



Stakeholders' Consultation
on
The Review of MYTO Methodology

September, 2017

Outline



- **Introduction**
- **Legal Authority**
- **Context**
- **Critical Issues for review**
- **Steps taken by NERC**
- **Comments received**

Introduction



- **This consultation is in line with the business rules of the Commission to receive stakeholders' contributions toward amending the existing tariff methodology (MYTO) for the NESI with a view to enabling TCN and Distribution Companies (Discos) to effectively deliver on their targets.**

Introduction Contd.



- **Comments received from this consultation will be considered in line with the provision of Section 76(2) of the EPSR Act 2005.**

Legal Authority



EPSRA,
2005

- **Section 32 (1) of the EPSRA 2005**

Section 32
Subsection
1a

- To create promote, and preserve efficient industry and market structures, and to ensure the optimal utilization of resources for the provision of electricity services;

Section 32
Subsection
1 b

- To ensure that prices charged by licensees are fair to consumers and are sufficient to allow the licensees to finance their activities and to allow for reasonable earnings for efficient operation;

Section 32
Subsection
1c

- To ensure that regulation is fair and balanced for licensees, consumers, investors, and other stakeholders



Legal Authority Contd.



EPSRA,
2005

- **Section 76(1) of the Act: The following activities are subject to tariff regulation:**



Section 76
Sub-section
1a

- Generation and Trading; and
- Transmission, Distribution and System Operation.

Section
76(9)

- provides that if it appears to the Commission that a tariff methodology should be changed, the Commission shall give notice in the official Gazette, and in one or more newspapers; and

Section
76(10)

- provides that in changing the methodology, the Commission may, after taking into account any objection or representations received in response to the notice issued shall confirm the proposed changes to the tariff methodology.





Context

- **Following the procedures set out in Section 76 of the EPSR Act 2005 NERC established the Multi-Year Tariff Order (MYTO) in 2007 and amended it 2012**
- **The MYTO provides for a 15 year tariff path with major reviews every five years and minor reviews bi-annually to consider changes in the following parameters:**
 - Inflation;
 - Exchange rate;
 - Gas price;
 - System planning output generated by TCN;
 - Available generation capacity; and
 - CAPEX requirement required to evacuate and distribute the said available generation capacity.

Context Contd.



- **The MYTO is an adaptation of a price-cap version of incentive regulation that applies the following key elements:**



Use of rewards and penalties to incentivize utility performance;

Utility participates in setting goals or performance targets; and

Utility decides how to achieve goals.

Context Contd.

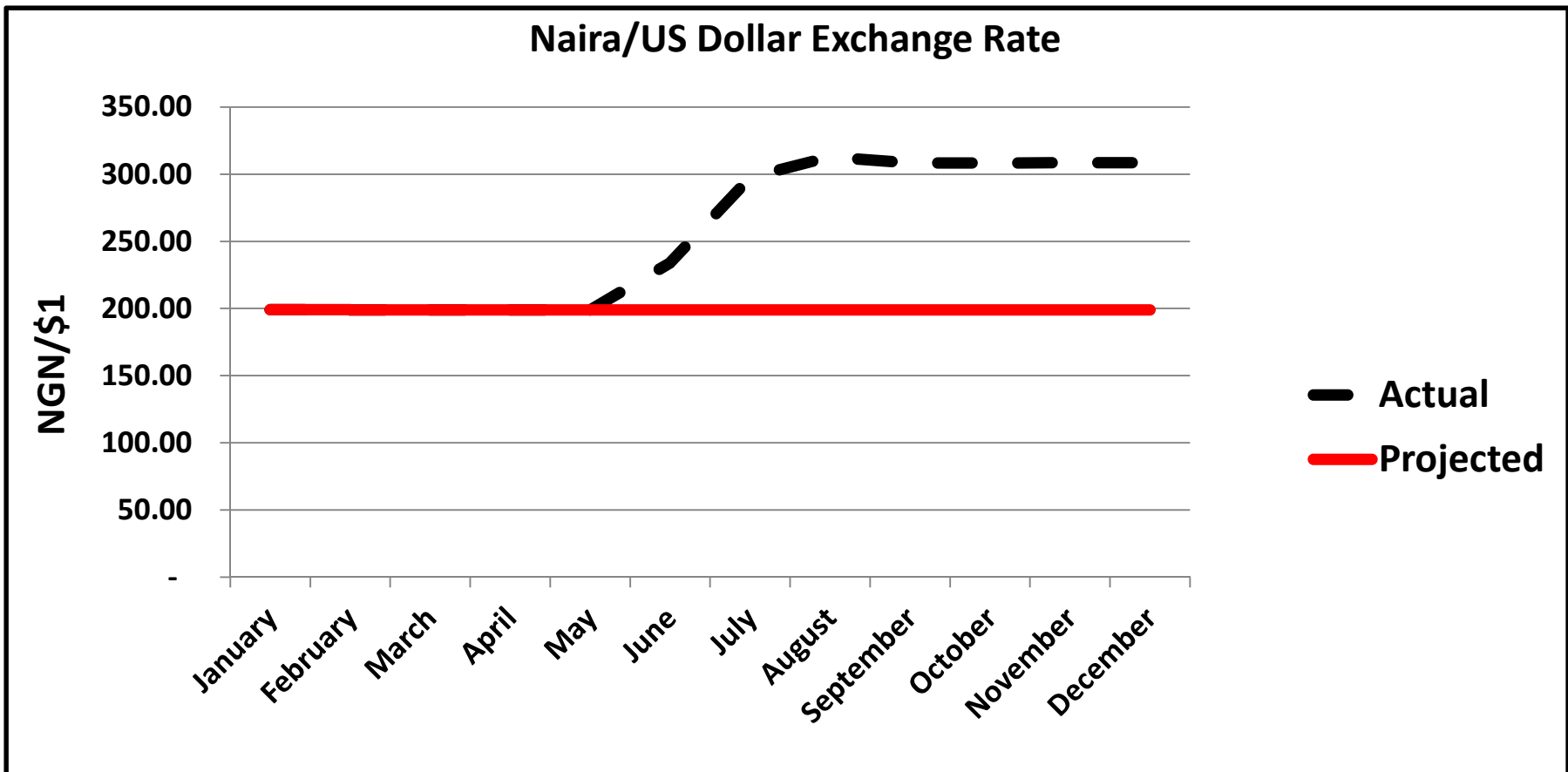


- **Concerns on the MYTO to be addressed via this consultation:**
 - Disparity in applying changes in foreign exchange (N/\$) between energy invoices that is indexed on a monthly basis and Disco end-user tariffs that are adjusted semi annually (every six (6) months)

Naira/US Dollar Exchange Rate in 2016



Month	January	February	March	April	May	June	July	August	September	October	November	December
Actual	198.97	198.97	198.97	198.97	198.97	234.08	297.52	312.83	308.28	308.32	308.56	308.56
Projected	198.97	198.97	198.97	198.97	198.97	198.97	198.97	198.97	198.97	198.97	198.97	198.97



Context Contd.



