



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

Registrar

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Ph: 9206500, 9207200 Fax : 9210215
E-mail: office@nepra.org.pk

No. NEPRA/TRF-78/TEL-2007/2823-25
June 29, 2007

Subject: Decision of the Authority w.r.t Tariff Petition filed by Tapal Energy Limited (TEL) (Case No. NEPRA/TRF-78/TEL-2007) Pursuant to ECC's Decision (Case No. ECC-40/03/2007 dated 10.04.2007) for Formal Approval/Tariff Order

Intimation of Decision of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997)

Dear Sir,

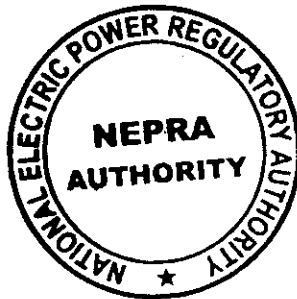
Please find enclosed the subject decision of the Authority along with Annex-I (09 pages) in Case No. NEPRA/TRF-78/TEL-2007.

2. The decision is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

3. Please note that only Order of the Authority at para 5 of the decision relating to the Reference Tariff Schedule along with Annex-I needs to be notified in the official gazette. The Order is reproduced for the purpose of clarity and is attached herewith.

DA/as above.

The Secretary
Cabinet Division
Government of Pakistan
Cabinet Secretariat
Islamabad



45-7
29.06.07.
(Mahjoob Ahmad Mirza)

CC:

1. Secretary, Ministry of Water & Power, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.

ORDER OF THE AUTHORITY
IN CASE NO. NEPRA/TRF-78/TEL-2007
TO BE NOTIFIED IN THE OFFICIAL GAZETTE

Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules 2000, Tapal Energy Limited (TEL) is allowed to charge, subject to adjustment of Capacity Purchase Price on account of net dependable capacity as determined by test jointly carried out by Central Power Purchasing Agency (CPPA) and the petitioner, the reference tariff schedule (**Annex-I**) for delivery of electricity to CPPA of NTDC for procurement on behalf of EX-WAPDA Distribution Companies.

The following indexations shall be applicable to reference tariff.

I) **One Time Adjustment**

a) **Adjustment due to variation in net capacity**

The reference tariff has been determined on the basis of minimum net capacity of 161.2 MW at delivery point at mean site conditions. All the tariff components except fuel cost component shall be adjusted at the time of COD based upon the IDC tests to be carried out for determination of contracted capacity. If the IDC is established higher than 161.2 MW, the adjustments shall be made according to the following formula:

i)	Fixed O&M	=	0.1517/tested IDC x 161.2 MW
ii)	Insurance	=	0.0517/tested IDC x 161.2 MW
iii)	Debt Service _(Ref)	=	DS _(Ref) /tested IDC x 161.2 MW
iv)	Return on Equity	=	0.2025/tested IDC x 161.2 MW
v)	ROE during Construction	=	0.0359/tested IDC x 161.2 MW
vi)	Variable O&M – Foreign	=	0.3348/tested IDC x 161.2 MW
vii)	Variable O&M – Local	=	0.0971/tested IDC x 161.2 MW

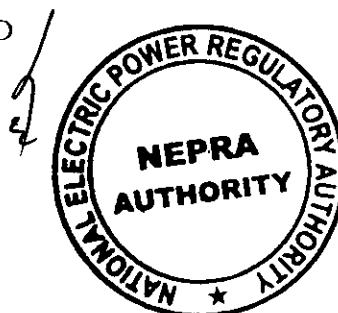
b) **Adjustment in Insurance Component**

Insurance component of reference tariff shall be adjusted as per actual on yearly basis upon production of authentic documentary evidence by TEL according to the following formula:

$$\text{Insurance}_{(Rev)} = \text{Ins}_{(Adj)} / (0.0517 * NC * 1000 * 8760 / 10^6) \times AP / 60 * ER_{(Rev)}$$

Where;

$$\text{Ins}_{(Adj)} = \text{Adjusted insurance at COD}$$



NC = Net Capacity in MW at COD
AP = Actual Premium subject to maximum of Reference Percentage (US\$) determined at COD
ER_(Rev) = Revised Exchange Rate

c) Adjustment due to custom duties and Interest during Construction

The tariff is approved by ECC and it includes Custom Duties and Interest During Construction therefore no adjustment on this accounts is required.

