pro-active risk escalation reports to the PACP and Federal Ministry of Power
- Monthly Report to PTFP Board
- Quarterly Report to selected Sector Stakeholders
- Yearly Report for Public Stakeholders
- Monthly Activity Report to NIAF

2014 Methodology

Approach

A set of goals has been established for the Short (June-2014), Medium (December-2014) and Long (December-2020). These goals can only be delivered by the coordinated actions of multiple parties. In order to help achieve these goals, PTFP has designed initiatives and identified the individual deliverables that each party, or agent, would be required to conclude upon for the goal to be delivered successfully and to schedule. PTFP will monitor the activities of the parties, facilitate their interactions and (where necessary) fast-track them, and catalyse the resolution of outstanding issues to ensure progress is to standard and to schedule.

Short Term	Medium Term	Long Term
<ul style="list-style-type: none">• Initial Target :<ul style="list-style-type: none">○ 4,500 MW○ Jun-2014• Reporting Frequency<ul style="list-style-type: none">○ Weekly/ Fortnightly• Target Review/Update<ul style="list-style-type: none">○ Monthly	<ul style="list-style-type: none">• Initial Target :<ul style="list-style-type: none">○ 6,000 MW○ Dec-2014• Reporting Frequency<ul style="list-style-type: none">○ Monthly/ Quarterly• Target Review/Update<ul style="list-style-type: none">○ Quarterly	<ul style="list-style-type: none">• Initial Target :<ul style="list-style-type: none">○ TBD MW○ Dec -2020• Reporting Frequency<ul style="list-style-type: none">○ Half Yearly/ Yearly• Target Review/Update<ul style="list-style-type: none">○ Yearly

Sector Work Plan

A Sector-wide Work Plan has been created detailing various Sector Activities. This is an initial program that will be subject to revision and update. This Work Plan will be maintained by the Programme Management Unit (PMU) of the Task Force.

Sector Activity Classification

These Activities can be classified thus:

#	Activity	Description	Comment
0	Goal	High-level sector-wide target to be achieved for Sector Reform progress	<ul style="list-style-type: none"> Identified by PTFP/Management Qualitative Description of a Strategy
1	Initiative	Initiative of Sector	<ul style="list-style-type: none"> Defined by PTFP/Management or Senior Performance Monitor (SPM) Engagement sought from MDA/E(s) for "Buy-in" Multi-party Coordination
2	Deliverable	Deliverable by MDA/E	<ul style="list-style-type: none"> Identified by SPM Single Agent (MDA/E) with primary responsibility Measurable and Observable Progress Metric Focus of Reporting
3	Action	Action by MDA/E	<ul style="list-style-type: none"> Defined by SPM with PMU Measurable and Observable Progress Metric Focus of monitoring by PTFP/MGT
4	Task	Action by PTFP	<ul style="list-style-type: none"> Actions by PTFP – <i>Monitoring, Facilitating, Catalyzing, Validating</i> Focus of tracking by PMU

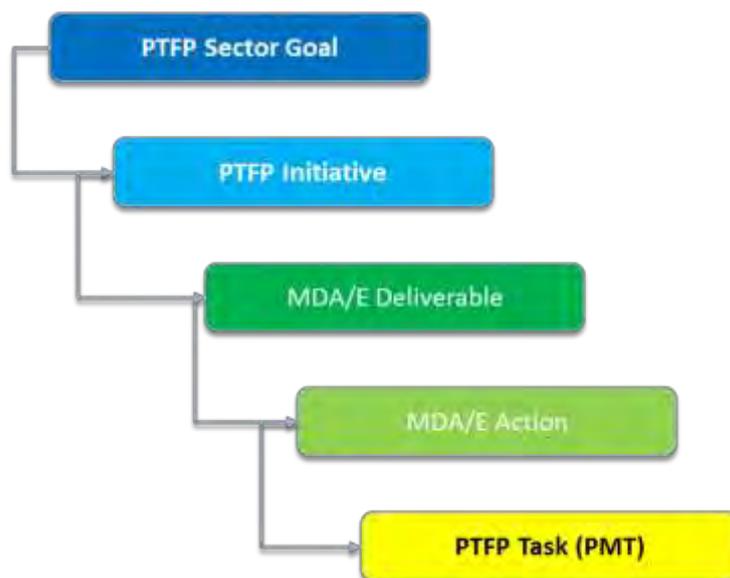


Figure 11: Schematic of Sector Activity Hierarchy

Action Plan

Where possible, *Progress Metrics* will be designed to form the basis of reporting. It is essential that *Deliverables* are defined in such a manner as to lend themselves to this.

ID	Class	Task Level	Goal/ Initiative/ Deliverable/ Action/ Task	Detail	Type	SubType	Start	End	Status	Progress	Pct	Completion	Timeline	Lead Agent	Agents	Lead PTFP
											0%					
	Goal	0	RECOVER TO 4500 (MW)	Achieving a (SD Average) Peak Power of 4500 MW	Short-Term	Jun-2014			To Start	N/A	71%	<div style="width: 71%;"></div>	Jun-2014			CPTFP
	Initiative	1	Western Axis Gas-To-Power 750 MMSCF/D	Achieving a (SD Average) Supply to Power of 750 MMSCF/D on Western Gas Axis	Short-Term	Jun-2014			In Progress	N/A	60%	<div style="width: 60%;"></div>	Jun-2014	SPM/PTFP	N/A	FTP
	Deliverable	2	Restoration of 100 MMscfd lost gas from Escravos	Completion and return of ELP A from vandalism	Performance	Technical			In Progress	Stalled	25%	<div style="width: 25%;"></div>	Mar-2014	NGC/CNL	NGC/ CNL	FTP
	Deliverable	2	70 MMscfd Increased gas supply from Escravos	Stranded gas due to ELP A vandalism. To be useable on completion of ELP A repairs	Performance	Technical			In Progress	Poor	65%	<div style="width: 65%;"></div>	Mar-2014	NGC/CNL	NGC/ CNL	FTP
	Deliverable	2	45 MMscfd resumption of gas supply to Ikom Power by Septa	Ikom Power plant outage expected to be completed and new gas supplier recommences supply	Performance	Technical			In Progress	Poor	60%	<div style="width: 60%;"></div>	Mar-2014	SEPTA	SEPTA	FTP
	Deliverable	2	40 MMscfd additional gas from Utorogo	Require outage of Utorogo gas plant for 3 weeks for tie in of Utorogo 1 and 2 plants and subject to ELP A return to service.	Performance	Technical			In Progress	Fair	55%	<div style="width: 55%;"></div>	Jun-2014	NPDC/NGC	NPDC/ NGC	FTP
	Deliverable	2	Additional Capacity in ELP C pipeline and improved pressure in Olorunsogo	Completion and commissioning of PS 4 to PS 5 pipeline on ELP C pipeline	Performance	Technical			Concluded	N/A	100%	<div style="width: 100%;"></div>	Mar-2014	NGC/NNPC	NPDC/ NGC	FTP
	Deliverable	2	Additional Capacity in ELP C pipeline and improved pressure in Olorunsogo	Completion and commissioning of PS 1 to PS 2 pipeline on ELP C pipeline	Performance	Technical			In Progress	Fair	63%	<div style="width: 63%;"></div>	Jun-2014	NGC/NNPC	NPDC/ NGC	FTP

Figure 12: Simulated Schematic of Sector Work Plan showing Goals, Initiatives and Deliverables

Performance Monitoring

Sector Performance will be driven by a continuous process of close-marking and monitoring of the above-mentioned activities with the escalation of issues where and when required.

