



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

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Registrar

No.NEPRA/R/TRF-99/SPL-2008/558-60
October 21, 2008

Subject: **Determination of the Authority in the Matter of Petition filed by Saif Power Ltd. (SPL) for Revision/Modification of its Generation Tariff (Case # NEPRA/TRF-99/SPL-2008) (3)**
Intimation of Determination of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997)

Dear Sir,

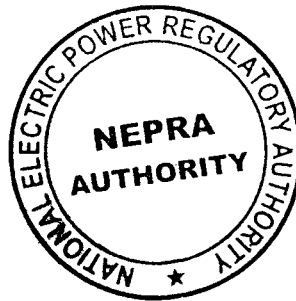
Please find enclosed the subject Determination of the Authority along with Annexure-I II & III (25 pages) in Case No. NEPRA/TRF-99/SPL-2008(3).

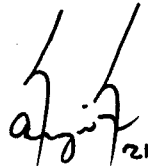
2. The Determination is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National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

3. Please note that only Order of the Authority at para 11 of the Determination relating to the reference tariff, adjustments & indexation along with Annexure-I, II & III needs to be notified in the official gazette. The Order is reproduced for the purpose of clarity and is attached herewith.

Enclosure: As above

The Secretary
Cabinet Division
Government of Pakistan
Cabinet Secretariat
Islamabad




(Mahjoob Ahmad Mirza)
21.10.08

CC:

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



ORDER OF THE AUTHORITY
IN CASE NO. NEPRA/TRF-99/SPL-2008
TO BE NOTIFIED IN THE OFFICIAL GAZETTE

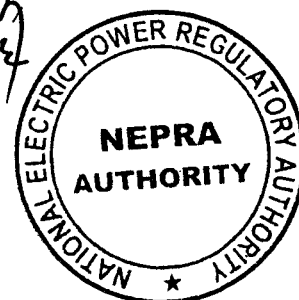
The Authority has assessed the project cost as per the breakup given hereunder;

i)	EPC;	US\$ 93,068,800 Euro 47,501,000	} equivalent US\$ 157.062 m
ii)	Rupee/Euro parity	Pak Rs. 110.428	
iii)	Rupee/Dollar parity	Pak Rs. 81.9683	
iv)	Piling Work and Soil Investigation	US\$ 2.12 million	
v)	Non-EPC	US\$ 16.257 Million	
vi)	Lenders Advisory Fee	US\$ 2.94 Million	
vii)	Custom Duties	US\$ 5.50 Million	
viii)	Taxes	US\$ 1.88 million	
ix)	IDC	US\$ 25.47 Million	
	Total Project Cost	US\$ 211.224 million	

Based upon the above assessment of 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	0.0976	0.0976	US CPI & \$ to Rupee
O&M Local	0.0502	0.0502	WPI
Cost of Working Capital *	0.0455	0.0455	KIBOR
Insurance	0.0949	0.0949	US\$ to Rupee
Debt Service	1.5310	-	KIBOR
Return on Equity	0.3601	0.3601	US\$ to Rupee
ROE during Construction	0.0292	0.0292	US\$ to Rupee
Total Capacity Charge	2.2084	0.6774	
* In case of HSD plant operation on HSD cost of working capital shall be paid on 15 days inventory level basis as Rs. 0.0974/kW/hour			
A) Energy Charge on Operation on Gas			
Rs./kWh			Fuel Price
Fuel Cost Component	1.8573	1.8573	US CPI & US\$ to Rupee





Variable O&M	0.2547	0.2547	
B) Energy Charge on Operation on HSD Rs./kWh			
Fuel Cost Component	12.1651	12.1651	Fuel Price
Variable O&M	0.3676	0.3676	US CPI & US\$ 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-II & III.