II) Pass-Through Items

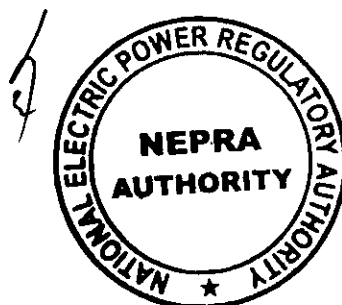
No provision for income tax has been accounted for in the tariff. If TEL is obligated to pay any tax on its income, the exact amount paid by the company may be reimbursed by NTDC to TEL on production of original receipts. This payment may be considered as pass-through (as Rs./kW/Hour) monthly payment spread over a 12 months period in addition to the capacity purchase price in the Reference Tariff. Furthermore, in such a scenario, TEL may also submit to NTDC details of any tax shield savings and NTDC may deduct the amount of these savings from its payment to TEL on account of taxation. Withholding Tax is also a pass through item just like other taxes as indicated in the government guidelines for determination of tariff for new IPPs.

Withholding tax shall be allowed @7.5% (or applicable rate) of the return on equity. CPPA (NTDC) shall make payment on account of withholding tax at the time of actual payment of dividend subject to maximum of 7.5% (or applicable rate) of 15% of equity.

In case Company does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the Net Return on Equity) would be carried forward and accumulated so that the Company is able to recover the same as a pass through from the Power Purchaser in future on the basis of the total dividend pay out.

III Indexations

The following indexations shall be applicable to reference tariff.



a) Indexation applicable to O&M

In future the 50% of Fixed O&M part of Capacity Charge will be adjusted on account of local Inflation (WPI) and 50% on account of variation in US CPI and dollar/Rupee exchange rate. Quarterly adjustment for local inflation, foreign inflation and exchange rate variation will be made on 1st July, 1st October, 1st January and 1st April based on the average of the available information with respect to WPI notified by the Federal Bureau of Statistics (FBS), US CPI issued by US Bureau of Labor Statistics and revised TT & OD selling rate of US Dollar notified by the National Bank of Pakistan. The mode of indexation will be as under:

b) Fixed O&M

$$F O\&M_{(LREV)} = \text{Rs. } 0.1517 \text{ per kW per Hour} * 50\% * WPI_{(REV)} / 117.80$$

$$F O\&M_{(FREX)} = \text{Rs. } 0.1517 \text{ per kW per hour} * 50\% * US CPI_{(REV)} / 199.8 * ER_{(REV)} / 60$$

Where:

$F O\&M_{(LREV)}$ = The revised applicable Fixed O&M Local Component of the Capacity Charge indexed with WPI

$F O\&M_{(FREX)}$ = The revised applicable Fixed O&M Foreign Component of the Capacity Charge indexed with US CPI and Exchange rate variations.

$WPI_{(REV)}$ = The revised wholesale Price Index (manufacturers)

$WPI_{(REF)}$ = 117.80 wholesale price index (manufacturers) of April 2006 notified by Federal Bureau of Statistics

$US CPI_{(REV)}$ = The revised US CPI

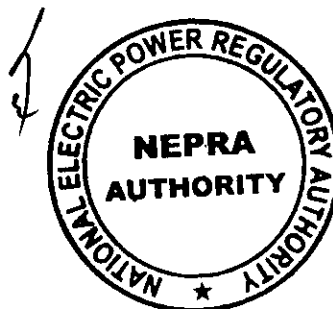
$US CPI_{(REF)}$ = 199.8 US CPI for the month of March 2006 as notified by the US Bureau of Labor Statistics

$ER_{(REV)}$ = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

Note: The reference numbers indicated above shall be replaced by the revised numbers after incorporating the required adjustments at COD.

c) Variable O&M

The formula of indexation for variable O & M component will be as under:



$$V O\&M_{(FREV)} = \text{Rs. } 0.3348 \text{ per kWh} * US CPI_{(REV)} / 199.8 * ER_{(FREV)} / 60$$

$$V O\&M_{(LREV)} = \text{Rs. } 0.0971 \text{ per kWh} * WPI_{(REV)} / 117.80$$

Where;

$V O\&M_{(FREV)}$ = The revised applicable Variable O&M Component of the Energy Charge indexed with US CPI and Exchange rate variations

$V O\&M_{(LREV)}$ = The revised applicable Local Variable O&M Component of the Energy Charge indexed

$US CPI_{(REV)}$ = The revised US CPI

$US CPI_{(REF)}$ = 199.8 US CPI for the month of March 2006 as notified by the US Bureau of Labor Statistics

$ER_{(REV)}$ = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan.

