



REVIEW OF BASIC ASSUMPTIONS FOR SEMI-ANNUAL REVIEW OF MYTO-2

MARKET COMPETITION AND RATES DIVISION

NERC ABUJA

MAY 2014

BACKGROUND

- In exercise of the powers conferred upon it by Section 76(8) of the Electric Power Sector Reform Act, the Nigerian Electricity Regulatory Commission (NERC) adopted a tariff methodology a “Multi Year Tariff Order tariff methodology”
- The MYTO provides a 15 year tariff path for the electricity industry, with minor reviews semi-annually in the light of changes in a limited number of parameters (such as **inflation, exchange rate, gas prices and generation capacity**) and major reviews every 5 years, when all of the inputs are reviewed with stakeholders.

FIVE YEAR MAJOR REVIEW

According to Section 6.4 of the MYTO methodology, the major 5-yearly tariff review, will address the following variables

- capital expenditure
- actual and projected sales
- Customer numbers and consumptions
- operating costs
- fuel costs
- taxes and other payments
- forecasts of electricity demand
- interest rates
- reasonable industry WACC
- appropriate expansion of the transmission and distribution networks
- reasonable annual rates of reduction of industry losses, particularly non-technical losses.

Minor Review

- Section 6.1 of MYTO methodology provides that minor review be carried out to incorporate changes in the:
 - Inflation rate
 - Foreign exchange rate
 - Gas price and;
 - Generation capacity
 - Capacity to evacuate generation capacity

Bi-Annual Minor Review

- The Commission requested for official statistics from Central Bank of Nigeria on inflation and Exchange rate for period ending March 31st 2014.
- Requested from System Operation information the generation capacity as at 31st March 2014
- The Federal Ministry of Energy has since three years ago issued the indicative gas prices under Gas to Power policy for 2009 to 2012 and throughout the 2012 to 2016 tariff regime.

Inflation rate

- The inflation rate received from the CBN shows a figure of 7.8% as at 31st March, 2014. However, MYTO2 had an assumption of 13% inflation rate.

Exchange rate

- The data received from the CBN and NBS also shows an exchange rate of N157.30 to \$1 as at 31st March, 2014. MYTO-2 was benchmarked at N178 to US \$1 it is however, important to note that MYTO-2 also allows a charge of 1% above CBN rate to cover letter of credit and other bank charges.
- CBN exchange rate + 1% premium is therefore $157.30 + 1.573 = 158.57$

Gas price

- Gas prices have been regulated since the adoption of the MYTO in 2008 and the regulated prices are applied in the 2012- 2016 price regime.
- The regulated gas price for 2014 is \$1.80/mmbtu.

Generation Capacity

- The data received from the NCC Oshogbo shows that available generation has decreased to 3,424MW on 31st March , 2014. The gross capacity was estimated to be 4,306MW.
- The MYTO-2 projection for the year under review is 9,061MW.

Summary of Result of the Minor Review

Parameters	Assumption(2014)	Actual/ March 2014	Difference
Inflation	13%	7.8%	-5.2%
Exchange Rate	N 178	N 158.57	-N10.1
Gas price/mmbtu	US \$2.30	US \$1.80	-\$.50
Generation Capacity	9,061MW	4,306MW	-4,755
Revenue Requirement	N804 Billion	N510 Billion	-N294
Average retail tariff	N20.80	N24.50	+N4.30

Wholesale Tariff for Successor Gencos (N/MWh)

	BEFORE	AFTER	DIFFERENCE
Fuel cost (N/MWh)	4,789	3,336	-1453
Fixed O&M (N/MWh)	397	397	0
Variable O&M (N/MWh)	1,154	1,101	-53
Capital cost (N/MWh)	3,713	3,257	-456
Tax cost (N/MWh)	1,110	974	-136
Transmission loss cost (N/MWh)	977	794	-183
Wholesale contract prices (N/MWh)	12140	9,858	-2282
Capacity charge (N/MWH)	4,850	4,303	-547
Energy charge (N/MWh)	7,290	5,555	-1735

Discos Revenue Requirements before and after the Minor Review

Distribution Company	Revenue Requirement before the minor review (2014)- N, Billion	Revenue Requirement after the minor review (2014) –N , Billion
Abuja	87.781	55.742
Benin	69.608	44.258
Enugu	69.494	44.250
Ibadan	105.372	68.598
Jos	44.062	28.531
Kaduna	64.160	41.594
Kano	60.428	38.272
Eko	85.413	54.432
Ikeja	110.049	68.021
Port Harcourt	51.084	32.944
Yola	28.359	18.719