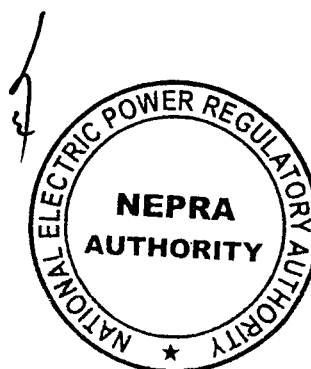
Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules 2000, Saif Power Limited (SPL) is allowed to charge, subject to adjustment of Capacity Purchase Price on account of net dependable capacity as determined by test jointly carried out by Central Power Purchasing Agency (CPPA) and the petitioner, the above mentioned tariff 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. Adjustment in EPC Cost (One Time)

The Authority has assessed EPC cost as US\$ 157.062 million comprising of US\$ 73 million plus Euro 47.501 million for equipment and US\$ 20 million for construction. Since the exact timing of payment to EPC contractor is not known at this point of time therefore an adjustment for foreign currency fluctuation for the portion paid in the relevant foreign currency will be made. In this regard, the sponsor will be required to provide all the necessary relevant details along with documentary evidence. Based upon such information the relevant currency of EPC cost components shall be established and applied to the corresponding EPC cost components. The relevant tariff components i.e. Insurance, ROE, ROEDC, Principal Repayment and Interest Charges shall be adjusted only for currency fluctuation against the reference parity values.

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 relevant tariff components



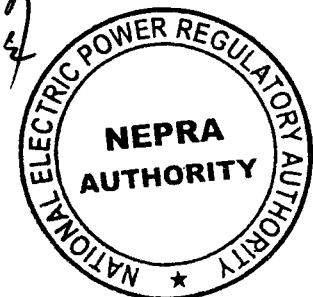


including fuel cost component shall be adjusted at the time of Commercial Operation Date (COD) based upon the Initial Dependable Capacity (IDC) to be carried out for determination of contracted capacity. Adjustment shall not be made if IDC is established less than net capacity of 209 MW at reference site conditions. The adjustments shall be made according to the following formula:

- | | |
|---------------------------------|-------------------------------------|
| i) O&M Foreign | = 0.0976/tested IDC x 209 MW |
| ii) O&M Local | = 0.0502/tested IDC x 209 MW |
| iii) Insurance | = 0.0949/tested IDC x 209 MW |
| iv) Cost of Working Capital-Gas | = 0.0455/tested IDC x 209 MW |
| v) Cost of Working Capital-HSD | = 0.0974/tested IDC x 209 MW |
| vi) Debt Service | = 1.5310/tested IDC x 209 MW |
| vii) Return on Equity | = 0.3601/tested IDC x 209 MW |
| viii) ROE during Construction | = 0.0292/tested IDC x 209 MW |
| ix) Variable O&M - Gas | = 0.0318+0.2229/tested IDC x 209 MW |
| x) Variable O&M - HSD | = 0.0460+0.3216/tested IDC x 209 MW |

b) Debt Service, Return on Equity (ROE) and Return on Equity during Construction (ROEDC) shall be adjusted at COD as per actual based upon the authentic documentary evidence to be provided by SPL 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) Cost of Piling Works and Soil Investigation;
- iv) Custom Duties & Taxes including Federal Excise Duty of 1% and Sindh Infrastructure Cess of 0.525%
- v) Interest During Construction;
- vi) Change in Financing Structure due to change in Foreign/ Local Borrowing Composition
- vii) Cost of working capital based on HSD price prevailing at the time of COD.





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 the production of authentic documentary evidence by SPL according to the following formula;

$$\text{Insurance}_{(\text{Adj.})} = \text{AIC} / 2.12 * P_{(\text{Act})} * \text{ER}_{(\text{Rev})} / 81.9683$$

Where;

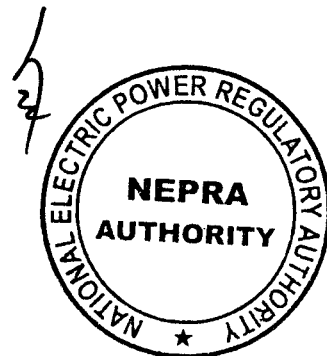
- AIC = Adjusted Insurance Component (Rs. kW/hr) as per IDC Test
P_(Act) = Actual Premium or 1.35% of the adjusted EPC whichever is lower
ER_(Rev) = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan at Invoice date