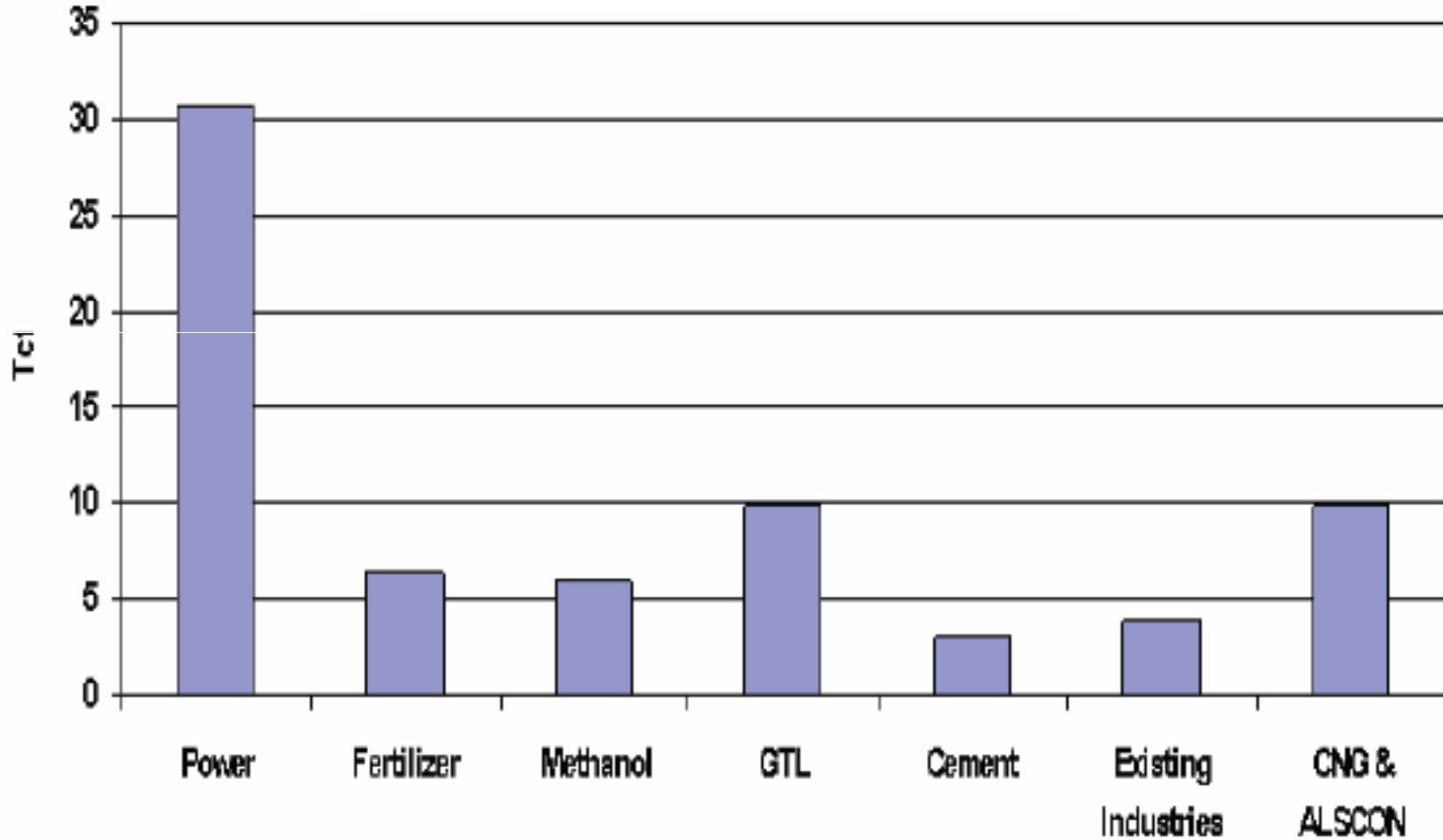
- **Concerns on the MYTO to be addressed via this consultation:**
 - Volumetric energy risk that exposes Discos and TCN to loss of revenue where projected energy generated and wheeled are not attained due to reasons not within the control of the network operators (Discos & TCN);

Domestic Gas Demand – Gas Sector Profile



Domestic Gas Reserves Requirement in Tcf (2007-2026)

Domestic Gas Requirement in Tcf (2007-2026)