Note: The reference VO&M indicated above shall be replaced with the revised number at COD after incorporating the required adjustment based upon the IDC Test.

d) Adjustment for KIBOR variation

The interest part of fixed charge component will remain unchanged throughout the term except for the quarterly adjustment due to variations in interest rate as a result of variation in 3-monthly KIBOR according to the following formula:

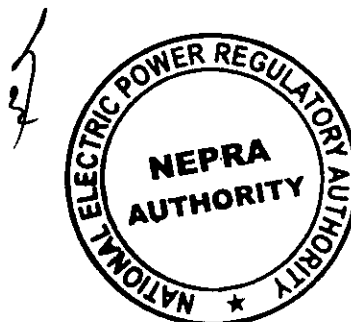
$$\Delta I = NC/1000 * (8760/4) * Q_{(R)} * LR_{(Ref)} * (KIBOR_{(REV)} - 8.54\%) / 4$$

Where:

ΔI = The variation in interest charges applicable corresponding to variation in 3-monthly KIBOR. ΔI can be positive or negative depending upon whether KIBOR REV is > or < 8.54%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each quarter under adjustment on quarterly basis.

NC = Net Capacity established at COD

$Q_{(R)}$ = Remaining quarters of Loan Repayment



$LR_{(Ref)}$ = Reference Loan Repayment component of tariff established at
COD

e) Fuel Price Variation

The Variable Charge Part of the tariff relating to fuel cost shall be adjusted on account of the fuel price variations according to the following formula:

$$FC_{(Rev)} = Rs.4.3626 \text{ per kWh} * FP_{(Rev)} / Rs. 22,140.07 \text{ per Ton} + 0.4532 * Ft_{(Rev)} / Rs.2,300 \text{ per ton}$$

Where:

$FC_{(Rev)}$ = Revised fuel cost component of Variable Charge on RFO.

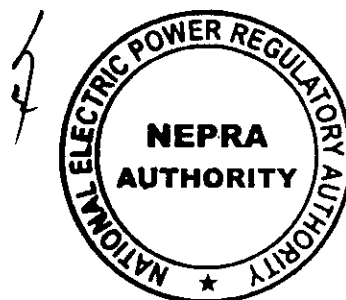
$Ft_{(Rev)}$ = Revised Freight Charges

$FP_{(Rev)}$ = The new price of RFO per Metric Ton as per the following mechanism;

Description	US\$/Ton	Rs./Ton
1. Arab Gulf Mean Price Premium i.e. Freight + Margin + Blending		
2. C&F Price (1 + 2)		
3. Import Incidentals		
i. Bank Charges 0.10% of c&f		
ii. LC Commission 0.15% of c&f		
iii. Marine Insurance 0.108% of c&f		
iv. Handling Charges 0.15% of c&f		
v. Ocean Losses 0.50% of c&f		
vi. FOTCO charges		
4. Landed cost (2 + 3)		
5. Ad Valorem Duty # 1% of landed cost		
6. GST @ 15% of 4 + 5		
7. OMC Margin (3.5% of 4 + 5 + 6)		
8. GST on OMC Margin (15% of 7)		
9. Marketing/Selling Price of RFO ex-OM installation Karachi (4 + 5 + 6 + 7 + 8)		
10. Inland Freight (at actual)		Rs./Ton
11. GST on Inland Freight @ 15%		Rs./Ton
12. Delivered Price of RFO to IPP (Rupees per ton) (9 + 10 + 11)		Rs./Ton

US\$ Pak Rupee Exchange Rate-NBP Selling TT/OD at the date of applicable fuel price

* The supplier shall clearly indicate average Gross and Net calorific values of Arabian Gulf or any other source of which average reference fuel prices are used. Fuel



supplier shall provide price adjustment mechanism due to variation in calorific value of the fuel being supplied to the IPP against the reference calorific values.

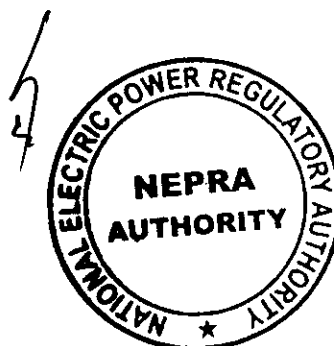
**** Fuel supplier shall provide item wise actual incidental charges prevailing at the time of receiving payment for fuel supply.**

The fuel cost component will be adjusted after the commercial operation date, at the time of revision in RFO price. Adjustment on account of local inflation, foreign inflation, foreign exchange rate variation, KIBOR variation and fuel price variation will be approved and announced by the Authority for immediate application within seven working days after receipt of TEL's request for adjustment in accordance with the requisite indexation mechanism stipulated herein.