This process will be principally driven by the **PTFP Weekly Technical Management Meeting** which will focus on the status and progress of the MDA/E Deliverables and Actions.

Initiatives & Deliverables																
ID	Class	Task Level	Goal/ Initiative/ Deliverable/ Action/ Task	Detail	Type	SubType	Start	End	Status	Progress	Pct	Completion	Timeline	Lead Agent	Agents	Lead PTFP
											0%					
	Goal	0	RECOVER TO 4500 (MW)	Achieving a (SD Average) Peak Power of 4500 MW	Short-Term	Jun-2014			To Start	N/A	71%	<div style="width: 71%;"></div>	Jun-2014			CPTFP
	Initiative	1	Western Axis Gas-To-Power 750 MMSCF/D	Achieving a (SD Average) Supply to Power of 750 MMSCF/D on Western Gas Axis	Short-Term	Jun-2014			In Progress	N/A	60%	<div style="width: 60%;"></div>	Jun-2014	FTP	N/A	FTP
	Deliverable	2	Restoration of 100 MMscfd lost gas from Escravos	Completion and return of ELP A from vandalism	Performance	Technical			In Progress	Stalled	25%	<div style="width: 25%;"></div>	01-Mar-14	NGC/CNL	NGC/ CNL	FTP
	Action	3	Handover of Pipeline	Final Handing over of line by EPC to NGC	Performance	Technical			To Start	N/A	0%	<div style="width: 0%;"></div>	21-Feb-14	NGC/CNL	NGC/ CNL	FTP
	Task	4	Site Inspection	FTP Site Inspection	Monitoring	Inspection			To Start	N/A	0%	<div style="width: 0%;"></div>	17-Feb-14	FTP	N/A	PMU
	Action	3	Pressure Testing of Pipeline	Contractor to Pressure test line	Performance	Technical			Concluded	Stalled	N/A	<div style="width: 0%;"></div>	21-Jan-14	NGC/CNL	NGC/ CNL	FTP
	Task	4	Meet with NGC on new W/P Plan	Meeting to establish new timelines	Facilitating	Meeting			To Start	N/A		<div style="width: 0%;"></div>	26-Jan-14	FTP	N/A	PMU
	Task	4	Escalate Issue of New Damage	Letter to HMOF	Catalysing	Escalation			To Start	N/A		<div style="width: 0%;"></div>	26-Jan-14	FTP	N/A	PMU

Figure 13: Simulated Schematic of Sector Work Plan showing Deliverables, Actions and Tasks

Supporting the weekly meetings will be the **PTFP Fortnightly SPM/Heads Meeting**. This will focus upon the inter-dependencies and inter-relationships of sector activities to ensure that there is coordination of effort and alignment of impacts to achieve the desired outcomes, to prevent the *silo-ing* of sector activities, and optimize the allocation of PTFP resources.

There will also be the **PTFP Monthly Board Meeting** where issues and ideas arising will be escalated and presented for consideration.

Initial focus will be on delivering the Short-Term and Medium-Term goals. Periodic meetings will be used for the Long-term targets. The PTFP Management and SPM/Heads meetings will focus upon the PTFP Management activities (*Tasks*) that have occurred or that will be required to extract performance in the conclusion of the MDA/E *Actions* and *Deliverables*.

#	Deliverable	Actions	Update	Monitoring	Facilitating	Catalysing
1	Restoration of 100 MMscfd lost gas from Escravos	Pressure Testing of pipeline	Pipeline Damage reported during pressure testing		Meeting with NGC for new workplan	Escalated issue to MoP
2	Restoration of 100 MMscfd lost gas from Escravos	Pipeline Handover	Awaiting Updated workplan	Site inspection was scheduled 17Feb2014		

Figure 14: Simulated Schematic of Reporting (of Tasks) at PTFP Weekly Meetings

Performance Evaluation

PTFP evaluation of the sector activities of MDA/Es (Activity = *Deliverables* or *Actions*) will be conducted principally via inspections to validate performance and completion. The verification of any expected impacts will be, where possible, a defined activity (Activity = *Task*; Type= *Validating*) within the Work Plan. This would either take the form of an inspection by PTFP or documented report by the MDA/E which would generate documentation

Work Plan

A Summary of the *PTFP Workplan for Sector 2014*, detailing the *Goals*, *Initiatives*, and *Deliverables* is being produced. The deliverables within this report are in the process of being validated by each SPM. This Work Plan will form the basis of the *Sector Activity Monitoring and Reporting Framework*. From this Work Plan, the PTFP Media and Communications Unit (MCU) will develop the supporting Media and Communication initiatives.

The *PTFP Work Plan for Sector 2014* currently consists of the following:

- Short-Term: *Goals, Initiatives, & Deliverables*;
 - Breakdown to *Actions* and *Tasks* will be developed.
- Medium- Term: *Goals, Initiatives &*, where detailed, *Deliverables*
 - Greater activity definition will be developed in the coming weeks.
- Long-Term: *Goals & Initiatives*
 - Greater activity definition will be developed in the coming weeks and months.

Role of PTFP in 2014

- Monitor and facilitate the completion of the outstanding sales of Afam and Sapele Power Plants and Kaduna Distribution Company by the BPE to complete the Privatization arrangements in line with the requirements of the Electricity Power Sector Reform Act 2005.
- Monitor and facilitate the sales of the NIPP Power plants by providing technical and commercial expertise to the BPE and the NDPHC.
- Monitor and facilitate the completion of outstanding gas supply and gas transmission projects and agreements to support the newly-privatized companies and the national requirements for power.
- Monitor and facilitate the completion of NIPP fuel to power projects by the NDPHC.
- Monitor and facilitate the funding and implementation of Transmission projects by the TCN to sustain the reform and assure system stability.

- Monitor the performance of the new successor companies in conjunction with BPE to ensure compliance with commitments and obligations in the Share Transfer and Performance Agreements for all the Power Generation and Distribution Companies.
- Monitor the performance of the management contractor of the TCN – Manitoba Hydro International – to ensure compliance with commitments and obligations in the Management Contract.
- Support the Ministry of Power with Technical expertise in the Development of the Policies to sustain the Power Industry on a Medium/Long term Basis including but not limited to development and validation of gas supply and transportation, future power generation and supply, transmission and distribution projections as well as renewable energy and rural electrification development.
- Work with NERC, NBET, EMS, NELMCO and other Government Agencies to sustain the market viability and efficiency.
- Monitor and facilitate the completion and commissioning of gas supply and infrastructure projects by NNPC and its subsidiaries as part of the Gas Masterplan to support projected Power Generation.
- Monitor the performance of the implementation of the Interim Rules and facilitate declaration of the TEM by NERC as the market moves towards full commercialisation.
- Monitor and facilitate the implementation of the Reform Roadmap Revision 1 and update as may be required at the end of the extended tenure of the PTFP.
- Support for the Presidential Action Committee on Power (PACP) to monitor and report on progress made on listed items above and ensure the proper and correct operation of the Nigerian Electricity Supply Industry in the on-going Sector Reform.
- Ensure that all outstanding Power Equipment Containers at Lagos Ports are cleared by Nigeria customs and work on modality of releasing and distributing the Power Equipment/Accessories to the respective project sites in respect of NDPHC, TCN and PMU containers, while concluding the release of the remaining materials at PHCN Oshodi Central Stores.

Fuel-to-Power

On the assumption that vandalism interruption recedes, power plants are completed at Omoku and Gbarain and power evacuation facilities are in place for all NIPP power plants especially in the east, 170 MMscfd of gas will be recovered in the west, additional 300 MMscfd gas supply sources will be completed in the west making a total of 470 MMscfd. The additional gas of 300 MMscfd is expected from Utorogu NAG 2 with a nett addition of 80 MMscfd allowing for decommissioning of Ughelli East Gas plant, 100 MMscfd from Oredo/Pan Ocean facility, Forcados Yokri (80 MMscfd) and Odidi with 40 MMscfd.