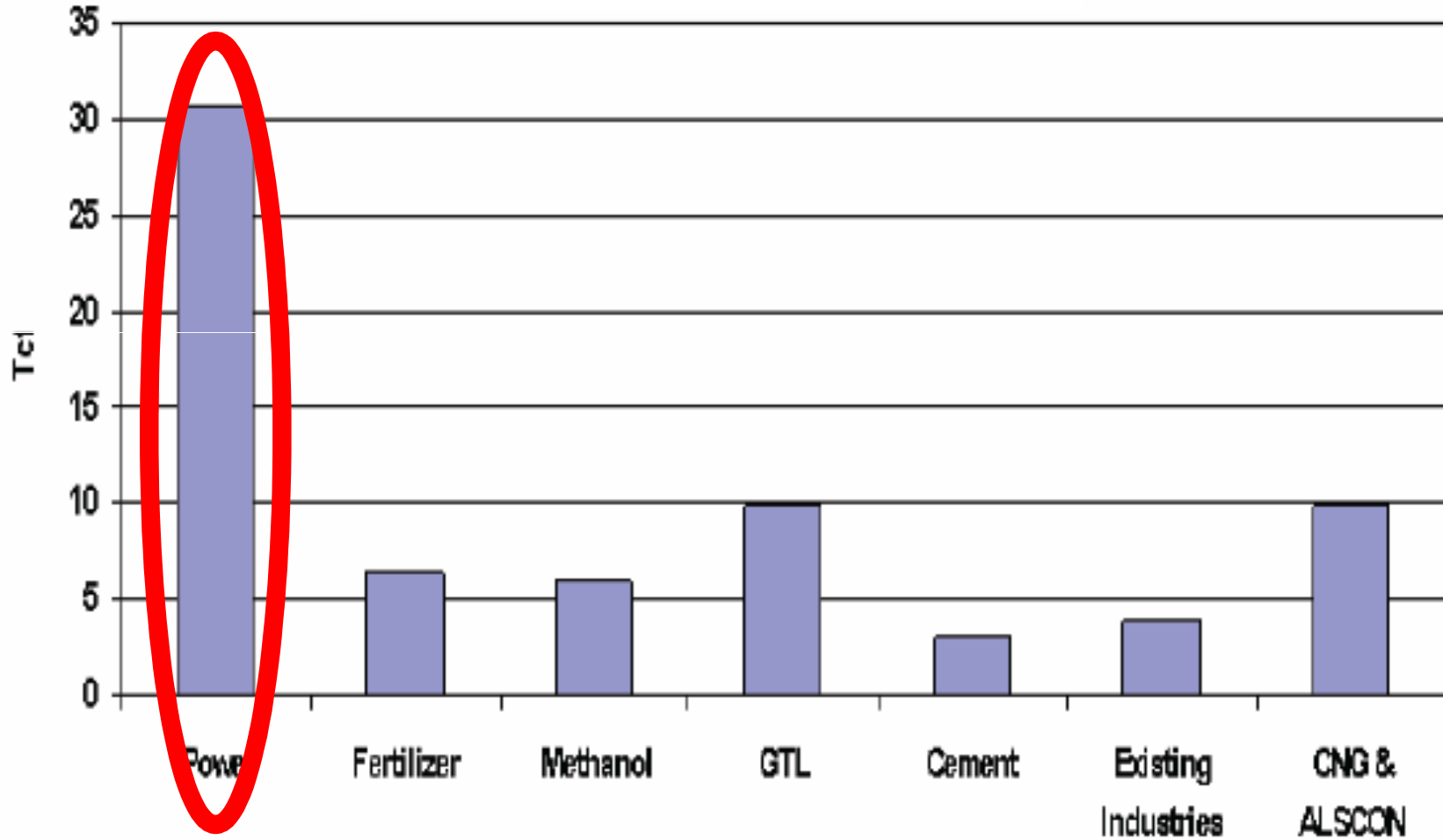


Domestic Gas Demand – Gas Sector Profile

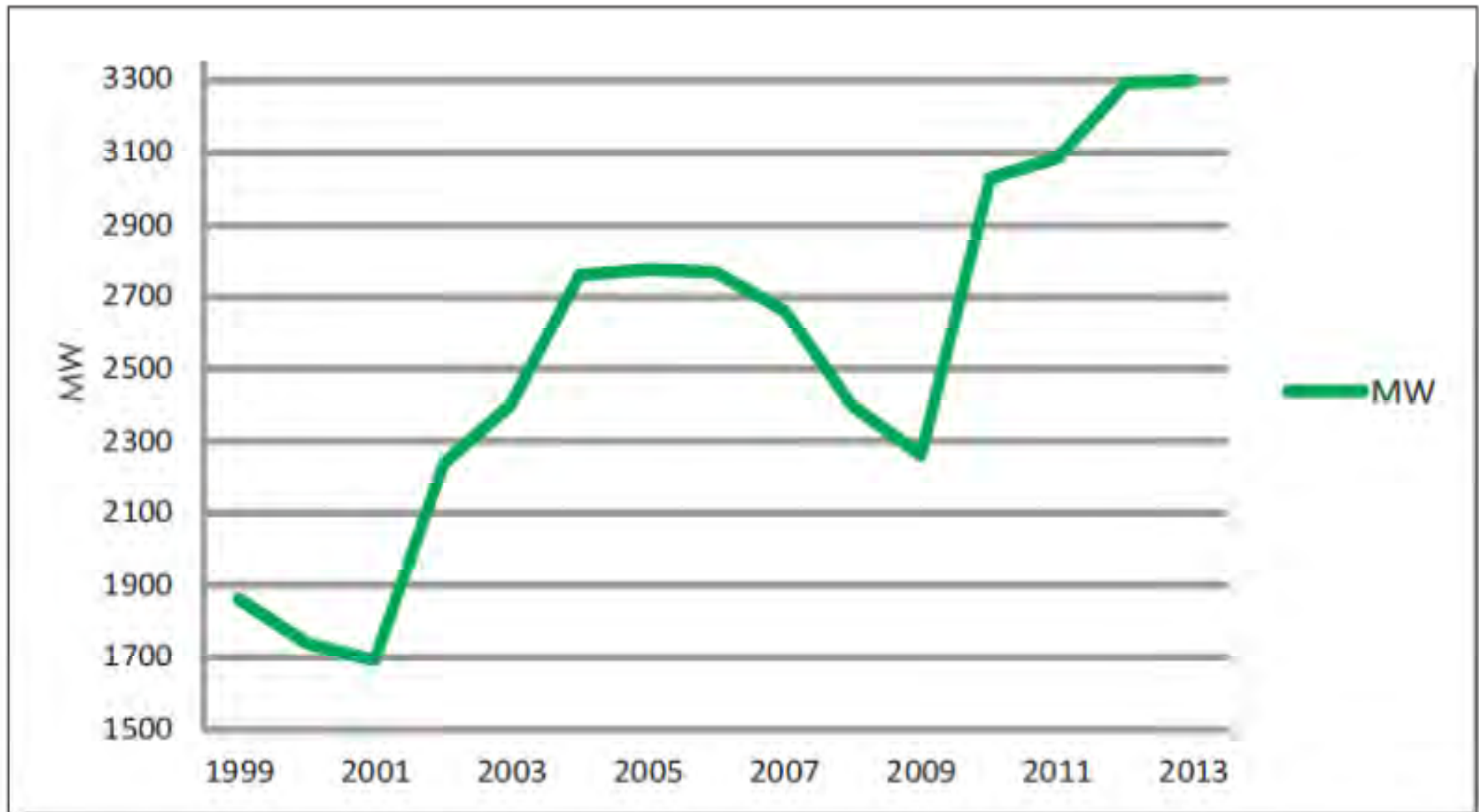


Domestic Gas Reserves Requirement in Tcf (2007-2026)

Domestic Gas Requirement in Tcf (2007-2026)

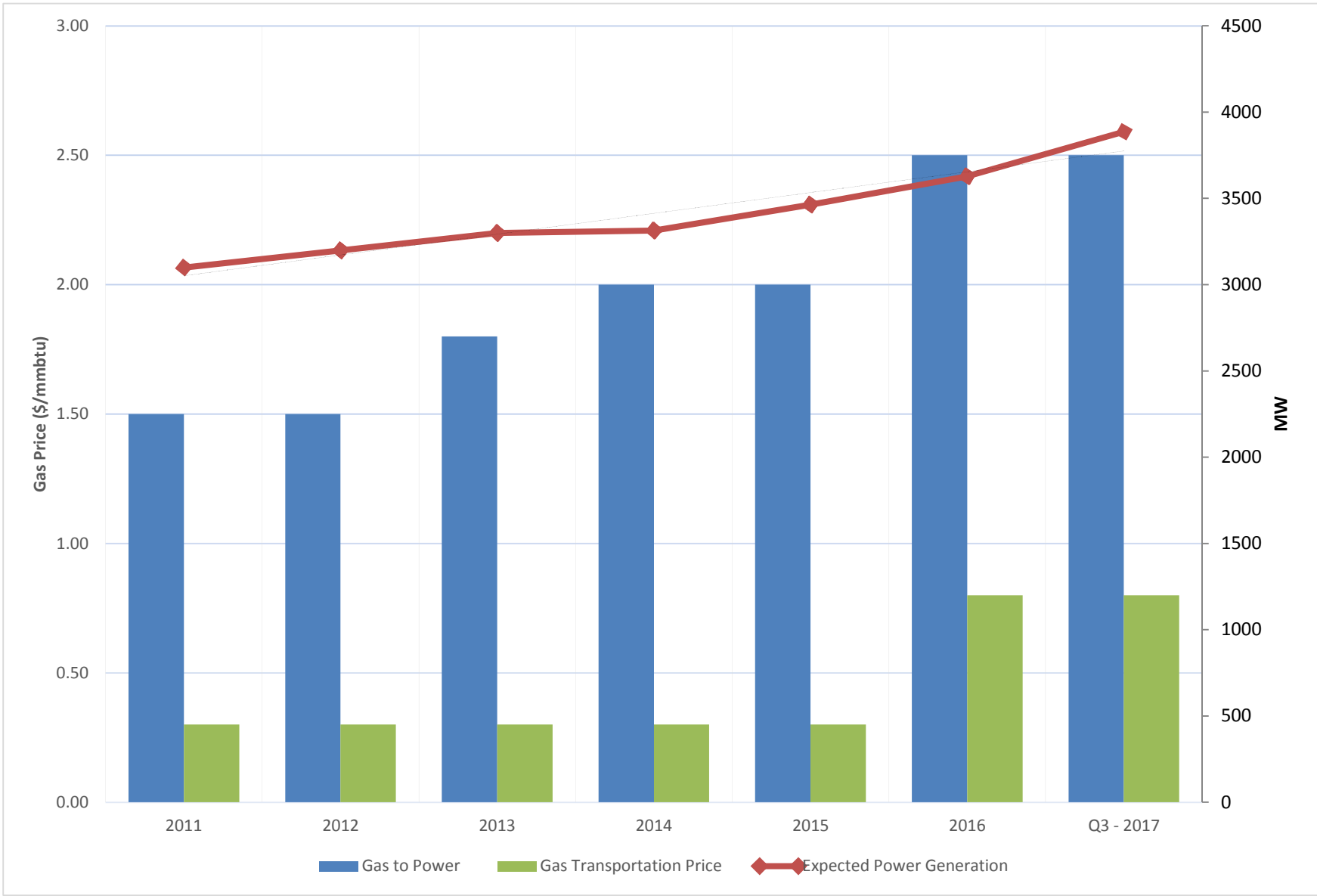


Annual Power Generation (1999 – 2013)