Changes in power allocation to the Discos

Distribution Company	Load allocation before the minor review GWh	Load allocation after the minor review GWh
Abuja	4216.3	2395.3
Benin	3299.7	1874.6
Enugu	3299.7	1874.6
Ibadan	4766.3	2707.8
Jos	2016.5	1145.6
Kaduna	2933.1	1666.3
Kano	2933.1	1666.3
Eko	4033.0	2291.2
Ikeja	5499.6	3124.4
Port Harcourt	2383.2	1353.9
Yola	1283.2	729.0

Proposed Decision

- Reduce wholesale tariff from current rate to N9.86K/KWh for all GENCOS using gas.
- Maintain the 2013 fixed charge and slightly increase the energy charge for just R2 customers.
- Revised Retail tables as shown below

ABUJA

		N/month			N/Kwh		
	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff.	%
R1	-	-	-	4.00	4.00	-	
R2	985.92	702.11	(283.81)	13.25	14.70	1.45	11%
R3	73,996.92	52,696.13	(21,300.79)	23.75	23.75	-	
R4	191,015.54	136,029.72	(54,985.82)	23.75	23.75	-	
C1	985.92	702.11	(283.81)	17.39	17.39	-	
C2	67,081.71	47,771.54	(19,310.17)	22.08	22.08	-	
C3	173,169.38	123,320.76	(49,848.62)	22.08	22.08	-	
D1	1,404.22	1,000.00	(404.22)	17.81	17.81	-	
D2	141,984.60	101,112.85	(40,871.75)	23.14	23.14	-	
D3	173,169.38	123,320.76	(49,848.62)	23.14	23.14	-	
A1	985.92	702.11	(283.81)	17.05	17.05	-	
A2	60,556.95	43,125.00	(17,431.95)	17.05	17.05	-	
A3	76,354.42	54,375.00	(21,979.42)	17.05	17.05	-	
L1	842.53	600.00	(242.53)	14.08	14.08	-	

BENIN

	N/month			N/Kwh			
	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff.	%
R1	-	-	-	4.00	4.00	-	
R2	1,500.00	750.00	(750.00)	11.94	14.82	2.88	24%
R3	49,143.32	37,527.00	(11,616.32)	21.29	21.29	-	
R4	174,288.72	133,090.97	(41,197.75)	21.29	21.29	-	
C1	1,309.55	1,000.00	(309.55)	16.63	16.63	-	
C2	44,550.75	34,020.00	(10,530.75)	19.79	19.79	-	
C3	185,625.49	141,748.00	(43,877.49)	19.79	19.79	-	
D1	1,309.55	1,000.00	(309.55)	15.97	15.97	-	
D2	200,900.82	153,412.60	(47,488.22)	20.75	20.75	-	
D3	204,188.04	155,922.80	(48,265.24)	20.75	20.75	-	
A1	1,309.55	1,000.00	(309.55)	15.29	15.29	-	
A2	49,517.20	37,812.50	(11,704.70)	15.29	15.29	-	
A3	58,520.33	44,687.50	(13,832.83)	15.29	15.29	-	
L1	1,309.55	1,000.00	(309.55)	15.75	15.75	-	

EKO

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff	%
R1	-	-	-	4.00	4.00	-	
R2	1,125.00	750.00	(375.00)	12.87	15.63	2.76	24%
R3	47,846.93	31,897.95	(15,948.98)	23.71	23.71	-	
R4	150,320.66	136,655.14	(13,665.51)	23.71	23.71	-	
C1	1,125.00	750.00	(375.00)	15.84	15.84	-	
C2	25,495.16	22,169.70	(3,325.46)	22.04	22.04	-	
C3	130,351.46	118,501.33	(11,850.13)	22.04	22.04	-	
D1	1,356.75	904.50	(452.25)	17.78	17.78	-	
D2	129,299.74	116,593.58	(12,706.17)	23.10	23.10	-	
D3	130,351.46	118,501.33	(11,850.13)	23.10	23.10	-	
A1	975.00	750.00	(225.00)	17.02	17.02	-	
A2	57,475.00	52,250.00	(5,225.00)	17.02	17.02	-	
A3	64,281.25	58,437.50	(5,843.75)	17.02	17.02	-	
L1	1,125.00	750.00	(375.00)	13.07	13.07	-	