In the east it is projected that 340 MMscfd is expected to be supplied on completion of Northern Option pipeline (100 MMscfd), 7Energy gas plant for Calabar (100 MMscfd) and utilization of 140 MMscfd stranded since 2010 from Gbarain (80 MMscfd) and Omoku with 60 MMscfd. Major infrastructure required to be completed is the 36" X 323 Km PS1 to PS4 of the Escravos to Lagos gas (ELP C) pipeline system.

As indicated above, to assure timely development of future gas sources, commitments for offtake need to be made as soon as possible and the power industry need to build a reputation for paying for gas as and when required. These factors will be major enablers for avoidance of the current gas shortfall being experienced in the country.

Generation

For 2014, the generation outlook looks promising as shown in Figure 23. It is expected that projects delayed from 2013 would be concluded in 2014 and there would be funding available for machine maintenance from new owners. If all of the above holds, then total generation capacity is projected to reach 10,603MW. The actual generation to the grid would then be a function of the availability of gas and transmission capacity. It is hoped that with the critical projects on gas and transmission currently ongoing, the challenges posed by paucity of fuel and transmission instabilities would be curtailed.

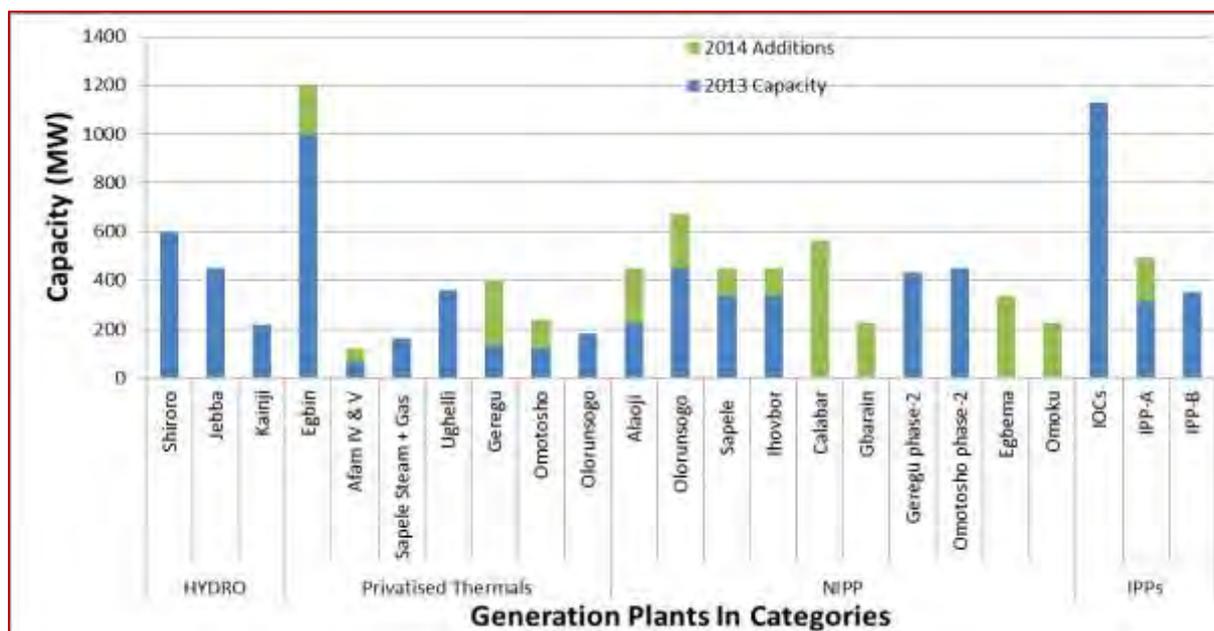


Figure 15: Projected Generation Capacity Additions in 2014

Transmission

The transmission sector still has significant challenges to overcome for realizing its performance potential desired by power sector reform. On the funding front the Federal Executive Council pledged investment of \$1.6 billion is expected to be delivered the third quarter of 2014. Government identified funding sources are working towards bankability consistent with delivery of system studies and environmental impact assessments spearheaded by the Transmission Company of Nigeria.

On the management front the milestone deliverables provided by the management contractor require implementation for turning around the company. On the construction front the major system loop under construction, the Alaoji to Ikot Ekpene to Jos 330 kV transmission line is expected to be commissioned by 2nd quarter 2014 to further enhance system reliability. The completion of the Jos loop by NIPP will mark the first time in Nigerian history that power has been supplied to the Jos and Kaduna areas by two separate transmission line sources. A significant achievement given the distances involved with constructing the transmission line. Once this work is completed the transmission system can be properly referred to as a grid "network".

Other challenges to overcome during 2014 are implementing effective management of system reliability, improving generator evacuation and also improving the transmission/distribution interface for ensuring 24/7 power availability to grid connected customers. To meet these challenges, the Transmission Company will be tasked with improving management of real-time operations for delivering system reliability that complement the system construction

improvements delivered by the NIPP. As part of this effort renewed focus on fast tracking projects that solve existing generation evacuation bottlenecks and existing transmission/distribution interface capacity gaps.

Breakdown of Funding Requirements 2013-2017		2013	2014	2015	2016	2017	Totals
Total Funds needed by Year		460	2115	693	1178	1178	5624
1	African Development Bank - US\$ 100.0M:	50	50				
	African Development Bank - US\$ 50.0M:		50				
2	World Bank (NEGIP) - US\$ 200.0M:	46	61	93			
	World Bank (NEGIP) - US\$ 90.0M:	30	60				
3	Eurobond - US\$ 135.0M:		135				
4	FGB 2013-2017 Appropriation - US\$625.0M:	125	125	125	125	125	
5	Agence A FDB - US\$170.0M:		119	32	19		
6	MYTO Capex - US\$11.0M:	11					
7	NDPHC: US\$1.6B		800	400	400		
8	Islamic Development Bank - US\$ 150.0M:			150			
9	Chinese XD Loan US\$ 500.0M		70	280	100	50	
	World Bank China Loan US\$ 700.0M:			294	196	94	46 70
	Others: Pivot Chinese Loan US\$ 2.5B:						500
Possible Funding		262	1563	1281	934	791	4831
Funding Surplus/Deficit		(198)	(552)	588	(244)	(387)	(793)

Table 6: Planned TCN Capital Requirement and Possible Sources of Funding

From a transmission performance monitoring role, the PTFP will continue driving improvements in system reliability and Transmission Company efficiency; as well as ensure satisfactory progress is made towards realizing power sector reform goals. The PTFP will continue to regularly interface with the management contractor to implement change management concepts and improve business processes, interface with the System Operator to improve system reliability and established related management principles, and will work with the Transmission Service Provider to improve network maintenance reliability and installation of interface equipment such as 33KV breakers to improve distribution offtakes.

The PTFP Transmission team will:

- Ensure transmission system reliability and maintenance reliability concerns are effectively addressed for supplying power to grid connected customers 24/7 in a reliable, safe and secure manner.
- Ensure efficient utilization of government identified funding solutions including making projects bankable in time for construction to start.
- Ensure a reliable, efficient and cost effective network for the transmission of electrical energy.
- Ensure improvement to the financial and technical management of the Transmission Company in line with modern business practices.
- Ensure the Transmission Company is reorganized in a timely manner along with improving business practices, overall efficiency and effective capacity building of its staff.