Source: PHCN

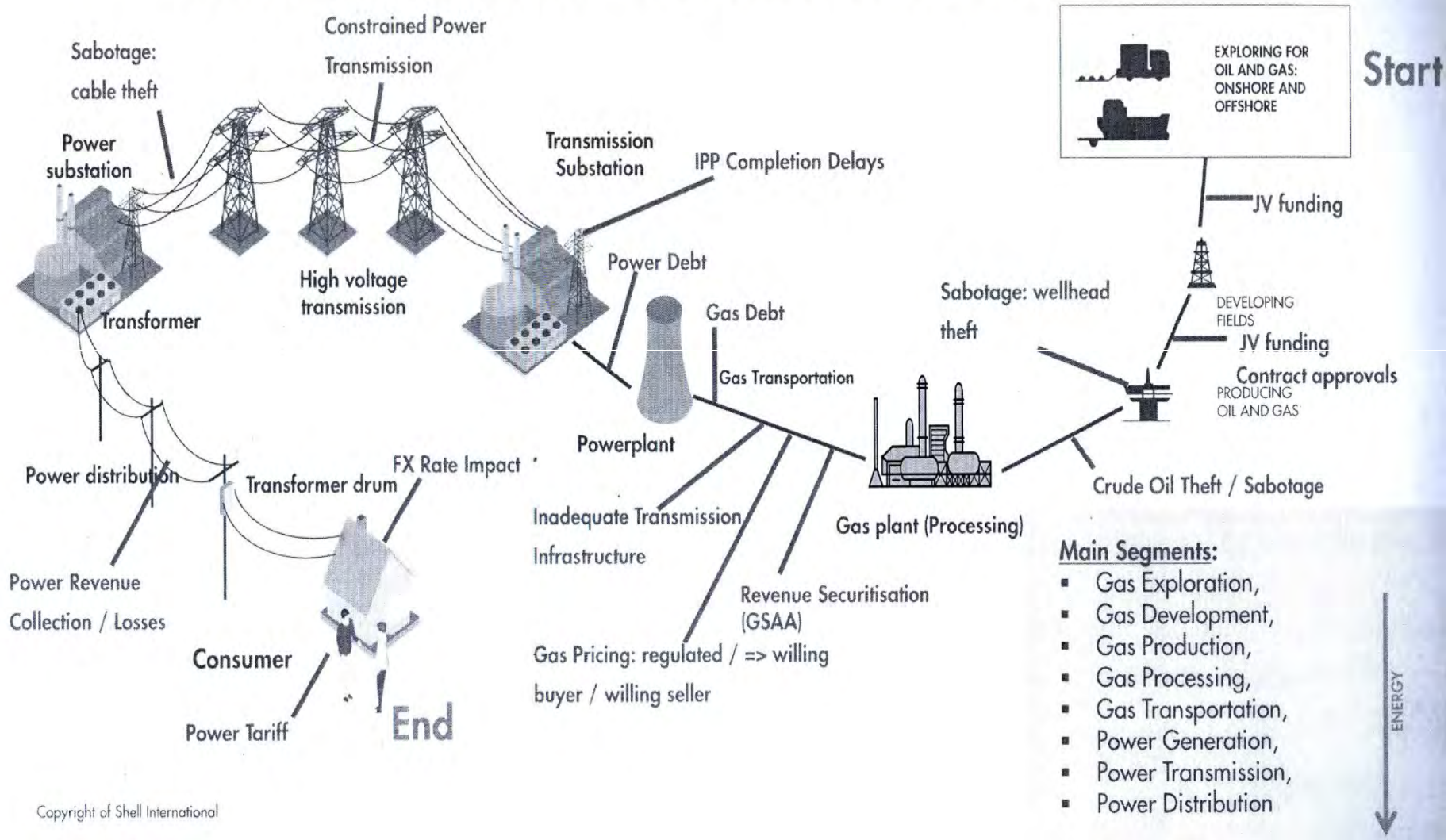
Annual Power Generation (2011 – Q3 2017)





ELECTRICAL POWER VALUE CHAIN

POWER VALUE CHAIN – UNVIAIBLE, UNSUSTAINABLE



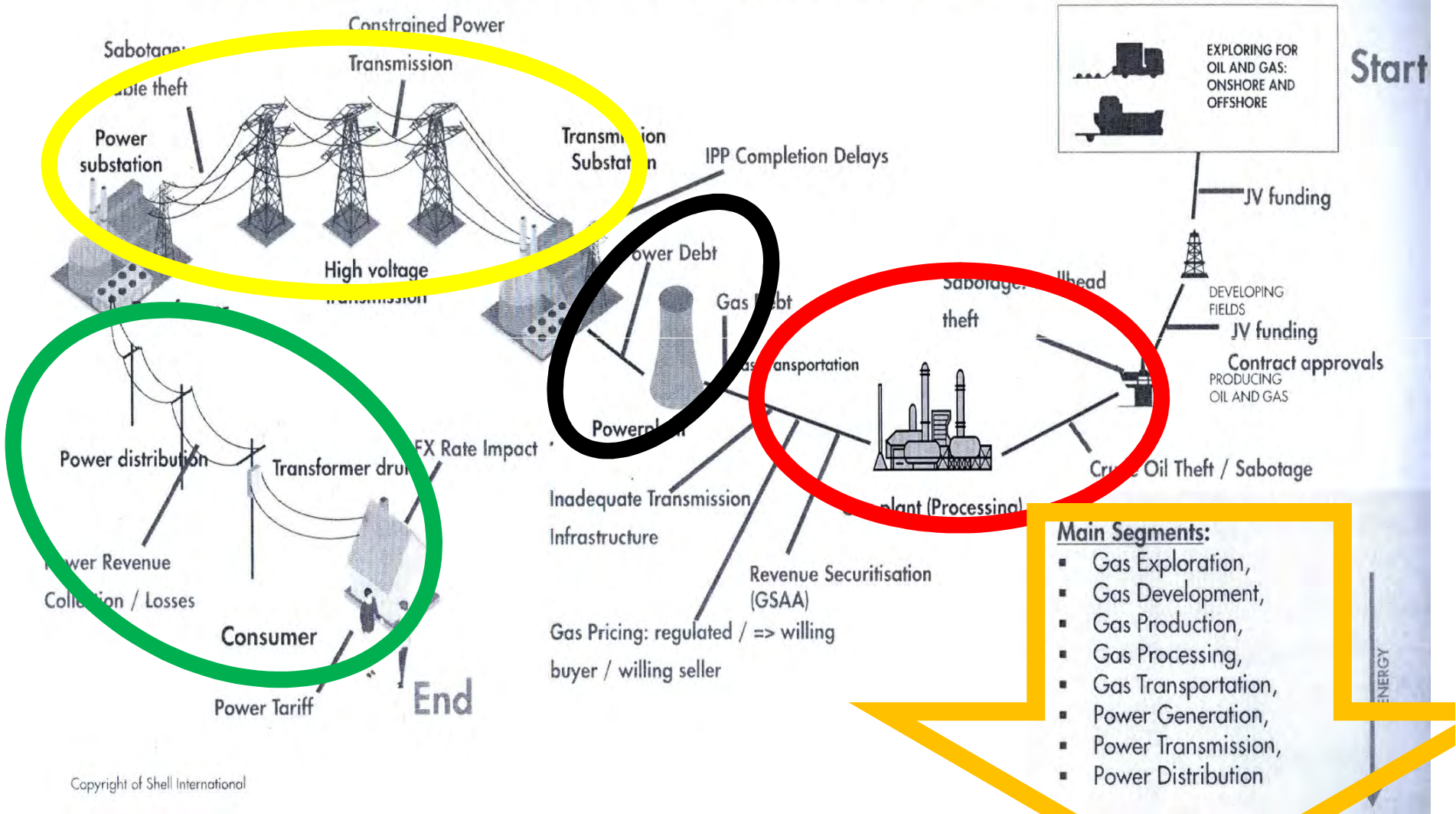
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Electricity on Demand