ENUGU

Subclass	Fixed			Energy			%
	Approved	Proposed	Diff	Approved	Proposed	Diff.	
R1	-	-	-	4.00	4.00	-	
R2	874.17	650.00	(224.17)	15.57	16.44	0.88	6%
R3	32,846.69	24,423.64	(8,423.05)	24.60	24.60	-	
R4	157,910.20	117,416.46	(40,493.74)	24.60	24.60	-	
C1	874.17	650.00	(224.17)	18.14	18.14	-	
C2	29,777.08	22,141.18	(7,635.89)	22.87	22.87	-	
C3	143,157.00	106,446.50	(36,710.50)	22.87	22.87	-	
D1	1,748.33	1,300.00	(448.33)	18.45	18.45	-	
D2	140,852.31	104,732.81	(36,119.50)	23.97	23.97	-	
D3	143,157.00	106,446.50	(36,710.50)	23.97	23.97	-	
A1	874.17	650.00	(224.17)	20.31	20.31	-	
A2	50,432.73	37,500.00	(12,932.73)	20.31	20.31	-	
A3	63,121.26	46,934.74	(16,186.52)	20.31	20.31	-	
L1	874.17	650.00	(224.17)	15.58	15.58	-	

IBADAN

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff	%
R1	-	-	-	4.00	4.00	-	
R2	781.13	624.95	(224.17)	13.56	16.11	2.56	19%
R3	23,452.61	18,763.50	(8,423.05)	25.80	25.80	-	
R4	146,572.69	117,267.00	(40,493.74)	25.80	25.80	-	
C1	624.95	500.00	(224.17)	17.07	17.07	-	
C2	21,260.90	17,010.00	(7,635.89)	23.98	23.98	-	
C3	132,878.73	106,311.00	(36,710.50)	23.98	23.98	-	
D1	624.95	500.00	(448.33)	19.35	19.35	-	
D2	130,739.51	104,599.50	(36,119.50)	25.14	25.14	-	
D3	132,878.73	106,311.00	(36,710.50)	25.14	25.14	-	
A1	624.95	500.00	(224.17)	18.52	18.52	-	
A2	41,989.02	33,593.75	(12,932.73)	18.52	18.52	-	
A3	58,589.33	46,875.00	(16,186.52)	18.52	18.52	-	
L1	624.95	500.00	(224.17)	14.22	14.22	-	

IKEJA

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff.	%
R1	-	-	-	4.00	4.00	-	
R2	894.56	750.00	(144.56)	13.21	13.21	-	
R3	31,332.15	26,268.90	(5,063.25)	23.17	23.17	-	
R4	195,817.82	164,173.80	(31,644.02)	23.17	23.17	-	
C1	894.56	750.00	(144.56)	17.57	17.57	-	
C2	28,404.08	23,814.00	(4,590.08)	21.54	21.54	-	
C3	177,522.99	148,835.40	(28,687.59)	21.54	21.54	-	
D1	1,192.75	1,000.00	(192.75)	17.38	17.38	-	
D2	232,886.73	195,252.40	(37,634.33)	22.58	22.58	-	
D3	236,697.32	198,447.20	(38,250.12)	22.58	22.58	-	
A1	894.56	750.00	(144.56)	16.63	16.63	-	
A2	51,437.22	43,125.00	(8,312.22)	16.63	16.63	-	
A3	78,274.03	65,625.00	(12,649.03)	16.63	16.63	-	
L1	775.29	650.00	(125.29)	12.77	12.77	-	

JOS

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff.	%
R1	-	-	-	4.00	4.00	-	
R2	1,162.50	775.00	(387.50)	14.32	16.75	2.43	17%
R3	43,625.14	29,083.43	(14,541.71)	25.80	25.80	-	
R4	272,645.78	181,763.85	(90,881.93)	25.80	25.80	-	
C1	1,162.50	775.00	(387.50)	18.74	18.74	-	
C2	39,548.25	26,365.50	(13,182.75)	23.98	23.98	-	
C3	247,173.08	164,782.05	(82,391.03)	23.98	23.98	-	
D1	2,092.50	1,395.00	(697.50)	18.74	18.74	-	
D2	243,193.84	162,129.23	(81,064.61)	25.14	25.14	-	
D3	247,173.08	164,782.05	(82,391.03)	25.14	25.14	-	
A1	2,092.50	1,395.00	(697.50)	18.52	18.52	-	
A2	94,453.13	62,968.75	(31,484.38)	18.52	18.52	-	
A3	108,984.38	72,656.25	(36,328.13)	18.52	18.52	-	
L1	2,092.50	1,395.00	(697.50)	17.85	17.85	-	