Distribution

Following the handover of the Distribution companies to the new private owners, there will be a paradigm shift in the duties and responsibilities of the Performance Monitoring Team on Distribution.

The key areas of focus will be:

- Development and administration of an automated model for tracking hours of supply availability to customers in the major cities.
- Monitoring, escalating and resolution of Transmission/Distribution interface gaps.
- Monitoring and escalation of issues between the new owners and major customers/community clusters.
- Monitoring and escalation of major challenges to service delivery that require Government intervention.
- Facilitate the integration of relevant and viable rural electrification projects into the grid.
- Facilitate the integration of the newly completed NIPP Distribution projects into the grid
- Monitoring of grid metering projects.
- Development of strategies that will ensure sustainability in service delivery.
- Review of Distribution standards in line with best practices. These include:
 - Multiple vending options,
 - Accurate records of customer demography,
 - Load demand studies,
 - Improving customer care,
 - Retrofitting plan for aged equipment,
 - Loss reduction strategies.

Strategies to Improve Service Delivery

The Distribution team will continue to develop strategies that will encourage efficiency and reliability in distribution network operations and ultimately improved service delivery.

The following key areas have been identified as short-term measures to improve technical and commercial performance of the DisCos:

- Retrofitting of obsolete and unserviceable switchgears
- Re-conductoring of weak but essential 33KV, 11KV & 0.415KV Lines
- Replacement of failed equipment
- Evaluation of loss profile
- Grid metering delineation
- Integration of robust billing infrastructure
- Customer reclassification and indexation
- Aggressive deployment of customer meters
- Multiple vending options
- Operational Management Information system

It is expected that these will be resolved naturally by private-sector operators seeking increased performance to maximise profitability.

NIPP

In the coming year, Generation plants of the NIPP are scheduled to be privatised, the transmission projects ceded to TCN shall be fully integrated and energised and it is hoped that the Distribution projects are handed over to the new Distribution companies upon completion and on terms to be agreed.

Going forward, the PTFP shall:

- Continue to monitor and facilitate the completion of Generation, Transmission and Distribution projects of the NIPP programme, the divestment programme of the Power plants and providing technical and commercial expertise to the BPE and the NDPHC as the case may be.
- We shall continue to track and facilitate the completion of outstanding gas supply and gas transmission projects and agreements, monitor, intervene and facilitate the resolution of third party issues impacting on the completion of these projects including way leave, waivers and community issues.

Market/Energy Efficiency and Renewables (MEER)

Renewable Energy

Given the profit-oriented nature of the private sector and with the privatisation of the DisCos, it is expected that they will concentrate on areas that assure revenue for energy consumed and areas that are easy to serve. In other words, those other areas that are difficult to collect and areas that are difficult to serve, especially the rural areas, will be de-emphasised in the scheme of operations in the short run.

Whereas some urban areas may represent difficult to collect areas, the rural areas represent both difficult to serve and collect hence it is expected that service to the rural areas will further deteriorate in the periods immediately after privatisation.

It is against this backdrop that the Market Efficiency, Energy Efficiency and Renewable Energy (MEER) unit will strive through the implementation of the Sustainable Integrated Renewable Energy Scheme (SIREs) to serve as a means of ameliorating the anticipated drop in service levels of service to the rural communities as well as give further impetus to the drive of the federal government for increased electricity access to rural and off grid communities.

This will be a multi-sectorial effort comprising all the sectors of government involved in the delivery of renewable energy, including the regulatory agency and the legislature as may be required for the development of enduring systems that will ensure sustainability.

Market Efficiency

Yola DisCo currently is not contributing to the wholesale electricity market even in the pre- TEM period as is contained in the Interim Rules published by the regulator. Some reasons have been adduced for this inability, chief among which is poor voltage profile and this is in addition to the lingering security situation in the area. Barring security issues and in the light of new threat to gas pipelines threatening to stagnate power generation growth, the MEER unit will strive for the implementation of on-grid sustainable integrated renewable energy schemes in Yola DisCo as means of ameliorating identified power supply shortfall hence ensuring availability of minimum power requirements for profitable operations.

Grid metering remains a very important aspect of the wholesale electricity market and will play an important role in the emerging electricity market as we transit to the transitional electricity market. Past experience reveals that available infrastructure for the delivery of grid metering may not be adequate.

It is understood that as the electricity market assumes a more market oriented mode, margin(s) for errors in meter data will progressively diminish. This therefore will mean that grid metering infrastructure, including meter data management will have to be optimised for efficient delivery especially during TEM. In this regard the MEER unit will strive for the implementation of the grid metering infrastructure audit as a means of gauging the extent of intervention that will be required to put the grid metering unit in good stead during TEM.

Reform

2014 is expected to witness the commencement of TEM, upon the conclusion of the Interim Rules Period (IRP). The commencement of TEM is expected to result in an electricity market that is driven by bilateral contracts, private sector entry, and efficiency and competitiveness that is driven by private sector initiative. It is also a period in which all the industry stakeholders are expected to play their appropriate roles, which is key to attaining the objectives of the reform, improved electricity supply and a sustainable electricity market. NERC, as the regulator, consistent with power sector reform literature, is expected to provide a balanced regulatory framework that ensures the needs of electricity consumers are balanced with ensuring that the cost structure necessary to encourage the entry of private sector investment into the market is in place.

The Ministry of Power, as the agency tasked with policy formulation for the sector, is expected to orient its philosophy and portfolio from operating an integrated power utility, to providing support to the sector via feasibility studies, energy mix planning, enactment of alternative energy policies, etc. In order to ensure that the Nigerian public is not short-changed from the privatization, the Bureau of Public Enterprises (BPE) and NERC will work closely together, to implement the post-privatization framework, ensuring that the new owners meet the terms and conditions of their performance agreements and business plans.

With the eventual culmination of the World Bank's Partial Risk Guarantee (PRG) program, it is expected that this securitization arrangement will provide significant inducement for independent power development. That is, an increase in the number of Independent Power Producer (IPP) Greenfield projects. Thus, NBET continues to work towards putting in place the requisite PPA templates, administrative support structure and technical expertise to support this projected growth.

It is also important to acknowledge that, in spite of the bright future that awaits the re-birth of the Nigerian Electricity Supply Industry (NESI), challenges associated with a nascent sector are not unexpected. Improved power supply will remain subject to the ability of the new owners to put in place the measures and plans that were specified in their business plan, in a timely manner.

Labour

On the labour relations front, a vibrant and motivated workforce characterized by a new work orientation with efficiency and productivity as its distinguishing elements will be prioritized in 2014. The Task Force will require continued handling of post-privatization issues and carrying out enlightenment programs to re-orient the workforce in line with the Nigerian labour laws. Our efforts will maintain effective monitoring of the new private owners in order to ensure that their

industrial relations and business practices are consistent with the labour laws and constitution of the Federal Republic.

Labour Issues and Challenges in 2014

- Settlement of all residual and unfinished severance payments to about 2,000 uncleared casual staffs of PHCN.
- Post-Privatization re-orientation training workshops for the Management and workers of privatized Power Sector to strengthen their partnership in conformity with extant Labour Laws.
- Facilitating the speedy emergence of the new private power operators into a formidable group in the Organized Private Sector, through their membership of Nigeria Employers Consultative Association (NECA), and assisting them to streamline and benchmark the labour unit costs for the sector.
- Encourage the new private Power Operators to forge a strong working relationship and mutual understanding with the two existing labour unions in the sector.
- Moderate and drastically reduce the propensity of the two power sector unions to embark on work stoppages and cause unnecessary dislocation in the electricity output, nationwide.