ELECTRICAL POWER VALUE CHAIN



POWER VALUE CHAIN – UNVIABLE, UNSUSTAINABLE



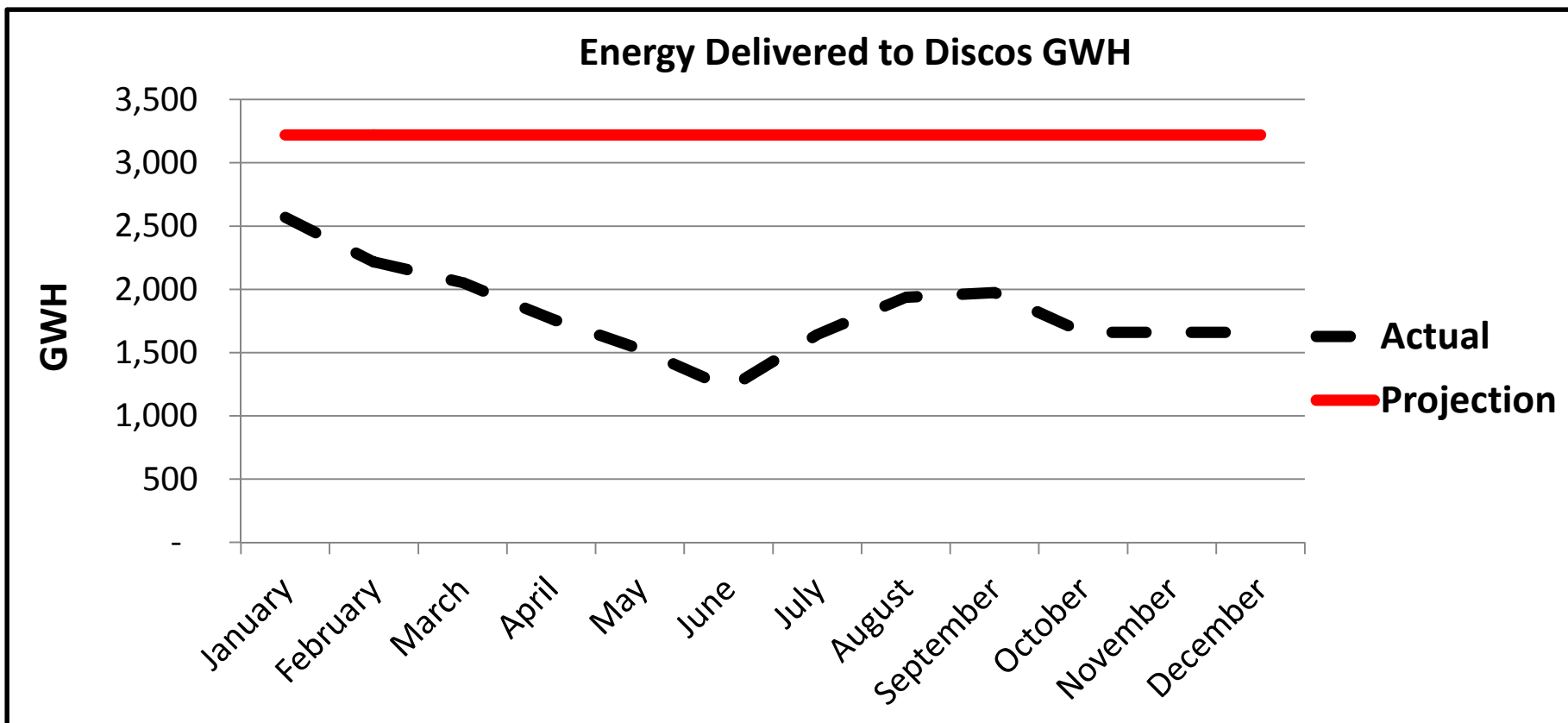
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Electricity on Demand



Energy Delivered to Discos GWH

2016	January	February	March	April	May	June	July	August	September	October	November	December
Actual	2,568	2,216	2,052	1,768	1,529	1,217	1,643	1,937	1,975	1,660	1,660	1,660
Projection	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220



Context Contd.