Adjustment of Withholding Tax

Pass-Through Items

No provision for income tax, workers' profit participation fund and workers' welfare fund, any other tax, excise duty or other duty, levy, charge, surcharge or other governmental impositions, payable on the generation, sales has been accounted for in the tariff. If SPL is obligated to pay any tax on the income purely generated from its operation i.e. Electricity Generation of power producer, the exact amount should be reimbursed by CPPA 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, SPL may also submit to CPPA details of any tax shield savings and CPPA will deduct the amount of these savings from its payment to SPL 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. CPPA (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:





$$\text{Withholding Tax Payable} = \{[15\% * (E(\text{Ref}) - E(\text{Red})) + \text{ROEDC}(\text{Ref})] * 7.5\% * \text{ER}(\text{Rev})\} / 81.9683$$

Where:

$E(\text{Ref})$ = Adjusted Reference Equity at COD

$E(\text{Red})$ = Equity Redeemed

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

$\text{ER}(\text{Rev})$ = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

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.

Indexations:

The following indexation shall be applicable to the reference tariff as follows;

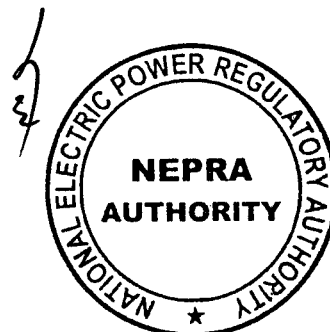
a) Indexation applicable to O&M

The Fixed O&M local component of Capacity Charge will be adjusted on account of Inflation (WPI) and Fixed O&M foreign component 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 15th July, 15th October, 15th January and 15th April based on the latest 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:

(i) Fixed O&M

$$\text{F O\&M-Local}(\text{Rev}) = \text{Rs. } 0.0502/\text{kW/Hour} * \text{WPI}(\text{REV}) / 132.1$$

$$\text{F O\&M-Foreign}(\text{Rev}) = \text{Rs. } 0.0976/\text{kW/Hr} * \text{US CPI}(\text{REV}) / 213.528 * \text{ER}(\text{REV}) / 81.9683$$





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)
- $WPI_{(REF)}$ = 132.1 wholesale price index (manufactures) of March 2008 notified by Federal Bureau of Statistics
- $US\ CPI_{(REV)}$ = The revised average quarterly US CPI
- $US\ CPI_{(REF)}$ = Reference US CPI (All Urban Consumers) of 213.528 for March 2008 as notified by the US Bureau of Labor Statistics
- $ER_{(REV)}$ = Revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan
- $ER_{(REF)}$ = Reference TT & OD selling rate of US dollar of Rs. 81.9683 per US\$ 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

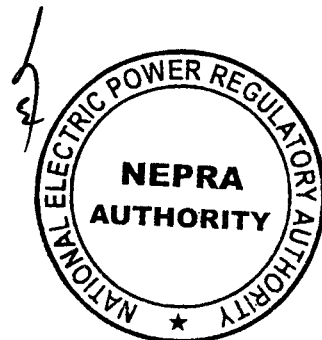
The formula of indexation for variable O & M component will be as under:

$$V\ O\&M\text{-Gas}_{(REV)} = \text{Rs. } 0.2547 \text{ per kWh} * US\ CPI_{(REV)} / 213.528 * ER_{(REV)} / 81.9683$$

$$V\ O\&M\text{-HSD}_{(REV)} = \text{Rs. } 0.3676 \text{ per kWh} * US\ CPI_{(REV)} / 213.528 * ER_{(REV)} / 81.9683$$

Where:

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





$WPI_{(REV)}$	=	The revised wholesale Price Index (manufacturers)
$WPI_{(REF)}$	=	132.1 wholesale price index (manufactures) of March 2008 notified by Federal Bureau of Statistics
$US\ CPI_{(REV)}$	=	The revised average quarterly US CPI
$US\ CPI_{(REF)}$	=	Reference US CPI (All Urban Consumers) of 213.528 for March 2008 as notified by the US Bureau of Labor Statistics
$ER_{(REV)}$	=	Revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan
$ER_{(REF)}$	=	Reference TT & OD selling rate of US dollar of Rs. 81.9683 per US\$ 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.