POST PRIVATISATION CONSOLIDATION STRATEGY

Risk Profiling

As the industry becomes increasingly private-sector driven, concerns can be described as any risk that could be expected to have an impact on investment returns. This can be viewed as an impact either in terms of the absolute nominal returns or the probability of achieving these returns over the short, medium and long terms.

Nigeria must now start to accept that increased uncertainty in any aspect related to the payment, the production and delivery, the operation and maintenance of power will result in an increased cost of power. Such increases, over the long run, will not be borne by investors; but rather must be borne by either the market itself (i.e. the current and future consumers of power) or the government (i.e. the current and future taxpayers of society). In this reality, one should consider the potentially-exponential growth of our market which even if increased by a factor of 16-fold (i.e. it doubled four times) would still leave Nigeria below the per-capita power production of leading African countries. This fact demonstrates that the future consumers of power have an equal, or perhaps even greater, stake in the success of today's electricity market.

The government must now wholly-acknowledge this new reality if it is to create a viable and sustainable market for today's and tomorrow's citizens and mitigate aggressively against risks that threaten this nascent market.

POST PRIVATISATION: RISK MITIGATION

Topic	Risk	Impact	Proposed Mitigation	Agents
Rate Concerns	Recalculation of ATC&C Losses for Discos and tariff inputs	Underestimation of system losses will lead to underpricing of tariff and investment losses by new owners	Loss study for Discos to be conducted during IRP	NERC
	Customer tariff increase	Political pushback	Extension of FGN Subsidy beyond June-2014 Redesign/reclassification of tariff customer classes	FGN NERC
Interim Rules Period	Delays in IRP Process	Delay in the start of TEM Drop in Market confidence Drop in confidence in NDPHC privatisation	IRP to TEM Migration Workplan detailing tasks and agencies responsible	NERC
	Inaccurate work program	Drop in Market confidence	Validate NERC work program	PTFP
	Inadequate project management of deliverables	Late or inadequate conclusion on deliverables. Delay in investment from private sector	Project monitoring & oversight of IRP agents	PTFP

Topic	Risk	Impact	Proposed Mitigation	Agents
TCN	Inadequate Corporate Governance	Ineffective governance – management uncertainty	Monitor effectiveness of Board	MoP
	Weak Executive Management	Ineffective management – delays in grid expansion	Establish with MoP a comprehensive M&E function for TCN	PTFP
	Weak Project Management	Ineffective application of recently-acquired funds	As above	PTFP
	Weak Operational Management	Ineffective application of recently-acquired funds	As above	PTFP
Gas	Bunkering	Reduced supply of gas => reduced power Increased FG financial payments to market for guarantees to power investment	Has been escalated to PACP. Actions - ongoing	PTFP
	Vandalism	Reduced supply of gas leads to the reduced supply of power Increased FG financial payments to market for guarantees to power investment	Has been escalated to PACP. Actions - ongoing	PTFP
	Commercialisation & Contract Delays	Delay in the development of the necessary gas fields to support power growth.	Sector focus on execution of Gas Supply Agreements (GSA) and regular payments for gas offtake.	Ministry of Petroleum Resources
	Procurement & Funding Approval & Disbursement Processes	Procurement and funding decisions are delaying project delivery timelines. Funding of NPDC gas projects to be direct rather than through JV-IOC structures.	Review of funding and procurement processes	Ministry of Petroleum Resources

Topic	Risk	Impact	Proposed Mitigation	Agent
Technical Regulation	Short-term: Technical Inspection	Absence of clarity will result in confusion and drop in market confidence	Formal assignment of inspectorate services to EMS with the sector functions that they are to perform	NERC
	Medium-term: Technical Regulation	Absence of clarity will result in drop in market confidence	To set up an independent regulated body in charge of all technical regulatory issues. Similar to US FERC/NERC or NG FAAN/AIB	NERC
Market Nurturing	Fund for Market shocks. E.g. Floods	Fund availability will provide confidence to Market Participants on readiness to support market as it grows.	To establish a power support fund for market shocks. This could be repaid back by a small 'reform' charge on future consumers' tariffs	FGN/NERC
	Resolution of Pre-Reform liabilities	Clarity of resolution mechanism will provide confidence to Market Creditors (e.g. gas providers) to expand capacity post-privatisation	To establish a power reform charge within MYTO tariff to pay pre-Handover and pre-TEM liabilities	NERC

Topic	Risk	Impact	Proposed Mitigation	Agents
Regulator Independence	Political involvement in market decisions	Reduction in investment and private sector involvement in market	Clear, objective and visible processes for decision making with regular sector communication.	NERC
Greenfield Securitisation	Clarity/ Conclusion on solution	Delay in concluding on a solution will decrease the market confidence of greenfield investors	Conclude on Put Call Option Agreement contract	Ministry of Finance
	Inclusion in 2014 borrowing plan	Failure to include solution in 2014 budget/ borrowing plan will decrease market confidence of greenfield developers and may delay initiation of projects	Submission and inclusion in 2014 borrowing plan	FGN/National Assembly
JV-IOC	Delays in O&G license renewal	Diminished scheduled commitment w.r.t. gas supply to power generation sector.	Provision of clarity on license renewal.	Ministry of Power/ FGN/ National Assembly

POST PRIVATISATION: FORWARD THINKING

Reconfiguration of the Rural Electrification Agency (REA)

Prior to the handover of the distribution companies, the **Rural Electrification Agency's model of development** had been principally via grid extensions. This is unlikely to be possible in the new private-sector led market as these grid extensions are often economically unviable from an operating expenses perspective and will be resisted by new owners. New models should be investigated for providing power to off-grid/ remote locations.

- REA might operate as a financial/ commercial accelerator (rather like NBET) in guaranteeing power production to off-grid generators/ facilitators;
- REA could be a co-investor in off-grid PPP-type solution – this might be a possible strategy if there is a significant core power consumer – e.g. agro-industrial processing.

Fuel Diversification and Grid Planning Studies

With the current problems surrounding gas availability caused by bunkering and vandalism, it has become critical that other sources of power generation are investigated: coal, small-hydro, **renewables, etc.** **These new sources of power will increase the country's energy mix** creating a more robust base of power. At the moment, there is significant and outstanding work that needs to be completed for the private-sector to invest and operate in these fields in both policy and regulation. It is essential that these are brought to a conclusion in the shortest time possible to provide the nation with much-needed and increased energy security. Despite its bad press from environmentalists, coal remains the fuel of choice for providing the base power load capacities for most power markets; if Nigeria is to increase its per capita power availability indices to that of other developing and emerging countries these alternatives will need to be developed.

Establishment of a National System Reliability and Efficiency Agency

With the sale of the successor companies to the private-sector we are embarking on a journey that should produce an order of magnitude change in the size of our national power sector. It is not unreasonable or overly-optimistic to expect a 10-fold increase in generation achieved delivering **45,000 MW (a number still less than South Africa's current capability)**. **In order to ensure that this goal is achieved in a safe, stable and secure manner it may be necessary to follow the examples of other nations and establish a body responsible for maintaining reliability standards to ensure that the parts of the various grids – transmission and distribution form a cohesive whole.**

Taking the United States as an example: *"...With the passage of the Energy Policy Act of 2005, an "Electric Reliability Organization" was created to develop and enforce compliance with mandatory reliability standards in the U.S. This non-governmental, "self-regulatory organization" was created in recognition of the interconnected and international nature of the bulk power grid.As part of the fallout of the Northeast Blackout of 2003, the Energy Policy Act of 2005 authorized the Federal Energy Regulatory Commission (FERC) to designate a national Electric Reliability Organization (ERO). On July 20, 2006, FERC issued an order certifying NERC as the ERO for the United States...."*

CONCLUSION

While 2013 was indeed the "make-or-break-year" for the Power Sector Reform in Nigeria, thanks to the collective efforts of this Administration, history was made with the completion of the privatization exercise of the PHCN assets. The Goodluck Administration achieved this historical feat making good on its power sector reform promise. Collaborative efforts from all power sector value chain operatives helped transition the electricity industry from government owned and operated to private sector-led and driven.