KADUNA

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff	%
R1	-	-	-	4.00	4.00	-	
R2	1,280.00	781.13	(498.87)	15.36	17.00	1.64	11%
R3	64,046.08	23,452.61	(40,593.47)	28.23	28.23	-	
R4	400,271.36	146,572.69	(253,698.67)	28.23	28.23	-	
C1	1,280.00	624.95	(655.05)	19.36	19.36	-	
C2	58,060.80	21,260.90	(36,799.90)	26.24	26.24	-	
C3	362,874.88	132,878.73	(229,996.15)	26.24	26.24	-	
D1	2,560.00	624.95	(1,935.05)	21.17	21.17	-	
D2	357,032.96	130,739.51	(226,293.45)	27.50	27.50	-	
D3	362,874.88	132,878.73	(229,996.15)	27.50	27.50	-	
A1	1,280.00	624.95	(655.05)	20.26	20.26	-	
A2	119,624.87	41,989.02	(77,635.85)	20.26	20.26	-	
A3	160,000.00	58,589.33	(101,410.67)	20.26	20.26	-	
L1	1,280.00	624.95	(655.05)	17.17	17.17	-	

KANO

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff.	%
R1	-	-	-	4.00	4.00	-	
R2	889.47	666.89	(222.59)	13.98	16.01	2.03	15%
R3	40,055.16	30,031.48	(10,023.67)	25.80	25.80	-	
R4	208,611.93	156,407.47	(52,204.46)	25.80	25.80	-	
C1	889.47	666.89	(222.59)	17.46	17.46	-	
C2	36,311.89	27,224.96	(9,086.93)	23.98	23.98	-	
C3	189,121.77	141,794.66	(47,327.12)	23.98	23.98	-	
D1	1,156.32	866.95	(289.36)	19.35	19.35	-	
D2	186,077.10	139,511.91	(46,565.20)	25.14	25.14	-	
D3	189,121.77	141,794.66	(47,327.12)	25.14	25.14	-	
A1	889.47	666.89	(222.59)	18.52	18.52	-	
A2	83,388.20	62,520.57	(20,867.63)	18.52	18.52	-	
A3	111,184.27	83,360.76	(27,823.51)	18.52	18.52	-	
L1	1,156.32	866.95	(289.36)	14.22	14.22	-	

PORT HARCOURT

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff	%
R1	-	-	-	4.00	4.00	-	
R2	1,050.00	700.00	(350.00)	13.60	15.09	1.49	11%
R3	52,537.80	35,025.20	(17,512.60)	24.83	24.83	-	
R4	246,260.70	164,173.80	(82,086.90)	24.83	24.83	-	
C1	1,050.00	700.00	(350.00)	18.25	18.25	-	
C2	47,628.00	31,752.00	(15,876.00)	23.07	23.07	-	
C3	223,253.10	148,835.40	(74,417.70)	23.07	23.07	-	
D1	1,470.00	980.00	(490.00)	24.83	24.83	-	
D2	219,658.95	146,439.30	(73,219.65)	24.19	24.19	-	
D3	223,253.10	148,835.40	(74,417.70)	24.19	24.19	-	
A1	1,470.00	980.00	(490.00)	17.82	17.82	-	
A2	98,437.50	65,625.00	(32,812.50)	17.82	17.82	-	
A3	131,250.00	87,500.00	(43,750.00)	23.76	23.76	-	
L1	1,470.00	980.00	(490.00)	18.25	18.25	-	

YOLA

	Fixed			Energy			
Subclass	Approved	Proposed	Diff	Approved	Proposed	Diff.	%
R1	-	-	-	4.00	4.00	-	
R2	1,250.41	750.00	(500.41)	12.78	15.00	2.22	17%
R3	40,354.62	24,204.92	(16,149.71)	22.71	22.71	-	
R4	252,205.89	151,274.43	(100,931.46)	22.71	22.71	-	
C1	1,250.41	750.00	(500.41)	17.88	17.88	0.00	
C2	36,583.37	21,942.90	(14,640.47)	21.11	21.11	-	
C3	228,642.85	137,141.19	(91,501.66)	21.11	21.11	-	
D1	1,250.41	750.00	(500.41)	17.04	17.88	0.84	
D2	224,961.93	134,933.36	(90,028.57)	22.13	22.13	-	
D3	228,642.85	137,141.19	(91,501.66)	22.13	22.13	-	
A1	1,250.41	750.00	(500.41)	16.31	17.50	1.19	
A2	74,503.34	44,687.50	(29,815.84)	16.31	17.50	1.19	
A3	100,813.97	60,468.75	(40,345.22)	16.31	17.50	1.19	
L1	1,250.41	750.00	(500.41)	12.52	16.00	3.48	



THANK YOU

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