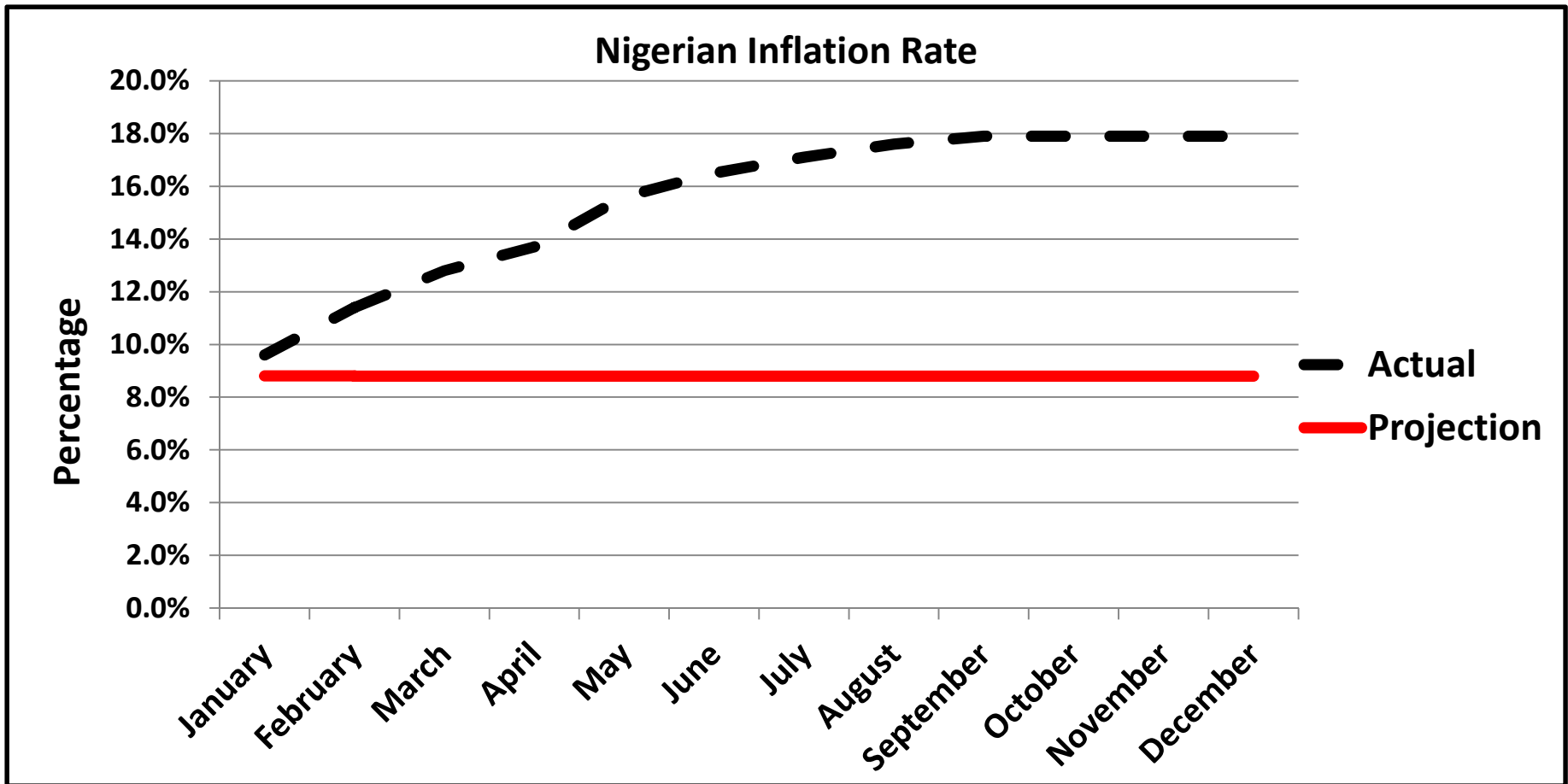


- **Concerns on the MYTO to be addressed via this consultation:**
 - Other changes in macroeconomic variables that changes more frequently when compared to assumed projections applied in the network operators' tariffs that are adjusted on a semiannual basis



Nigerian Inflation Rate

2016	January	February	March	April	May	June	July	August	September	October	November	December
Actual	9.6%	11.4%	12.8%	13.7%	15.6%	16.5%	17.1%	17.6%	17.9%	17.9%	17.9%	17.9%
Projection	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%	8.80%





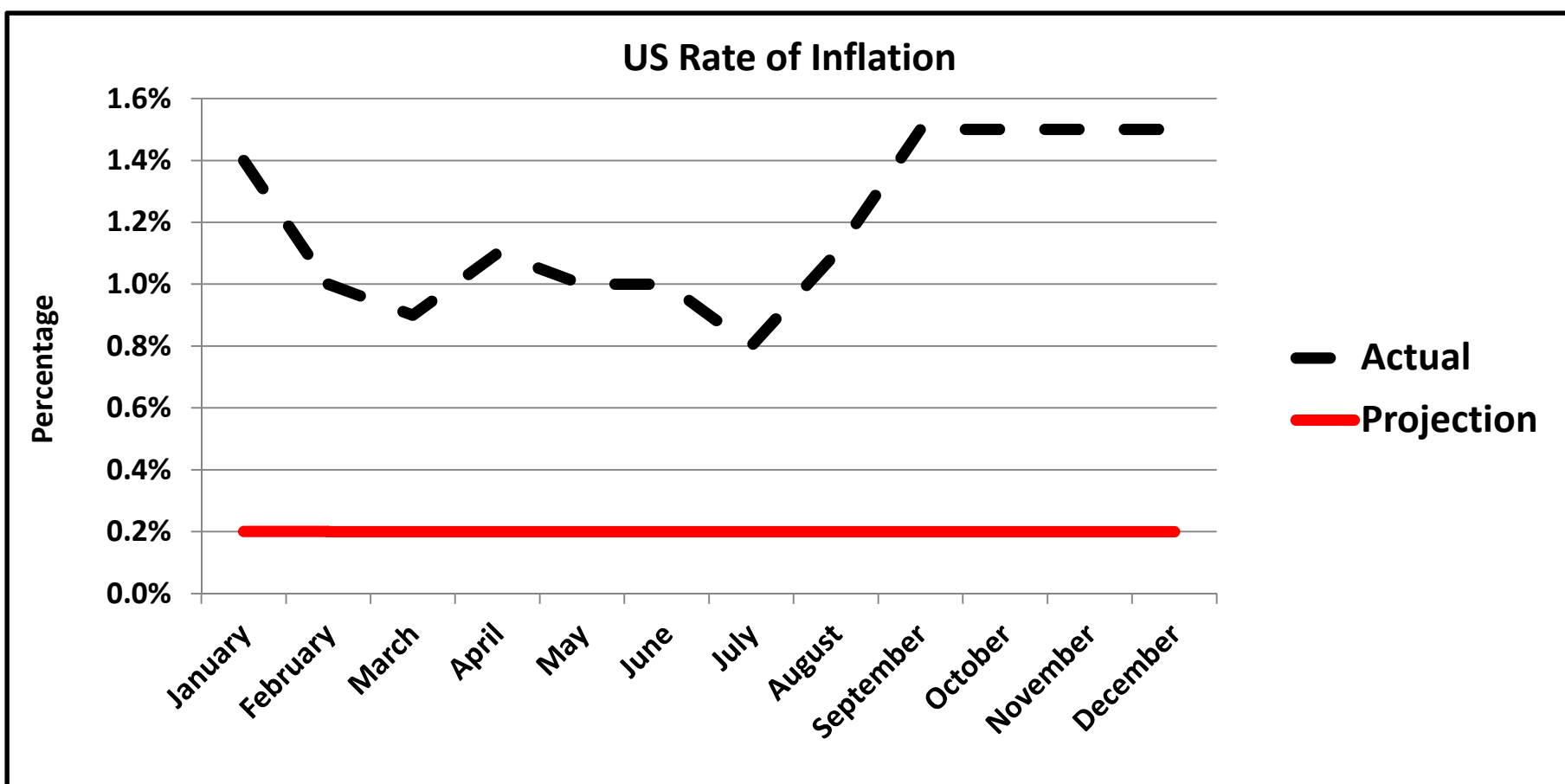
Context Contd.

- **Concerns on the MYTO to be addressed via this consultation:**
 - Absence of a framework to formally recognize transient revenue shortfalls or surpluses between reviews and its impact on operators periodic financial reporting.