The Presidential Task Force on Power along with government ministries, departments and agencies has conceptualized the sector playbook to move this market towards viability and sustainability. The identified threats ranging from vandalism of crude oil, gas and power infrastructure assets to inadequate funding and late approvals of critical gas and transmission projects must be mitigated in 2014 while at the same time an exerted focus on the renewable and clean energy market must be made.

To ensure that this progress maintains its momentum, it is critical that in 2014 highlighted risks, threats and opportunities are addressed to ensure the market can profitably perform, thrive and ultimately meet the long overdue needs of the Nigerian consumer's **domestic**, commercial and industrial markets.

It is only when this happens that the nation can truly achieve its full potential as an African titan.

Appendix 1:

REFORM AGENDA PILLARS

The Electric Power Sector Reform Act (EPSRA) 2005 set out the following key milestones:

Key Milestones	
1	The creation of a holding company for all public-sector power assets.
2	The unbundling of the holding company.
3	The corporatisation of successor companies.
4	The commercialisation of successor companies.
5	The privatisation of successor companies.
6	The creation of new generation and distribution entities.
7	The development of a competitive electricity market.

By August 2010, at the launch of the Roadmap, four of the above milestones (1, 2, 3, & 6) had been achieved.

The Roadmap had two fundamental objectives:

- Implementing the outstanding milestones of the EPSRA – *The Reform Objective*
- Improving service delivery over the transition – *The Service Delivery Objective*

The Roadmap set out explicit work plans to deliver the outstanding reform milestones and improvements in service delivery.

The Reform Work Plan

The Reform Work Plan had 3 high-level categories. These contain 13 high-level reform tasks:

Removing Obstacles to Private Sector Investment

- I. The establishment of an appropriate pricing regime
- II. The establishment of a bulk purchaser
- III. The provision of FGN Credit Enhancement
- IV. Creating an efficient and motivated workforce
- V. Operationalising NELMCO
- VI. Contracting out management of TCN
- VII. Clarifying and strengthening licensing regime
- VIII. Strengthening (and re-establishing) NERC

Clarifying FGN Strategy on the Divestiture of PHCN Successor Companies

- I. Concessioning of hydro power
- II. Sale of thermal generation plants

- III. Management Contract for TCN
- IV. Sale of electricity distribution companies

Reforming the Fuel-to-Power Sector

- I. Long-term Gas sector reform (PIB)

The Service Delivery Work Plan

The Service Delivery Work Plan had 2 high-level categories. These contain the 8 high-level reform tasks:

Value Chain Optimisation Measures

- I. Fuel-To-Power
- II. Generation
- III. Transmission
- IV. Distribution

Non-Engineering Measures

- I. Industry-wide data compilation and dissemination
- II. Human capital development
- III. Cross-sector discipline
- IV. Energy consumption efficiency and demand-side management

Appendix 2:

OUR MANAGEMENT TEAM

Reynolds Bekinbo Dagogo-Jack, FNSE *Chairman*

Engr. Reynolds Bekinbo Dagogo-Jack was appointed as the Chairman of the Presidential Task Force on Power (PTFP) on September 5, 2012. He had earlier served as the Senior Special Assistant to the President and Senior Performance Monitor for the National Integrated Power Projects (NIPP) at the PTFP. He is a foundation member of the PTFP from its inception in June 2010.

An accomplished and chartered civil engineer, he has core competence in a wide variety of disciplines spanning over thirty years of public and private sector experience. These areas include major infrastructure development and maintenance policy and programme. His most recent professional engagement was the performance monitoring, evaluation and facilitation for the completion of over four hundred ongoing power projects under the National Integrated Power Projects (NIPP) programme.

Prior to joining the PTFP, he had served twice as Commissioner for Works and Transport in Rivers State between 1997 and 2007. In 1996, he was appointed a member of a six-man Committee for sharing the assets and liabilities for newly created states: Sokoto/Zamfara and Bauchi/Gombe. Between 1992 and 1994, he served as a Deputy Director/Special Assistant to the Chairman of the Technical Committee of Privatisation and Commercialisation (now BPE) and was involved in the preparation of enterprise reform packages for the National Electric Power Authority, Nigerian Telecommunications Limited, Nigerian Ports Authority, and Federal Mortgage Bank. Engr. Dagogo-Jack was also Secretary to the Nigeria Airways Privatisation Sub-Committee.

In 2007, he was appointed Sole Administrator of the Rivers State Transport Corporation (RTC) which he transformed from a moribund State Agency into a viable self-sustaining commercial enterprise by reactivating its dormant assets, changing the employee culture and repositioning the company to become competitive - all within a period of one year.

Engr. Dagogo-Jack started his career in the downstream petroleum sector from 1982 to 1989. During this period, he rose through the ranks of management trainee with Unipetrol Nigeria Plc (now Oando Plc), progressing steadily to management cadre at Elf Petroleum Nigeria Ltd (now Total Nigeria) before his appointment as Special Assistant (Technical) to the Minister of Aviation in January 1990.

He graduated from the University of Benin in June 1980 with a Bachelor's degree in Civil Engineering, with distinctions in hydraulics and advanced structures. He has attended several advanced management and engineering courses in the United States and Nigeria. Whenever he is released from public service duties Engr. Dagogo-Jack engages himself in private practice and providing engineering consultancy services.

Tukur Tahir Aliyu, MNSE *Secretary to the Board*

Engr. Tukur Aliyu heads the Presidential Task Force on Power Secretariat which ensures that its activities are in full compliance with all Federal Government policies and practices. The Secretariat also guarantees that accurate and measurable value is received for all expenditures made by PTFP by evolving and working out the variable templates and metrics.

Engr. Aliyu has a Bachelor's degree in Electrical and Electronics Engineering from the Abubakar Tafawa Balewa University, Bauchi and is a Corporate Member of the Nigerian Society of Engineers. After his national service, he worked as an engineer at the Yobe Broadcasting Corporation, Damaturu. He has also held many senior positions in the Federal Ministry of Power. Before his appointment as PTFP Secretary, he was an Assistant Director in the Electrical Inspectorate Services Department of the Federal Ministry of Power. He has attended training courses on public sector budgeting, budget implementation, electrical supply regulations, management of energy utilisation, rural electrification and hydro-power plant operations.

Clement Oke, FNSE *Senior Performance Monitor, Fuel-to-Power*

Engr. Clement Adeyinka Oke, is the head of the Fuel-to-Power team, charged with monitoring and facilitating gas producers and transportation companies in the development, production, processing and supply/transportation of natural gas and alternatives fuels to meet the energy needs of Nigeria. His duties include establishing the current status of gas supply, pipeline transportation network, ongoing projects and planned activities related to the fuel-to-power sector. His team interacts with the NNPC Gas and Power Directorate, Gas Aggregation Company of Nigeria and gas supply companies to collate and analyse data and is a member of the Inter Ministerial Petroleum and Power Emergency Domestic Gas Committee and Coal to Power team of the Ministry of Power. They also identify issues relating to meeting the immediate and future gas demand for power and monitor the supply and demand chain.