Terms and Conditions of Tariff:

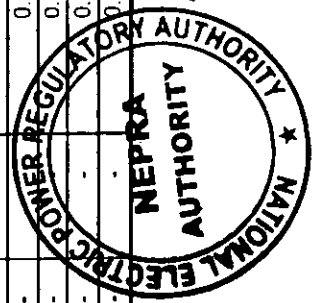
- i) All new equipment will be installed and the plant will be of standard configuration.
- ii) Capacity Charge Rs./kW/hour is applicable to available capacity at the delivery Point.
- iii) Dispatch criterion will be based on the Energy Charge.
- iv) Partial loading adjustment shall be applicable for the purpose of payment according to manufacturer's heat rate curves in case the plant load falls below 40%.
- v) 45% net efficiency at site over the 25 years life cycle of plant.
- vi) No compensation for start-up/shutdown charges will be allowed.
- vii) The above tariff is applicable for a period of 25 years commencing from the date of the Commercial Operation.

The above terms and conditions be incorporated as the specified tariff approved by the Authority pursuant to Rule 6 of the Licencing (Generation) Rules, in a Power Purchase Agreement between TEL and CPPA.



Tapal Energy Limited (TEL) Reference Generation Tariff

Year	Energy Purchase Price (EPP) (Rs./kWh)			Capacity Purchase Price (CPP) @ 100% PF (Rs./kW/hr)										Tariff @ 60% PF	
	Fuel Component t	Variable O&M Component	Total EPP	Escalable Component			Non-Escalable Component					Total CPP L = Sum of d to k	Total CPP Rs./kWh M=L/0.6	Total Tariff Rs./kWh N = C + M	
				Fixed O&M	Cost of Working Capital	Insurance	ROE	ROE - Cons. Period	Withholdin g Tax @7.5%	Debt Service					
										Principal	Interest				
	a	b	C=a+b	d	e	f	g	h	i	j	k				
1	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.6472	1.7870	2.9783	7.7728	
2	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.5802	1.7200	2.8667	7.6612	
3	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.5129	1.6527	2.7545	7.5490	
4	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.4457	1.5855	2.6425	7.4370	
5	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.3784	1.5182	2.5303	7.3248	
6	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.3111	1.4509	2.4182	7.2127	
7	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.2438	1.3836	2.3060	7.1005	
8	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.1766	1.3164	2.1940	6.9885	
9	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.1093	1.2491	2.0818	6.8763	
10	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.0421	1.1819	1.9698	6.7643	
11	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
12	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
13	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
14	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
15	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
16	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
17	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
18	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
19	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
20	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
21	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
22	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
23	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
24	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	
25	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227	



Average	7.2687
1-10	7.2687
11-25	5.7227
1-25	6.3411

Levelized tariff	6.8280
Rs./kWh	
US Cents/kWh	11.3800

Note: This tariff is based on the assumptions detailed in our letter of February 16, 2007

Decision of the Authority Regulatory Meeting (RM) 07-225 Dated June 26, 2007 w.r.t Tariff Petition filed by Tapal Energy (Pvt.) Limited (TEL) Pursuant to ECC's Decision (Case No. ECC-40/03/2007 dated: 10.4.2007) for Formal Approval/Tariff Order

The Authority considered the application Tapal Energy (Pvt.) Limited (TEL) located at Moza Kotli Wagha, 3-KM short of Kamoki, Tehsil & District Gujranwala for formal approval/Tariff Order of the Authority pursuant to ECC's decision (Case No. ECC-40/03/2007 dated 10.4.2007) in its meeting in which it approved paras 4, 5 and 6 of the summary submitted by the Ministry of Water & Power. Relevant extract of the summary is as under;

"Para 4 of the Summary

The Board of PPIB has recommended that the tariff for the three existing IPPs as noted in the table under para 2, based on the assumptions set out in Annex-IV, be approved. Decision of the Board are at Annex-V.