b) Adjustment for KIBOR variation

The interest part of fixed charge 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/LIBOR according to the following formula;

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 14.80\%) / 4$$

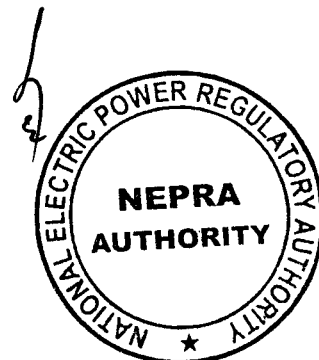
Where:

ΔI = the variation in interest charges applicable corresponding to variation in quarterly KIBOR. ΔI can be positive or negative depending upon whether $KIBOR_{REV} >$ or $< 14.80\%$. 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.

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 SPL's allowed rate relating to fuel cost shall be revised according to the following formula:

$$FC-Gas_{(Rev)} = Rs. 1.8573 \text{ per kWh} * FP(Rev)/Rs. 278.62 \text{ per MMBTU}$$

Where:

$$FC-Gas_{(Rev)} = \text{Revised fuel cost component of Variable Charge on gas}$$

$$FP-Gas_{(Rev)} = \text{The new price of gas as notified by the relevant Authority per MMBTU of fuel adjusted for LHV-HHV factor.}$$

$$FC-D_{(Rev)} = Rs. 12.1651 \text{ per kWh} * [FPD(Rev) \text{ Rs. Per MMBTU}] / Rs. 1728.69 \text{ MMBTU (Excl-GST)}$$

Where:

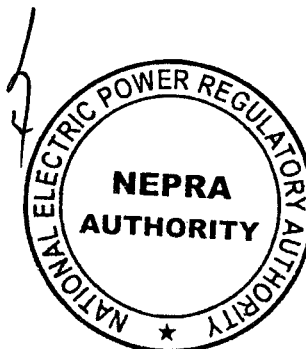
$$FCD_{(Rev)} = \text{Revised fuel cost component of Variable Charge on diesel}$$

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

Reference values used in the calculations;

HSD Fuel price with GST (GCV)	Rs. 68.14 per liter
General Sales Tax (GST)	16%
HSD fuel Price without GST (GCV)	Rs. 58.74 per liter
HHV-LHV Adjustment Factor	1.06
HSD Fuel Price without GST (NCV)	Rs. 62.27 per liter
HSD Fuel Price without GST	Rs. 1728.69 per MMBTU *
* Calculated by using the following reference values	
Reference Specific Gravity @ 15 °C or 15.6 °C 0.84	
Reference Calorific Value (Gross)	42,880 BTUs/Kg

- ii). In case of adjustment in HSD fuel component, SPL shall submit request for adjustment duly supported with the supplier's certificate indicating flash point, specific gravity and calorific value duly verified by the power purchaser. The Power Purchaser shall make all necessary arrangements to satisfy it regarding the Authenticity and validity of the information provided





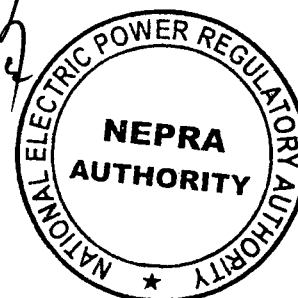
by SPL. In case of any dispute or discrepancy the power purchaser shall seek third party verification which for technical issues shall be HDIP and for price issues shall be OGRA. SPL shall be allowed immediate adjustment by the Authority within 7 days of such request with requisite certificates and verifications.

- iii). Adjustment on account of inflation, foreign exchange variation, KIBOR variation and fuel price variation will be approved and announced by the Authority within seven working days after receipt of SPL's request for adjustment in accordance with the requisite indexation mechanism stipulated herein.
- iv). Any change or modification regarding application of US CPI on foreign component of O&M cost and application of local CPI instead of WPI on local component of O&M cost made through GOP Policy shall also be applicable to SPL. However the change or modification shall be applicable from the date of issue of such Policy and shall not be applicable retrospectively.