He has more than forty years industry experience holding senior engineering and management positions in the Nigerian National Petroleum Corporation, West African Gas Pipeline Company, Shell Petroleum Development Company, National Electric Power Authority and the North Eastern State Ministry of Irrigation. Engr. Oke is a Chartered Engineer (UK) and Corporate Member of the following professional bodies: Institution of Gas Engineers (U.K.) and Institution of Mechanical Engineers (U.K.); Fellow of the Nigerian Society of Engineers and a Member of Council for the Regulation of Engineering in Nigeria (COREN).

Clement Oke studied Gas Engineering and Management at the University of Salford, UK and the College of Petroleum Studies, Oxford. He also holds a Bachelor of Mechanical Engineering degree from the Ahmadu Bello University, Zaria.

Simeon Atakulu, FNSE *Senior Performance Monitor, Generation*

Engr. Simeon Atakulu, is the Senior Performance Monitor in charge of the Generation team that monitors and reports performance of all generating plants in the country. He also advises on reform strategy with respect to the unbundled Power Holding Company of Nigeria generation companies and performance improvement techniques. Simeon is an expert in power plant development and management, asset life cycle assessment, predictive maintenance, and engineering procurement contract placement and management. His core skills include plant condition diagnostic, assessments and forecasting, planning and project management, database management, and human capacity development and management.

With over thirty years of experience in the power sector, Engr. Atakulu has a Bachelor of Science degree in Mechanical Engineering from the University of Nigeria, Nsukka and a Master of Business Administration certificate specialising in technology and business strategy from the Ogun State University, Ago-Iwoye. He has certifications in Management, Vibration Measurement and Machine Diagnostics, Advanced Thermal Power Plant Management, Power Generation Maintenance,

Project Management and Software Application. He is a fellow of the Nigerian Society of Engineers and a Member of the Nigerian Institute of Management.

Ron Verraneault *Senior Performance Monitor, Transmission*

Ron Verraneault is the Senior Performance Monitor for Transmission and also serves as Special Advisor to the Minister of Power on Grid Reliability. He served as the Executive Director, Transmission Service Provider for the Transmission Company of Nigeria.

Ron's professional career spans over twenty-five years in nuclear and electric power ranging from technical and operator roles to engineering, maintenance, project management and management of power systems. His management background also includes project management of capital projects and overseeing related construction, industrial and utility projects.

Ron began his career at the U.S. Nuclear Navy as an electrician qualified as Engineering Watch Supervisor with responsibility for the maintenance program and overseeing nuclear work as a quality assurance inspector. His experience also includes working as a technical trainer in the utility sector, a research assistant at a U.S. National Research Laboratory, and also as a self-taught **protection engineer. Ron's field experience encompasses performing** substation maintenance, managing field crews, protective relaying, safety and project commissioning activities. He also has extensive system operations experience entails working as dispatcher, transmission operator, generator operator, interchange operator, along with managing the energy broker system and plant gas supply. Ron is also U.S. NERC certified as a power system reliability coordinator.

He completed the U.S. Naval Nuclear Power program and obtained a Bachelor of Science in Electrical Engineer from Florida State University and also completed graduate level course work modelling and analysing electric power systems.

Abu Kadiri, MNSE *Acting Senior Performance Monitor, Distribution*

Engr. Abu Kadiri has been acting as the Senior Performance Monitor for the Distribution and Service Delivery team since March, 2013. The team is charged with the responsibility of monitoring the performance of the technical and commercial operations of the Distribution companies.

His duties amongst others include: establishing the baseline offtake capacities of the Distribution companies, monitoring and facilitating the completion of Distribution projects that will enhance the offtake capacity and improve the reliability/stability of the distribution network.

He is an Electrical Engineer with a field experience spanning over two decades in engineering consultancy services, distribution system planning, design and management. He has a good knowledge of power sector policy, regulatory and institutional frameworks with broad experience in organizational strategic planning and project/program management. He has worked in both public and private organizations.

He is a pioneer staff of the Presidential Task Force on Power where he started as Technical Adviser (Transmission and Distribution) and later became a Senior Technical Adviser (Distribution and Market Operations).

He holds a Bachelor and a Master of Engineering Degree in Electrical Engineering from Bayero University, Kano. He also attended numerous local and international capacity building programs in

Engineering and Project Management. He has obtained executive education certificates from the following selected institutions:

- Georgia State University - Atlanta, USA
- University of Illinois – Chicago, USA
- University of Cape Town, South Africa
- ENERDATA, Energy Intelligence - Grenoble, France
- Crown Agents - Sutton Surrey, UK
- Royal Institute of Public Administration (RIPA) – London, UK

He is a Corporate Member of the Nigerian Society of Engineers (NSE) and a registered Engineer with Council for the Regulation of Engineering in Nigeria (COREN).

Chike Madueke, MNSE Senior Performance Monitor, NIPP

Engr. Chike Madueke heads the National Integrated Power Projects (NIPP) monitoring team. This team monitors and evaluates the performance of over four hundred projects. As Senior Performance Monitor Chike leads the team to ensure the delivery of all the new NIPP generation, transmission, distribution and gas supply projects in the country. His team evaluates and reports all processes and system gaps in the management of the projects, and recommends actions to improve performance.

He holds a Bachelor's degree in Chemistry from the University of Ibadan, a Masters in Metallurgy and Materials Engineering from the University of Manchester, trained in Die Design and Production Engineering at SMC, Hammamatsu, Japan and has a Post Graduate Diploma in Management at the University of Lagos. He has also attended Harvard University, for Technology Innovation training, Massachusetts Institute of Technology (MIT) for Enterprise Transformation, and Stanford University for Advanced Project Management Courses. He is currently pursuing an online doctorate degree in Organisational Leadership at Grand Canyon University, Phoenix, Arizona.

Engr. Madueke is versatile and has held Chief Executive positions at several Engineering and Manufacturing organisations pioneering the development of local content capabilities and industrial projects. A resource person to the Presidency and four Ministries, he sits on the governing board of two Nigerian universities. For his contributions to the development of technology and industry in Nigeria, he has received a National Honour - the National Productivity Order of Merit (NPOM). He is a Corporate Member of the Nigerian Society of Engineers.

Chidi V. Ike, MNSE Senior Performance Monitor, Market/Energy Efficiency & Renewables

Engr. Chidi Ike is the Senior Performance Monitor for the Market Efficiency, Energy Efficiency and **Renewables (MEER) team at the Presidential Task Force on Power. He has a Bachelor's Degree in Electrical Engineering from the University of Nsukka, an MBA in Technology Management from the Abubakar Tafawa Balewa University in Bauchi in addition to various Computer Science certifications.**

Chidi has garnered a broad perspective of the power industry by serving in various capacities in the sector and, most importantly, having held supervisory responsibilities as an embedded Nigeria Infrastructure Advisory Fund Advisor at the Presidential Task Force on Power.

Prior to this role, he also served as the Senior Performance Monitor of the Distribution and Market Operations Unit at the PTFP. This responsibility entailed oversight responsibilities over all the

eleven distribution companies including the Market Operations Unit of the Transmission Company of Nigeria (TCN). As a foundation member to the Task Force, Chidi also held the Embedded Advisor role for the PTFP Transmission and Distribution Units respectively.

His career in engineering has spanned over 23 years in the power industry of which fifteen of those years were spent in transmission and distribution management roles at the Power Holding Company of Nigeria (PHCN).

Azu Obiaya *Senior Performance Monitor, Regulatory and Transactions Monitoring*

Azu Obiaya leads the Regulatory and Transactions Monitoring Unit of the Presidential Task Force on Power. His portfolio covers all the elements of the privatization of the Power Holding Company of Nigeria's successor companies, being implemented by the Bureau of Public Enterprises, as well as the regulatory activities of the Nigerian Electricity Regulatory Commission. The team also monitors and facilitates the activities of other sector players such as the Nigerian Bulk Electricity Trading Company and the Nigerian Electricity Liability Management Company.

