



Registrar

National Electric Power Regulatory Authority

Islamic Republic of Pakistan

2nd Floor, OPF Building, G-5/2, Islamabad.
Ph: 9206500, 9207200 Fax : 9210215
E-mail: office@nepra.org.pk

No.NEPRA/R/TRF-85/HPGCL-2007/5153-55
December 4, 2007

Subject:- Corrigendum – Determination of Generation Tariff by the Authority regarding Halmore Power Generation Company (Pvt.) Ltd. (Case No. NEPRA/TRF-85/HPGCL-2007)

Reference to this office letter No. NEPRA/R/TRF-85/HPGCL-2007/4711-13 dated November 8, 2007, some typo mistakes have been noted in the Order of the Authority. The following corrections are being made in the Order of the Authority;

- i) In paragraph 5, in the Reference Tariff, the tariff component of Insurance of 0.0688 during the Year 11 to 30 may be replaced with 0.0739;
- ii) In paragraph 5(I) under sub heading (a) Adjustment due to variation in net capacity, the entire text before the formula may be replaced with the text given hereunder;
“The reference tariff has been determined on the basis of minimum net capacity of 209 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 for operation on both fuels i.e. Gas & HSD. If the IDC is established higher than 209 MW, the adjustments shall be made according to the following formula;”
- iii) In paragraph 5 of Order, in line 2 of Section III a) (i) (Indexations) the figure 200 may be replaced with 199.8;
- iv) In the note appearing under III b) Adjustment for KIBOR variation, LIBOR may be replaced with CIR.


2. For the purpose of clarity the corrected Order is attached.

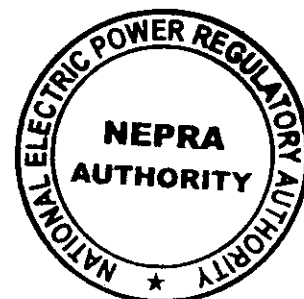
Document Attached / **As above.**

The Secretary
Cabinet Division
Government of Pakistan
Cabinet Secretariat
Islamabad

CC:

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


4.12.07
(Mahjoob Ahmad Mirza)





CORRECTED ORDER OF THE AUTHORITY
IN CASE NO. NEPA/TRF-85/HPGCL-2007
TO BE NOTIFIED IN THE OFFICIAL GAZETTE

The Authority has assessed the project cost as per the breakup given hereunder;

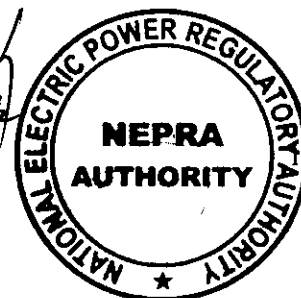
i)	EPC	US\$ 167.148 million
ii)	Rupee/Dollar parity	Pak Rs. 60
iii)	Euro/US\$ parity	1.4556
iv)	Non-EPC	US\$ 18.762 Million
v)	Financial Fee	US\$ 20.707 Million
vi)	Custom Duties	US\$ 7.357 Million
vii)	IDC	US\$ 11.240 Million

Based upon the above assessment of the Project Cost the Reference Tariff determined by the Authority is indicated in the following table;

REFERENCE TARIFF

Tariff Components	Year 1 to 10	Year 11 to 30	Indexation
Capacity Charge (PKR/kW/Hour)			
O&M Foreign	0.0651	0.0651	US CPI & \$ to Rupee
O&M Local	0.0434	0.0434	WPI
Cost of Working Capital *	0.0163	0.0163	KIBOR
Insurance	0.0739	0.0739	US\$ to Rupee
Debt Service - Local	0.1803	-	KIBOR
- Foreign	0.5864	-	Euro to Rupee
Return on Equity	0.2768	0.2768	US\$ to Rupee
ROE during Construction	0.0600	0.0600	US\$ to Rupee
Total Capacity Charge	1.3023	0.5356	
* In case plant operation on HSD cost of working capital shall be paid on 15 days inventory level basis as Rs. 0.0349/kW/hour			
A) Energy Charge on Operation on Gas Rs./kWh			
Fuel Cost Component	1.7787	1.7787	Fuel Price
Variable O&M	0.1746	0.1746	US CPI & \$ to Rupee
B) Energy Charge on Operation on HSD Rs./kWh			
Fuel Cost Component	6.7151	6.7151	Fuel Price
Variable O&M	0.2520	0.2520	US CPI & \$ to Rupee

- Note: i) Capacity Charge Rs./kW/hour applicable to dependable capacity at the delivery point.
- ii) Dispatch criterion will be Energy Charge.
- iii) The above tariff is applicable for a period of 30 years commencing from the date of the Commercial Operation.
- iv) Component wise tariff for operation on Gas and HSD is indicated at Annex-I & II.
- v) Debt Servicing schedule is attached as Annex-III.





Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules 2000, HPGCL is allowed to charge, subject to adjustment of Capacity Purchase Price, on account of 'Net Dependable Capacity', as determined by test(s) jointly carried out by Power Purchaser and the Petitioner, the above mentioned tariff for the delivery of electricity to Power Purchaser. 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 209 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 for operation on both fuels i.e. Gas & HSD. If the IDC is established higher than 209 MW, the adjustments shall be made according to the following formula;

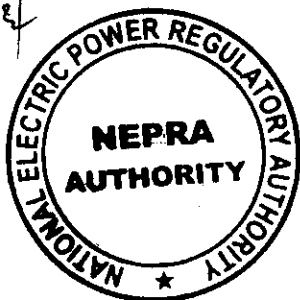
i) O&M Foreign	= 0.0651/tested IDC x 209MW
ii) O&M Local	= 0.0434/tested IDC x 209MW
iii) Insurance	= 0.0739/tested IDC x 209MW
iv) Cost of Working Capital-Gas	= 0.0163/tested IDC x 209MW
v) Cost of Working Capital-HSD	= 0.0349/tested IDC x 209MW
vi) Debt Service-Local	= 0.1803/tested IDC x 209MW
-Foreign	= 0.5864/tested IDC x 209 MW
vii) Return on Equity	= 0.2768/tested IDC x 209MW
viii) ROE during Construction	= 0.0600/tested IDC x 209MW
ix) Variable O&M - Gas	= 0.1746/tested IDC x 209MW
x) Variable O&M - HSD	= 0.2520/tested IDC x 209MW

b) Debt Service, ROE and ROEDC shall be adjusted at COD as per actual based upon the authentic documentary evidence to be provided by HPGCL on account of following variations;

- i) The Euro and Dollar component of EPC Cost for variation in relevant exchange rate variation against reference exchange rates;
- ii) Financial Advisory Fee (subject to the maximum of 1.2% of the borrowing);
- iii) Custom Duties & Taxes
- iv) Interest During Construction;
- v) Change in Financing Structure due to change in Foreign/ Local Borrowing Composition
- vi) The Working Capital requirement for fuel inventory will be established at the time of COD on the basis of fuel prices at that time.

c) Adjustment in Insurance as per actual

The actual insurance cost for the minimum cover required under contractual obligations with the Power Purchaser not exceeding 1.35% of the EPC Cost will be treated as pass-





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

$$\text{Insurance (Revised)} = \text{AIC}/\$2.256 \text{ million} \times \text{AP}$$

Where;

AIC = Adjusted Insurance Component as per IDC Test

AP = Actual Premium

II. Pass-Through Items

No provision for income tax has been accounted for in the tariff. If HPGCL is obligated to pay any tax on its ROE, the exact amount paid by the company may be reimbursed by Power Purchaser to HPGCL on production of original receipts. This payment may be considered as pass-through (as Rs./kW/hour) hourly payment spread over a 12 months period in addition to the capacity purchase price in the Reference Tariff. Furthermore, in such a scenario, HPGCL may also submit to Power Purchaser details of any tax shield savings and Power Purchaser will deduct the amount of these savings from its payment to HPGCL 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 paid @ 15% of the reference equity. Power Purchaser (NTDC) shall make payment on account of withholding tax at the time of actual payment of dividend subject to maximum of 7.5% of 15% equity according to the following formula:

$$\text{Withholding Tax Payable} = \{ \{ 15\% * (E_{(REF)} - E_{(Red)}) \} + \text{ROEDC}_{(Ref)} \} * 7.5\%$$

Where:

$E_{(REF)}$ = Reference Equity (US\$ 56.304 million x 60)

$E_{(Red)}$ = Equity Redeemed

$\text{ROEDC}_{(REF)}$ = Reference Return on Equity During Construction

Note: In case of foreign equity withholding tax calculated according to the above formula shall be adjusted for variation in currency (US\$ to Rupee).