Terms and Conditions of Tariff:

- i) Use of Gas will be considered as primary fuel.
- ii) All new equipment will be installed and the plant will be of standard configuration.
- iii) Dispatch criterion will be based on the Energy Charge.
- iv) Diesel oil will be used only for startups and other contingent requirements. Use of Diesel oil shall be allowed in accordance with the GOP's fuel policy announced from time to time.
- v) General assumptions of SPL which are not covered in this determination may be dealt with in the PPA according to its standard terms.

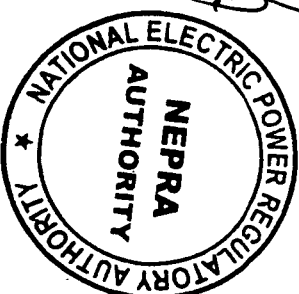
The above tariff and terms and conditions be incorporated as the specified tariff approved by the Authority pursuant to Rule 6 of the Licencing (Generation) Rules, in a Power Purchase Agreement between SPL and CPPA.



SAIF POWER LIMITED
PLANT OPERATION ON GAS

Annexure I

Year	Energy Charge (Rs./kWh)			Capacity Charge (Rs./kWh/hour)										Capacity Charge		Tariff	
	Fuel	Variable O&M	Total	Escalable (Fixed O&M) Foreign	Escalable (Fixed O&M) Local	Financing Cost on Working Capital	Escalable (Insurance)	Return on Equity	Return on Equity for Construction Period	Withholding Tax @7.5%	Loan Repayment	Interest Charges	Total	Rs. / kWh at 60% PF	Rs. / kWh	¢ / kWh	
1	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.2868	1.2442	2.2376	3.7284	5.8413	7.1263	
2	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.3413	1.1897	2.2376	3.7284	5.8413	7.1263	
3	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.4062	1.1247	2.2376	3.7284	5.8413	7.1263	
4	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.4835	1.0475	2.2376	3.7284	5.8413	7.1263	
5	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.5755	0.9555	2.2376	3.7284	5.8413	7.1263	
6	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.6850	0.8460	2.2376	3.7284	5.8413	7.1263	
7	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.8153	0.7157	2.2376	3.7284	5.8413	7.1263	
8	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.9704	0.5606	2.2376	3.7284	5.8413	7.1263	
9	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	1.1550	0.3760	2.2376	3.7284	5.8413	7.1263	
10	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	1.3747	0.1563	2.2376	3.7284	5.8413	7.1263	
11	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
12	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
13	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
14	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
15	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
16	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
17	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
18	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
19	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
20	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
21	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
22	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
23	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
24	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
25	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
26	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
27	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
28	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
29	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
30	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	-	-	0.7066	1.1777	3.2896	4.0133	
Levelized Tariff (1-30 Years)			2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0282	0.0282	0.4045	0.5934	1.7045	2.8408	4.8528	6.0424	

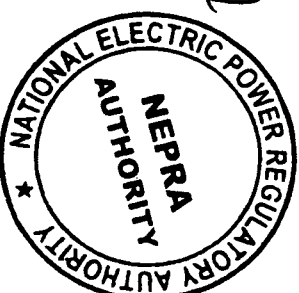


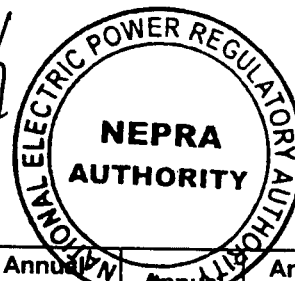
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**SAIF POWER LIMITED
PLANT OPERATION ON HSD**