Azu holds a Bachelor of Arts degree, majoring in Economics, as well as a Master's in Business Administration specializing in Finance. He has over twenty-four years of work experience, with the last twelve years in senior management positions. A preponderance of his experience has been derived from working in development consulting, as a full-time employee of Cardno Emerging Markets Group, Deloitte Touche Tohmatsu Emerging Markets and Development Alternatives, Inc. He has also worked in the public sector as a Special Assistant to the Ministers for Transport, and Mines and Steel Development.

Ebipere Clark *Senior Performance Monitor, Programme Management Unit*

Ebipere Clark is the Senior Performance Monitor of the Programme Management Unit (PMU) responsible for the coordination and organization of Task Force activities and projects. The PMU gathers and collates information on all gas to power projects (in both the public and private sectors), particularly planned or new generation, transmission, distribution and maintenance and rehabilitation activities. The unit monitors work plans of power reform project owners and related activities conducted by agencies of the power sector.

Mr. Clark has sixteen years of experience working in the capital markets in the United Kingdom and Japan specializing in capital markets structuring, trading, and risk management, derivative-finance theory, technology and systems; and large-scale trading platform development. Prior to joining PTFP in 2010, he worked as Chief Operating Officer of a road construction firm in Bayelsa State.

Clark has a Master's Degree from Cambridge University, UK in Engineering. He co-authored *Collateral Damage: Global Crash Phase Two*, where he wrote a chapter on the history and uses of Credit Derivatives.

Awele Okigbo *Senior Performance Monitor, Media and Communications*

Awele Okigbo is the head of the Task Force's Media and Communications Unit and responsible for all media and communications initiatives. Under her direction, the Media and Communications Unit enlightens critical stakeholders such as the Presidential Action Committee on Power, the media, labour unions, international organizations, private sector, civil society groups as well as the general public on the power sector reform activities and the various steps being taken to successfully build a dynamic private-sector led power industry.

Mrs. Okigbo holds a Bachelor's degree in International Relations and French from Tufts University in Boston, during which period she also studied at l'Université de la Sorbonne in Paris. Mrs. Okigbo has a Master's degree in International Communications and Marketing from American University in Washington DC, and an Executive Masters of Science in Communications Management at the Università della Svizzera Italiana in Switzerland (in view). Awele has completed Advanced Strategic Communications Management courses at the Singapore Management University (Lee Kong Chian School of Business), University of Southern California (USC) and University of California Los Angeles (UCLA). She is a *Global Alliance for Public Relations and Communications Management* Scholar and Ambassador for Nigeria.

She has over seventeen years of experience in public relations, media relations, corporate communications, issues and crisis management as well as event management, project management and business operations, working in media (International Herald Tribune, Burston Marsteller, C-SPAN and Minaj Group), finance (International Monetary Fund), telecommunications (Cisco Systems) and in the public sector (Nigerian Electricity Regulatory Commission and the Ministry of Works).

Salisu Mohammed *Senior Performance Monitor, Labour Relations*

Salisu Mohammed promotes harmonious labour relations among all power stakeholders including the employees of the various generating, distribution and transmission companies that transformed from the Power Holding Company of Nigeria.

With a degree in history from Ahmadu Bello University in Zaria, Salisu has over twenty five years of industrial relations experience in Nigeria, West Africa and the United States of America. In the last ten years, he has worked as a professional consultant in government reform agencies focusing on labour restructuring issues. He has developed competencies in working with workers and their unions to achieve peaceful transition from public to private ownership.

A trained journalist, Mr. Mohammed is a seasoned communicator endowed with diplomatic skills which assist greatly in networking with stakeholders, and thus complementing the goals of PTFP in achieving the Power Roadmap. In addition to his training in history, Mr. Mohammed has a Master of Arts degree in Journalism from the University of Wales, Cardiff, and an Industrial Relations Diploma.

Benjamin Okoroafor *Head, MIS & Knowledge Management*

Benjamin Chibuike Okoroafor serves as the head of the Management Information Systems and Knowledge Management team, primarily responsible for providing technical, information and communications technology support to all the teams and operations in the PTFP.

As one of the foundation staff of the PTFP, Ben started out as a Technical Adviser before leading the MIS & Knowledge Management Team. His responsibilities include administration of the PTFP database, network and data security, hardware, software and communications infrastructure as well as provide technical support and administration for all online, web and mobile-based services to the PTFP and the Ministry of Power. He is also responsible for the administration of the Geographic Information System (GIS) Energy Map of Nigeria, and base data for the Nigerian Electric Power Database.

With over twenty years of experience in the fields of project management, fiscal analysis, digital design, GIS, information and communications technology, Ben has held senior positions and also served as lead consultant in several programmes and projects under various private firms, State

governments and the Nigerian Presidency as well as internationally with the World Bank and Esri Inc., California, USA. He holds a Bachelor of Arts in Mass Communication from the University of Nigeria, Nsukka, a Graduate Diploma in Project Management from Robert Gordon University, Scotland, alongside advanced professional certifications from Cisco, Microsoft, Oracle and Netronics. He is also an Esri-certified Geographic Information Systems Administrator. He has worked on fiscal monitoring, geospatial analysis, developmental and ICT-based projects in Nigeria, Burkina Faso, Gabon in Africa; California and New Jersey in the USA; Berkshire, England in the UK, and in several cities in the Middle East.

2013 ACTIVITY IN PIX



Figure 16: PTFP Chairman, Engr. Dagogo-Jack with NDPHC Chairman, James Olotu, at the Commissioning of Omotosho Power Station



Figure 17: Dr. Sam Amadi, Chairman, Nigerian Electricity Regulatory Commission, at the Power Sector Reform Roadmap Retreat in February 2013



Figure 18: Panelists at the February 2013 Power Sector Reform Roadmap Retreat



Figure 19: PTFP Management Team Site Visit to SPDC/NNPC JV Afam VI Power Plant



Figure 20: PTFP Delegation Visit to SPDC/NNPC JV Okoloma Gas Plant



Figure 21: L-R: Felix Darko (GM Philips West Africa), Engr. Beks Dagogo-Jack (PTFP Chairman), Ronald de Jong (Exec. VP Philips & Chief Market Leader), Prof. Chinedu Nebo (Hon. Minister of Power), Dr. (Mrs) N. N. Akanbi (Nigerian Ambassador to the Netherlands) during a site visit to Philips Corporate offices in the Netherlands



Figure 22: Ministry of Power and PTFP Delegation on tour of Alfen BV Almere installations in the Netherlands



Figure 23: Ministry of Power and PTFP Delegation on tour of Alfen BV Almere Renewable Energy Site in the Netherlands



Figure 24: Engr. Beks Dagogo-Jack, PTFP Chairman, at the ELEC RAMA 2014 Summit, India



Figure 25: PTFP Chairman, Engr. Dagogo-Jack, commissioning the Jos Disco Substation



Figure 26: President Goodluck Jonathan handing over Egbin Power Plant Share Certificate to new owners, Sahara/Kepeco, at the Presidential Power Reform Transactions Signing Ceremony in April 2013



Figure 27: Signing of the World Bank Nigeria Electricity and Gas Improvement Project (NEGIP) Partial Risk Guarantee for Egbin Power Plant at the Presidential Signing Ceremony in April, 2013



Figure 28: PTFP Chairman, Engr. Beks Dagogo-Jack, and some members of the PTFP team on a gas pipeline vandalism site inspection in Bodo, Rivers State

Contact Us

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