Para 2 of the Summary

After an elaborate process entailing three rounds of bidding (details at Annex-II), the following tariffs have been arrived at:

<i>Company</i>	<i>Fuel Cost (Rs./kWh)</i>	<i>Variable O&M (Rs./kWh)</i>	<i>Total EPP (Rs./kWh)</i>	<i>Total CPP (Rs./kWh)</i>	<i>Levellized Tariff (Rs./kWh)</i>	<i>Levellized Tariff (US\$/kWh)</i>
<i>Kohinoor Energy</i>	4.3626	0.4059	4.7685	2.0595	6.8280	11.3800
<i>Tapal Energy</i>	4.3626	0.4319	4.7945	2.0335	6.8280	11.3800
<i>Japan Power</i>	4.3624	0.4319	4.7943	2.0337	6.8280	11.3800

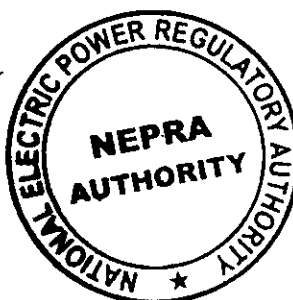
* According to PPIB summary details tariff sheets of the three projects are at Annex-III

Para 5 of the Summary

The Board has further recommended that commissioning of these projects be allowed within the first quarter of 2009, instead of the ECC's earlier approval for up to October 2008.

Para 6 of the Summary

Section 1.10 of the tariff Guidelines stipulates that "Once a tariff has been arrived at through competitive biddings ... it should not be subjected to further review by NEPRA. The lowest evaluated levellized tariff would be recommended to the GoP for acceptance." This summary is thus submitted to seek GoP approval. It is recommended that NEPRA should formally issue detail tariff approval and Tariff Order on the pattern of Attock Generation Ltd."



2. For the purpose of record PPIB was asked vide letter no. NEPRA/R/TRF-100/2646 dated June 14, 2007, to provide certain information and confirmation regarding the bidding process, which was partially provided vide letter no. 6(611)PPIB-IPP.EXP/07/FIN dated 18th June, 2007.
3. The Authority has been informed that the tariff has been arrived at through a competitive bidding process and has been approved by ECC therefore it does not require further prudence of cost review by the Authority in terms of Section 1.10 of Tariff Guidelines issued by GoP.
4. The Authority considers that the bidding process has been carried out by PPIB as a board established by and performing under the Ministry of Water & Power for attracting and facilitating investment in power generation. The rate said to have been arrived at through a competitive bidding among existing IPPs, recommendation to the Federal Government after negotiation and the consideration and subsequent approval by the ECC renders adequate credibility to the process. In view of the massive load shedding in the country, the inconvenience to the public and consequent disturbances in the streets it is considered prudent by the Authority not to disturb the finality of the process through another prudence review. Such an action is liable to delay the advent of critically required additional generation capacity in the country and would therefore not be in the public interest.
5. In view of the above the Authority hereby approves the tariff of Tapal Energy Limited (TEL) as set out in the following order;

ORDER

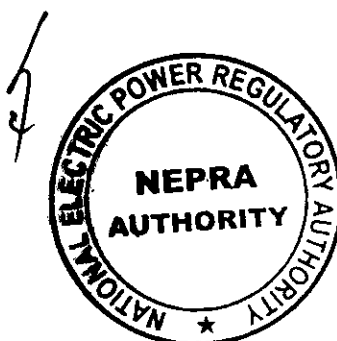
Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules 2000, Tapal Energy Limited (TEL) is allowed to charge, subject to adjustment of Capacity Purchase Price on account of net dependable capacity as determined by test jointly carried out by Central Power Purchasing Agency (CPPA) and the petitioner, the reference tariff schedule (**Annex-I**) for delivery of electricity to CPPA of NTDC for procurement on behalf of EX-WAPDA Distribution Companies.

The following indexations shall be applicable to reference tariff.

I) **One Time Adjustment**

a) **Adjustment due to variation in net capacity**

The reference tariff has been determined on the basis of minimum net capacity of 161.2 MW at delivery point at mean site conditions. All the tariff components except fuel cost component shall be adjusted at the time of COD based upon the



45/6 2

IDC tests to be carried out for determination of contracted capacity. If the IDC is established higher than 161.2 MW, the adjustments shall be made according to the following formula:

- i) Fixed O&M = $0.1517/\text{tested IDC} \times 161.2 \text{ MW}$
- ii) Insurance = $0.0517/\text{tested IDC} \times 161.2 \text{ MW}$
- iii) Debt Service _(Ref) = $DS_{(Ref)}/\text{tested IDC} \times 161.2 \text{ MW}$
- iv) Return on Equity = $0.2025/\text{tested IDC} \times 161.2 \text{ MW}$
- v) ROE during Construction = $0.0359/\text{tested IDC} \times 161.2 \text{ MW}$
- vi) Variable O&M – Foreign = $0.3348/\text{tested IDC} \times 161.2 \text{ MW}$
- vii) Variable O&M – Local = $0.0971/\text{tested IDC} \times 161.2 \text{ MW}$

b) Adjustment in Insurance Component

Insurance component of reference tariff shall be adjusted as per actual on yearly basis upon production of authentic documentary evidence by TEL according to the following formula:

$$\text{Insurance}_{(Rev)} = \text{Ins}_{(Adj)} / (0.0517 * \text{NC} * 1000 * 8760 / 10^6) \times \text{AP} / 60 * \text{ER}_{(Rev)}$$