Annexure II

Year	Variable Change (Rs./kWh)			Capacity Change (Rs./kWh/hour)										Capacity Charges		Total	
	Fuel	Variable O&M	Total	Escalable (Fixed O&M) Foreign	Escalable (Fixed O&M) Local	Financing Cost on Working Capital	Escalable (Insurance)	Return on Equity	Return on Equity for Construction Period	Withholding Tax @7.5%	Loan Repayment	Interest Charges	Total	Rs. / kWh at 60% PF	Rs. / kWh	¢ / kWh	
1	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.2868	1.2442	2.2896	3.8159	16.3486	19.9450	
2	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.3413	1.1897	2.2896	3.8159	16.3486	19.9450	
3	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.4062	1.1247	2.2896	3.8159	16.3486	19.9450	
4	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.4835	1.0475	2.2896	3.8159	16.3486	19.9450	
5	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.5755	0.9555	2.2896	3.8159	16.3486	19.9450	
6	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.6850	0.8460	2.2896	3.8159	16.3486	19.9450	
7	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.8153	0.7157	2.2896	3.8159	16.3486	19.9450	
8	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.9704	0.5606	2.2896	3.8159	16.3486	19.9450	
9	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	1.1550	0.3760	2.2896	3.8159	16.3486	19.9450	
10	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	1.3747	0.1563	0.7586	1.2643	13.7969	16.8320	
11	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
12	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
13	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
14	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
15	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
16	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
17	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
18	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
19	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
20	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
21	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
22	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
23	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
24	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
25	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
26	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
27	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
28	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
29	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
30	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	-	-	0.7586	1.2643	13.7969	16.8320	
Levelized Tariff (1-30 Years)			12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.4045	0.5934	1.7565	2.9276	16.4601	18.8611	





**SAIF POWER LIMITED
Debt Servicing Schedule**

Period	Local Debt					Annual Principal Repayment Rs./kW/ Month	Annual Interest Rs./kW/ Month	Annual Debt Servicing Rs./kW/ Month
	Principal	Repayment	Mark-Up	Balance	Debt Service			
	Million \$	Million \$	Million \$	Million \$	Millin \$			
	158.42	1.50	7.05	156.92	8.55			
	156.92	1.56	6.98	155.36	8.55			
	155.36	1.63	6.91	153.72	8.55			
	153.72	1.71	6.84	152.01	8.55			
1	158.42	6.40	27.79	152.01	34.19	209.33	908.29	1,117.62
	152.01	1.78	6.76	150.23	8.55			
	150.23	1.86	6.69	148.37	8.55			
	148.37	1.95	6.60	146.42	8.55			
	146.42	2.03	6.52	144.39	8.55			
2	144.39	7.62	26.57	144.39	34.19	249.15	868.46	1,117.62
	144.39	2.12	6.43	142.27	8.55			
	142.27	2.22	6.33	140.05	8.55			
	140.05	2.32	6.23	137.74	8.55			
	137.74	2.42	6.13	135.32	8.55			
3	135.32	9.07	25.12	135.32	34.19	296.55	821.07	1,117.62
	135.32	2.53	6.02	132.79	8.55			
	132.79	2.64	5.91	130.16	8.55			
	130.16	2.76	5.79	127.40	8.55			
	127.40	2.88	5.67	124.52	8.55			
4	124.52	10.80	23.39	124.52	34.19	352.97	764.65	1,117.62
	124.52	3.01	5.54	121.52	8.55			
	121.52	3.14	5.41	118.38	8.55			
	118.38	3.28	5.27	115.10	8.55			
	115.10	3.43	5.12	111.67	8.55			
5	111.67	12.85	21.34	111.67	34.19	420.11	697.50	1,117.62
	111.67	3.58	4.97	108.09	8.55			
	108.09	3.74	4.81	104.35	8.55			
	104.35	3.90	4.64	100.45	8.55			
	100.45	4.08	4.47	96.37	8.55			
6	96.37	15.30	18.89	96.37	34.19	500.04	617.58	1,117.62
	96.37	4.26	4.29	92.11	8.55			
	92.11	4.45	4.10	87.66	8.55			
	87.66	4.65	3.90	83.02	8.55			
	83.02	4.85	3.69	78.17	8.55			
7	78.17	18.21	15.98	78.17	34.19	595.16	522.46	1,117.62
	78.17	5.07	3.48	73.10	8.55			
	73.10	5.29	3.25	67.80	8.55			
	67.80	5.53	3.02	62.27	8.55			
	62.27	5.78	2.77	56.49	8.55			
8	56.49	21.67	12.52	56.49	34.19	708.38	409.23	1,117.62
	56.49	6.03	2.51	50.46	8.55			
	50.46	6.30	2.25	44.16	8.55			
	44.16	6.58	1.97	37.58	8.55			
	37.58	6.88	1.67	30.70	8.55			
9	30.70	25.79	8.40	30.70	34.19	843.15	274.47	1,117.62
	30.70	7.18	1.37	23.52	8.55			
	23.52	7.50	1.05	16.02	8.55			
	16.02	7.83	0.71	8.18	8.55			
	8.18	8.18	0.36	(0.00)	8.55			
10	(0.00)	30.70	3.49	(0.00)	34.19	1,003.54	114.07	1,117.62