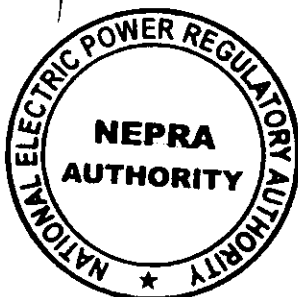
In case Company does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the Net Return on Equity) would be carried forward and accumulated so that the Company 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 indexation shall be applicable to the reference tariff as follows;

a) Indexation applicable to O&M

In future the 40% of Fixed O&M part of Capacity Charge will be adjusted on account of average quarterly local Inflation (WPI) and 60% on account of variation in average quarterly US CPI and dollar/Rupee exchange rate. Quarterly adjustment for local inflation, foreign inflation and exchange rate variation will





be made on 15th July, 15th October, 15th January and 15th April based on the average of the available information with respect to average WPI notified by the Federal Bureau of Statistics (FBS), average 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:

(i) Fixed O&M

$$F \text{ O\&M-Local}_{(REV)} = \text{Rs. } 0.0434/\text{kW/Hour} * WPI_{(REV)} / 117.80$$

$$F \text{ O\&M-Foreign}_{(REV)} = \text{Rs. } 0.0651/\text{kW/Hr} * US \text{ CPI}_{(REV)} / 199.8 * ER_{(REV)} / 60$$

Where:

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

$F \text{ O\&M}_{(FREY)}$ = 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 average quarterly wholesale price index (manufacturers) for the quarter ending April 2006 notified by Federal Bureau of Statistics

$US \text{ CPI}_{(REV)}$ = The revised average quarterly US CPI

$US \text{ CPI}_{(REF)}$ = 199.8 average quarterly US CPI for the quarter ending April 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.

(ii) Variable O&M

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

$$V \text{ O\&M-Gas}_{(REV)} = \text{Rs. } 0.1746 \text{ per kWh} * US \text{ CPI}_{(REV)} / 199.8 * ER_{(REV)} / 60$$

$$V \text{ O\&M-HSD}_{(REV)} = \text{Rs. } 0.2520 \text{ per kWh} * US \text{ CPI}_{(REV)} / 199.8 * ER_{(REV)} / 60$$

Where:

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

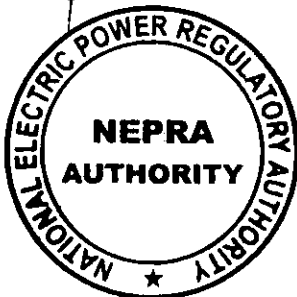
$V \text{ O\&M-HSD}_{(REV)}$ = The revised applicable Variable O&M Component of the Energy Charge indexed with US CPI and Exchange rate variations

$US \text{ CPI}_{(REV)}$ = The revised average quarterly US CPI

$US \text{ CPI}_{(REF)}$ = 199.8 average quarterly US CPI for the quarter ending April 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.



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b) Adjustment for KIBOR variation

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

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 9\%) / 4$$

Where:

ΔI = the variation in interest charges applicable corresponding to variation in quarterly KIBOR. ΔI can be positive or negative depending upon whether $KIBOR_{(REV)} > \text{or} < 9.0\%$. The interest payment obligation will be enhanced or reduced to the extent of ΔI for each quarter under adjustment applicable on quarterly

$P_{(REV)}$ = is the outstanding principal (as indicated in the attached debt service schedule to this order) on a quarterly basis on the relevant quarterly calculations date. Period 1 shall commence on the date on which the 1st installment is due after availing the grace period.

Note:- Since CIRR (Reference date of CIRR is 15th September 2007 to 14th October 2007) is fixed with respect to Foreign Loan component for the entire repayment term, there will be no adjustment on account of CIRR variation. However, if the fixed interest rate is agreed lower than the rate used for tariff calculation, the entire benefit will be passed on to the power purchaser.

c) Fuel Price Variation

The Variable Charge part of the tariff relating to fuel cost shall be adjusted on account of the fuel price variations as and when notified by the relevant authority, which in the instant case is the Oil & Gas Regulatory Authority (OGRA). In this regard, the variation in HPGCL's allowed rate relating to fuel cost shall be revised according to the following formula:

$$FCg_{(REV)} = \text{Rs. } 1.7787 \text{ per kWh} * FP_{(REV)} / \text{Rs. } 266.83 \text{ per MMBTU}$$

Where:

$FCg_{(REV)}$ = Revised fuel cost component of Variable Charge on gas

$FPg_{(REV)}$ = The new price of gas as notified by the relevant Authority per MMBTU of fuel adjusted for LHV-HHV factor.

$FCd_{(REV)}$ = $\text{Rs. } 6.7151 \text{ per kWh} * [FPD_{(REV)} \text{ Rs. per MMBTUs}] / \text{Rs. } 954.27 \text{ per MMBTU (Excl-GST)}$

Where:

$FCd_{(REV)}$ = Revised fuel cost component of Variable Charge on Diesel

$FPd_{(REV)}$ = The new price of diesel as notified by the relevant Authority per Litre of fuel adjusted for NCV-GCV factor, Specific gravity and Calorific value (Gross)

Reference values used in the calculations;

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