Where;

$\text{Ins}_{(Adj)}$ = Adjusted insurance at COD

NC = Net Capacity in MW at COD

AP = Actual Premium subject to maximum of Reference Percentage (US\$) determined at COD

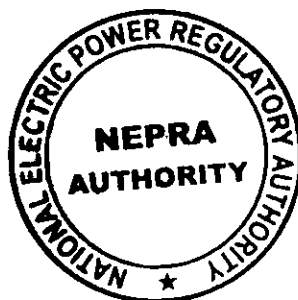
$\text{ER}_{(Rev)}$ = Revised Exchange Rate

c) Adjustment due to custom duties and Interest during Construction

The tariff is approved by ECC and it includes Custom Duties and Interest During Construction therefore no adjustment on this accounts is required.

II) Pass-Through Items

No provision for income tax has been accounted for in the tariff. If TEL is obligated to pay any tax on its income, the exact amount paid by the company may be reimbursed by NTDC to TEL on production of original receipts. This payment may be considered as pass-through (as Rs./kW/Hour) monthly payment spread over a 12 months period in addition to the capacity purchase price in the Reference Tariff. Furthermore, in such a scenario, TEL may also



submit to NTDC details of any tax shield savings and NTDC may deduct the amount of these savings from its payment to TEL on account of taxation. Withholding Tax is also a pass through item just like other taxes as indicated in the government guidelines for determination of tariff for new IPPs.

Withholding tax shall be allowed @7.5% (or applicable rate) of the return on equity. CPPA (NTDC) shall make payment on account of withholding tax at the time of actual payment of dividend subject to maximum of 7.5% (or applicable rate) of 15% of equity.

In case Company does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the Net Return on Equity) would be carried forward and accumulated so that the Company is able to recover the same as a pass through from the Power Purchaser in future on the basis of the total dividend pay out.

III Indexations

The following indexations shall be applicable to reference tariff.

a) Indexation applicable to O&M

In future the 50% of Fixed O&M part of Capacity Charge will be adjusted on account of local Inflation (WPI) and 50% on account of variation in US CPI and dollar/Rupee exchange rate. Quarterly adjustment for local inflation, foreign inflation and exchange rate variation will be made on 1st July, 1st October, 1st January and 1st April based on the average of the available information with respect to WPI notified by the Federal Bureau of Statistics (FBS), US CPI issued by US Bureau of Labor Statistics and revised TT & OD selling rate of US Dollar notified by the National Bank of Pakistan. The mode of indexation will be as under:

b) Fixed O&M

$$F O\&M_{(LREV)} = \text{Rs. } 0.1517 \text{ per kW per Hour} * 50\% * WPI_{(REV)} / 117.80$$

$$F O\&M_{(FREX)} = \text{Rs. } 0.1517 \text{ per kW per hour} * 50\% * US CPI_{(REV)} / 199.8 * ER_{(REV)} / 60$$



Where:

$F O\&M_{(LREV)}$ = The revised applicable Fixed O&M Local Component of the Capacity Charge indexed with WPI

$F O\&M_{(FREV)}$ = The revised applicable Fixed O&M Foreign Component of the Capacity Charge indexed with US CPI and Exchange rate variations.

$WPI_{(REV)}$ = The revised wholesale Price Index (manufacturers)

$WPI_{(REF)}$ = 117.80 wholesale price index (manufacturers) of April 2006 notified by Federal Bureau of Statistics

$US\ CPI_{(REV)}$ = The revised US CPI

$US\ CPI_{(REF)}$ = 199.8 US CPI for the month of March 2006 as notified by the US Bureau of Labor Statistics

$ER_{(REV)}$ = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

Note: The reference numbers indicated above shall be replaced by the revised numbers after incorporating the required adjustments at COD.

c) Variable O&M

The formula of indexation for variable O & M component will be as under:

$V\ O\&M_{(FREV)}$ = Rs. 0.3348 per kWh * $US\ CPI_{(REV)}/199.8$ * $ER_{(FREV)}/60$

$V\ O\&M_{(LREV)}$ = Rs. 0.0971 per kWh * $WPI_{(REV)}/117.80$

Where;