US Rate of Inflation

2016	January	February	March	April	May	June	July	August	September	October	November	December
Actual	1.4%	1.0%	0.9%	1.1%	1.0%	1.0%	0.8%	1.1%	1.5%	1.5%	1.5%	1.5%
Projection	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%



Critical Issues for Consultation



Reduction in the time period for conducting minor reviews to update tariffs from every six (6) months (semi-annually) to monthly or quarterly bases;

Reviewing the **frequency** of updating end-user tariffs with the minor review results as well as accounting for over/under recoveries recorded between minor reviews from semi-annually to monthly, quarterly or annually;

Make provision to include **Revenue Decoupling Mechanism** in the form of annual energy adjustments clause to track variances between actual and allowed revenues and make periodic true ups annually or more frequently (semi-annually, quarterly or monthly). Customers/Utilities (TCN & Discos) will be compensated for net changes in actual generation capacity in relation to assumed projections.



Steps taken by NERC



1

- Consultation paper on the review of MYTO Methodology developed

2

- Consultation paper published on the 13 June, 2017.

3

- 21 days was given to stakeholders and the general public to send in comments

4

- A total of sixteen (16) comments were received

5

- The final methodology after this consultation process will be issued in form of a decision of the Commission and gazetted. Licensees will be required to comply with the provisions of the methodology under the conditions of their licenses (Section 76(11)).



Question 1



- **Should Minor Reviews be conducted monthly or quarterly as against the current practice of semi annual reviews, with a view to reducing the time lag in reflecting PPAs and other tariff/cost assumptions which adjust monthly?**

Comments received from Stakeholders



Organization /Companies	Comment	Recommendation
<p>Network for Electricity Consumer Advocacy of Nigeria (NECAN)</p>	<p>NECAN says NO to the proposal because the proposal to reduce the time lag will destabilize consumers of all categories. It will create confusion and uncertainty in the budgeting and planning of the industrial consumers</p>	<p>The monthly or quarterly tariff review not recommended. Keep Status quo.</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>Manufactures Association of Nigeria (MAN)</p>	<p>a. Demerits of this proposition are completely more prominent in the consultation paper than the merits. Monthly or quarterly review concept will create more chaos for the end user for whom the review is extremely chaotic in its present state itself.</p> <p>b. The implementation of this kind of frequent review system involves detailed planning of schedules, additional manpower, potent communication channels between NERC and the consumers. This looks more like a theoretical concept rather than practical solution. Our country is not ready for this type of concept.</p> <p>c. This concept of monthly tariff review will bring unwarranted unrest to the manufactures community</p>	<p>MAN recommends that the tariff review be done annually as implementation of this concept of monthly or quarterly reviews will be counterproductive.</p>

Comments received from Stakeholders Contd.



Organization	Comments	Recommendation
<p>PHEDC</p>	<p>PHED:Semi-annual minor review is optimal. There is the need for customers to get a relatively stable tariff or avoid the perception of frequent tariff movement.</p>	<p>PHED- Retain semi-annual minor review. When there are high differentials (more than 5%) in the minor review parameters, a supportive mechanism that triggers a bond or subsidy should be explored. (status quo)</p>

Comments received from Stakeholders Contd.



Organization	Comments	Recommendation
<p>EKEDC</p>	<p>EKEDC: Monthly reviews be done which should account for all variables which are trued-up in the current system of bi-annual review. This is necessary given the current non-cost reflective nature of the tariff and considering the pressure being placed on the Discos to meet their commercial obligations to NBET.</p>	<p>EKEDC: The provisions of the MYTO Methodology should be made consistent with the monthly indexation formula applicable to invoices issues under the various industry PPAs. (status quo)</p>

Comments received from Stakeholders Contd.



Organization	Comments	Recommendation
KEDCO	The monthly cost adjustment in the PPA contracts is not consistent with the MYTO methodology which currently assumes semi-annual adjustments. This has created a lot of challenges for the Discos. Monthly reviews may not be feasible for all customers because prepaid customers may end up paying lower tariffs than the post paid customers if they have vended huge sum of money before prices are reviewed.	MYTO methodology path be reduced to 4 years as against the 10 years to reduce the uncertainty associated with the forecast variables used in determining tariffs.

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
IBEDC	IBEDC supports monthly review of the tariff however given the additional complexity in the monthly tariff review, IBEDC believes that it will be very challenging for NERC to successfully implement it	IBEDC supports the monthly tariff review

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
ZKJ Energy Partners LTD	<p>Most PPAs in the market provides for monthly price adjustments in response to changes in macroeconomic indices and other factors.</p>	<ol style="list-style-type: none"> a. ZKJ' proposes a cost reflective tariff based on monthly reviews of tariff assumptions, which will be reflected in end-user tariff on quarterly basis. The result of the review be passed to the Discos and provisions be made for adequate working capital. b. The difference in tariff between the two periods can be made up by a stabilization fund which would be defrayed in future as the end-user tariff gradually increases to reflect the actual results of the minor reviews.

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>Proton Energy Ltd</p>	<p>Minor reviews be conducted monthly subject to some caveats that address the perceived demerits of the increased review frequency:</p> <ul style="list-style-type: none"> a. Materiality threshold- tariff review be triggered if the changes in the parameters exceeds set threshold. b. Timely reflective adjustment of retail tariff- this can be on a quarterly basis c. Communication and transparency – retail consumers must be properly educated by the Discos and NERC on MYTO methodology. 	<p>Monthly minor review supported</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>MilHouse Gen Services</p>	<p>MilHouse Generation Services - Reviews should occur quarterly so as to capture movements timely enough such that all players can benefit. Additionally, the customer ultimately suffers when generation and distribution payments are not matched, as neither entity can cover its capital and operating expenses.</p>	<p>Quarterly reviews recommended.</p>
<p>Peter Michael</p>	<p>Peter Michael - proposes that the frequency of minor reviews on Power Purchase Agreements (PPAs) and other tariff/cost assumptions should be increased to monthly or weekly intervals.</p>	<p>The tariff should be reviewed at monthly or weekly intervals.</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
NWACHUKWU LOKKI	<p>Minor review should be carried out on quarterly basis, as it would lead to better alignment with reporting procedures in other parts of the value chain. Most organization deliver quarterly reports to stakeholders, even nations with GDP reporting. With exchange rate deregulation , there nothing like monthly changes in the rate as the rate can change by the second, minute , hour, day, etc. Should we also do reviews every minute because the naira changed from 305 to 306 and back to 305 in the space of 5 minutes?. Can NERC handle such?</p>	Quarterly minor review recommended

Question 2



- **Should the frequency of updating end-user tariffs with the minor review results as well as accounting for over/under recoveries recorded between minor reviews be reviewed from semi-annually to monthly, quarterly or annually?**

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
NECAN	Semi annual minor review be continued as allowed in MYTO 2. The uncertainty the proposed amendment will cause will certainly be enormous	Semi annual minor review maintained
Peter Michael –	Electricity as a commodity changes in price due to market forces and cost of production, so end-user tariffs should directly and immediately be tied to cost. Since our goal and desire is to create an electricity market that is competitive and self-sustaining, it is important that we develop a standard for determining daily true costs of electricity from which daily or real-time retail prices can be determined.	We should strengthen and increase our regulatory functions by not hesitating in revising any of our standards, regulations, rules, procedures, guidelines, etc. that have become obsolete and not addressing present realities.

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
MAN	The frequent tariff changes are bound to lower demand /consumption of electricity, lower consumer purchasing power, increase legal disputes and overall GDP slowdown in the long run.	MAN objects to the idea of tariff changes. Man recommends that until it is required, there must be no tariff hike and if necessary; increase in tariff must be only to an acceptable extent.
NWACHUKWU LOKKI	Updating End user Tariff should Trail Minor reviews by a period of 3 months, this is to allow for greater Transparency and performance evaluation	Quarterly tariff updates recommended

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
PHEDC	PHED does not support frequent update of tariff as this will create frequent tariff shock, erode trust on the Disco, affect the planning process for most MD customers and negatively influence collections.	Recognition of industry shortfalls should be the major concern instead of frequent tariff reviews. Semi annual true up/true down is the best for the customers.
EKEDC	EKEDC: Rather than focusing on reducing the stipulated periods between minor reviews, efforts should be put into honouring stated commitments to conduct minor tariff reviews as and when due i.e. semi-annually/bi-annually or otherwise as utilities are more concerned about regulatory certainty and cost recovery.	EKEDC: the frequency of updating the End-user tariffs should be quarterly adjustments.

Comments received from Stakeholders Contd.

Org/Com	Comment	Recommendation
KEDCO	KEDCO: the false assumptions made in previous tariffs created the problems for the Discos and customers and not the current frequency of semi-annual reviews and it's associated under/over recoveries.	KEDCO: There is no need to change the current practice of the semi-annual minor reviews and the calculation of the associated under/over recoveries.
ZKJ Energy Partners	A time lag of three months would give the Commission and the market enough time to articulate the next end user tariff. In doing so, ZKJ Energy restates that it is important that provisions are made in the tariff for adequate working capital.	<ul style="list-style-type: none"> a. The end user tariff be reviewed and updated on a quarterly basis. b. The regulator should engage in proper education of consumers

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
Proton Energy Ltd-	<p>End user tariff be updated quarterly only if the following changes can be effected in parallel:</p> <ul style="list-style-type: none"> a. Complete migration to metered consumption- until consumers are fully metered any movement which moves the sector closer to a “spot market” will lead to inefficiency and public outcry. b. Communication and transparency-retail customers must be engaged by the Discos and the Commission. 	<p>End- user tariff should be updated quarterly.</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>MilHouse Generation Services</p>	<p>a. Monthly review is too frequent. NERC will spend too much time analyzing monthly movements, which detracts from its ability develop policy and enforce its rules and regulations.</p> <p>b. Frequent tariff changes increase the potential for disputes in the market place</p>	<p>Too frequent tariff reviews not recommended</p>

Question 3



- **Should provision be made to include Revenue Decoupling Mechanism in the form of annual energy adjustment clause to track variances between actual and allowed revenues and make periodic true ups annually or more frequently (semi-annually, quarterly, or monthly)?**

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>Peter Michael</p>	<p>Breaking the link between revenue and energy sales in terms of revenue decoupling should not and should never be introduced into our tariff structures. It is cumbersome and complex to reconcile and serves to benefit only the operators at the expense of the consumers. The concept of revenue decoupling is contradictory and paradoxical to the yearnings and aspirations of NERC.</p>	<p>Revenue Decoupling should not be introduced.</p>
<p>NECAN</p>	<p>NECAN strongly rejects the proposal to include revenue decoupling mechanism in the form of annual energy adjustment clause to track variances between actual and allowed revenues to make true ups annually or more frequently. Accepting this proposal would mean transferring risk associated with volumetric risk to consumers.</p>	<p>No to revenue decoupling</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
MAN	Manufacturers Association of Nigeria – MAN will not accept the transfer of full risks associated with volumetric energy throughput to consumers. MAN also rejects to bear the burden of TCN and the Discos inefficiency.	Revenue decoupling not recommended.
NWACHUKWU LOKKI-	A simple Answer is No, it is quite premature to bring new variables into the MYTO formula at this time. A drawback of the draft consultation is the failure to define rate decoupling.	No to revenue Decoupling

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>PHED</p>	<p>Revenue decoupling might not be a great approach to the challenging regulatory issues in the sector.</p>	<p>MYTO methodology be maintained with the following adjustments</p> <ul style="list-style-type: none"> a. CAPEX be reviewed to be commensurate with ATCC loss reduction target b. OPEX be revised using a good benchmarking approach c. Regulatory asset base and depreciation should be reviewed to reflect realistic estimates d. The ATCC should remain the same. However, the loss reduction target per loss category should be reviewed and set in tune with reality

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
EKEDC	Provisions should be made for revenue decoupling mechanism, its frequency however cannot be determined by EKEDC until more details are obtained on this.	For this system to work effectively there will be need for a sector bond or other funding structures that ensure operators are made whole prior to the adjustments of end-user tariffs.

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>KEDCO</p>	<p>If the proposed decoupling is meant to ensure that discos are made whole for revenue shortfall arising from low generation, then KEDCO is in full support because Discos should not be forced to borrow to finance shortfalls in the sector</p> <ol style="list-style-type: none"> a. Given the different approaches to decoupling, NERC should develop a more detailed consultation paper on options for decoupling including funding mechanism. b. The Commission should take pragmatic approach in resolving contractual inconsistencies 	<p>KEDCO is in full support of revenue decoupling. if a solution is found to the on-going shortfall problem through decoupling, then this should be done on a semi annual basis in tandem with the current bi-annual minor reviews.</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
IBEDC	<ul style="list-style-type: none"> a. NERC should clarify if the RDM would be for TCN, MO, SO, NERC and NBET. While the paper recognizes rate rider, it does not indicate how the Rider would be applied. b. Would RDM incentivize TCN to expand/invest in its network? TCN would arguably be indifferent to power delivered if there was a true-up and a Rate Rider applied. c. It is unclear if TCN Rate Rider would be calculated on a customer by customer basis or in the aggregate. 	<p>Fixed charge be reintroduced to cover fixed cost.</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
<p>ZKJ Energy Services</p>	<p>a. ZKJ does not support the provisions of Energy decoupling mechanism at the development stage of the market. The disassociation of utilities profits from throughput removes the pressure to increase production, thereby reducing the rate at which energy resources are depleted.</p> <p>b. Given the need to expand the distribution network and increase supply to consumers, revenue decoupling may not align with MYTO incentive based principle.</p>	<p>The utilities must be incentivized to distribute power more through network enhancement, metering and meeting loss reduction targets.</p>

Comments received from Stakeholders Contd.



Org/Com	Comment	Recommendation
Proton Energy Ltd	Proton Energy Ltd – Revenue Decoupling mechanism be implemented.	Revenue Decoupling mechanism should be implemented
MilHouse Generation Services	A provision should be made to include a Revenue Decoupling mechanism for TCN and the DISCOs. The mechanism should account for the variance between expected and actual generation capacity on a semi-annual basis. However, this adjustment should be made in light of DISCOs refusal to accept power that is made available to them. Monthly and even quarterly variances above or below a certain threshold can be implemented on a quarterly basis.	Revenue decoupling should be allowed

Questions/Comments



1. Should Wholesale tariff be reviewed quarterly with a view to reducing the time lag in reflecting PPAs which adjust monthly?
2. Should the retail tariff design be updated every six month with under/over recoveries arising from the quarterly review as against the existing requirement for of an annual update?
3. Should provision be made to include Revenue Decoupling Mechanism in the form of annual energy adjustment clause to track variances between actual and allowed revenues and make periodic true ups annually or more frequently (semi-annually, quarterly, or monthly)?



THANK YOU

Contact us at:

**Adamawa Plaza, Plot 1099 First Avenue,
Off Shehu Shagari Way,
Central Business District,
Abuja**

Website: www.nercng.org

E-mail: info@nercng.org