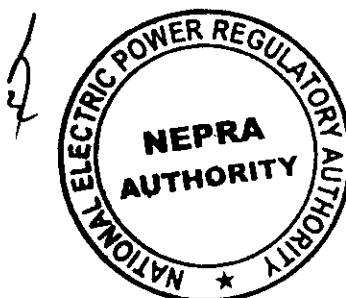
$V\ O\&M_{(FREV)}$ = The revised applicable Variable O&M Component of the Energy Charge indexed with US CPI and Exchange rate variations

$V\ O\&M_{(LREV)}$ = The revised applicable Local Variable O&M Component of the Energy Charge indexed

$US\ CPI_{(REV)}$ = The revised US CPI

$US\ CPI_{(REF)}$ = 199.8 US CPI for the month of March 2006 as notified by the US Bureau of Labor Statistics

$ER_{(REV)}$ = The revised TT & OD selling rate of US dollar as notified



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by the National Bank of Pakistan.

Note: The reference VO&M indicated above shall be replaced with the revised number at COD after incorporating the required adjustment based upon the IDC Test.

d) Adjustment for KIBOR variation

The interest part of fixed charge component will remain unchanged throughout the term except for the quarterly adjustment due to variations in interest rate as a result of variation in 3-monthly KIBOR according to the following formula:

$$\Delta I = NC/1000 * (8760/4) * Q_{(R)} * LR_{(Ref)} * (KIBOR_{(REV)} - 8.54\%) / 4$$

Where:

ΔI = The variation in interest charges applicable corresponding to variation in 3-monthly KIBOR. ΔI can be positive or negative depending upon whether KIBOR REV is > or < 8.54%. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each quarter under adjustment on quarterly basis.

NC = Net Capacity established at COD

$Q_{(R)}$ = Remaining quarters of Loan Repayment

$LR_{(Ref)}$ = Reference Loan Repayment component of tariff established at COD

e) Fuel Price Variation

The Variable Charge Part of the tariff relating to fuel cost shall be adjusted on account of the fuel price variations according to the following formula:

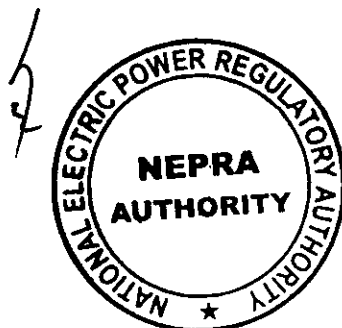
$$FC_{(Rev)} = Rs.4.3626 \text{ per kWh} * FP_{(Rev)} / Rs. 22,140.07 \text{ per Ton} + 0.4532 * Ft_{(Rev)} / Rs.2,300 \text{ per ton}$$

Where:

$FC_{(Rev)}$ = Revised fuel cost component of Variable Charge on RFO.

$Ft_{(Rev)}$ = Revised Freight Charges

$FP_{(Rev)}$ = The new price of RFO per Metric Ton as per the following mechanism;



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Description	US\$/Ton	Rs./Ton
1. Arab Gulf Mean Price Premium i.e. Freight + Margin + Blending		
2. C&F Price (1 + 2)		
3. Import Incidentals		
i. Bank Charges 0.10% of c&f		
ii. LC Commission 0.15% of c&f		
iii. Marine Insurance 0.108% of c&f		
iv. Handling Charges 0.15% of c&f		
v. Ocean Losses 0.50% of c&f		
vi. FOTCO charges		
4. Landed cost (2 + 3)		
5. Ad Valorem Duty # 1% of landed cost		
6. GST @ 15% of 4 + 5		
7. OMC Margin (3.5% of 4 + 5 + 6)		
8. GST on OMC Margin (15% of 7)		
9. Marketing/Selling Price of RFO ex-OM installation Karachi (4 + 5 + 6 + 7 + 8)		
10. Inland Freight (at actual)		Rs./Ton
11. GST on Inland Freight @ 15%		Rs./Ton
12. Delivered Price of RFO to IPP (Rupees per ton) (9 + 10 + 11)		Rs./Ton

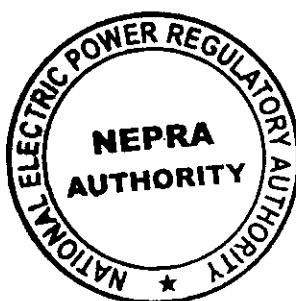
US\$ Pak Rupee Exchange Rate-NBP Selling TT/OD at the date of applicable fuel price

- * The supplier shall clearly indicate average Gross and Net calorific values of Arabian Gulf or any other source of which average reference fuel prices are used. Fuel supplier shall provide price adjustment mechanism due to variation in calorific value of the fuel being supplied to the IPP against the reference calorific values.
- ** Fuel supplier shall provide item wise actual incidental charges prevailing at the time of receiving payment for fuel supply.

The fuel cost component will be adjusted after the commercial operation date, at the time of revision in RFO price. Adjustment on account of local inflation, foreign inflation, foreign exchange rate variation, KIBOR variation and fuel price variation will be approved and announced by the Authority for immediate application within seven working days after receipt of TEL's request for adjustment in accordance with the requisite indexation mechanism stipulated herein.

Terms and Conditions of Tariff:

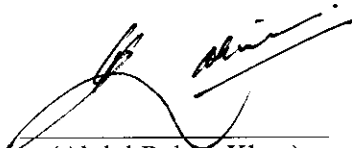
- i) All new equipment will be installed and the plant will be of standard configuration.

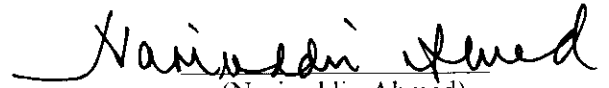


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- ii) Capacity Charge Rs./kW/hour is applicable to available capacity at the delivery Point.
- iii) Dispatch criterion will be based on the Energy Charge.
- iv) Partial loading adjustment shall be applicable for the purpose of payment according to manufacturer's heat rate curves in case the plant load falls below 40%.
- v) 45% net efficiency at site over the 25 years life cycle of plant.
- vi) No compensation for start-up/shutdown charges will be allowed.
- vii) The above tariff is applicable for a period of 25 years commencing from the date of the Commercial Operation.

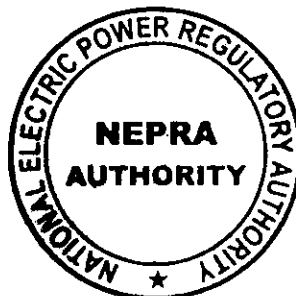
The above terms and conditions be incorporated as the specified tariff approved by the Authority pursuant to Rule 6 of the Licencing (Generation) Rules, in a Power Purchase Agreement between TEL and CPPA.


(Abdul Rahim Khan)
Member


(Nasiruddin Ahmed)
Member

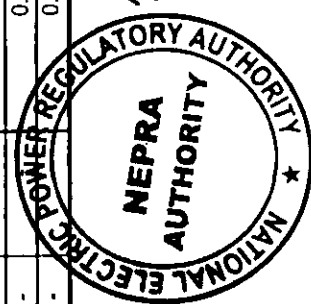


Lt. General (R) Saeed uz Zafar
Chairman



Tapal Energy Limited (TEL) Reference Generation Tariff

Energy Purchase Price (EPP) (Rs./kWh)				Capacity Purchase Price (CPP) @ 100% PF (Rs./kWh/hr)										Tariff @ 60% PF		
Year	Fuel Component t	Variable O&M Component	Total EPP C=a+b	Escalable Component				Non-Escalable Component					Total		Total CPP Rs./kWh M=L/0.6	Total Tariff Rs./kWh N = C + M
				Fixed O&M	Cost of Working Capital	Insurance	ROE	ROE - Cons. Period	Withholdin g Tax @7.5%	Debt Service		CPP L = Sum of d to k				
										Principal	Interest					
	a	b	C=a+b	d	e	f	g	h	i	j	k					
1	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.6472	1.7870	2.9783	7.7728		
2	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.5802	1.7200	2.8667	7.6612		
3	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.5129	1.6527	2.7545	7.5490		
4	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.4457	1.5855	2.6425	7.4370		
5	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.3784	1.5182	2.5303	7.3248		
6	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.3111	1.4509	2.4182	7.2127		
7	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.2438	1.3836	2.3060	7.1005		
8	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.1766	1.3164	2.1940	6.9885		
9	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.1093	1.2491	2.0818	6.8763		
10	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	0.5829	0.0421	1.1819	1.9698	6.7643		
11	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
12	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
13	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
14	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
15	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
16	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
17	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
18	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
19	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
20	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
21	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
22	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
23	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
24	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		
25	4.3626	0.4319	4.7945	0.1517	0.0852	0.0517	0.2090	0.0392	0.0201	-	-	0.5569	0.9282	5.7227		



Levelized tariff	
Rs./kWh	6.8280
US Cents/kWh	11.3800

Average	
1-10	7.2687
11-25	5.7227
1-25	6.3411

Note: This tariff is based on the assumptions detailed in our letter of February 16, 2007

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