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**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
(NEPRA)**

No. NEPRA/TRF-99/SPL-2008

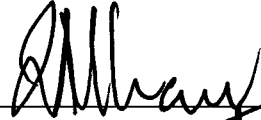
**DETERMINATION OF THE AUTHORITY IN THE MATTER OF
PETITION FILED BY SAIF POWER LIMITED (SPL)
FOR REVISION/MODIFICATION OF ITS GENERATION TARIFF**

PETITIONER

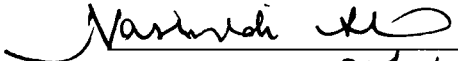
Saif Power Limited (SPL)
3rd Floor, Kulsum Plaza, 2020 Blue Area, Islamabad

AUTHORITY

Zafar Ali Khan
Member


20/10/08

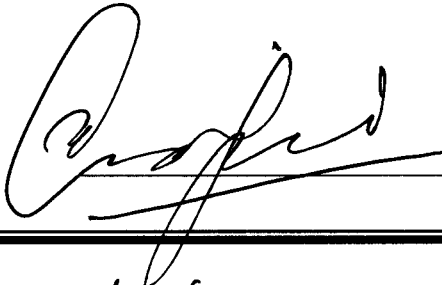
Nasiruddin Ahmed
Member

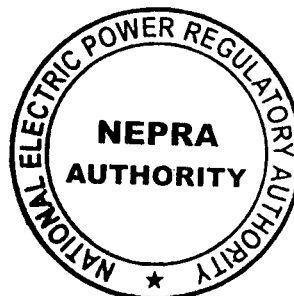

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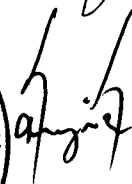
Maqbool Ahmad Khawaja
Member



Khalid Saeed
Chairman









1. Background

1.1 Saif Power Ltd. (SPL) filed a tariff petition vide letter no. SG / SPL – NEPRA / Corp. Off/ 2008/56 dated May 26, 2008 for the revision / modification of its generation tariff, which was determined by the Authority on October 1, 2007. Notice of admission along with salient features of the petition was published in the major national newspapers. The notices were also sent through letters to the key stakeholders. Hearing in the matter was held on July 10, 2008.

1.2 According to SPL the current status of the project is as follows:

- Financial close with a syndicate of nine banks was achieved on September 11, 2007 on a debt equity ratio of 75:25.
- All major equipments are in the pipeline for their delivery at site. The first gas turbine was to arrive in June 2008, while all other major equipment will arrive as per the agreed schedule.
- So far, USUS\$ 41.11 million and Euro 37.54 million have been paid to the EPC contractor.
- Construction work has already started at site. Piling work has been completed and foundations of gas turbines are nearing completion.
- Two teams from the EPC contractor have been mobilized at site and many more such teams are to follow.
- The Commercial Operation Date (COD) is scheduled on or about December 2009, i.e. no later than the Required Commercial Operations Date under the Power Purchase Agreement (PPA).

2. Relief sought

The petitioner has prayed to the Authority for the following:

- Re-instate Company's Non-EPC costs from US\$ 12.53 million to USUS\$ 18.41 million. SPL has sought this increase of US\$ 5.88 million , under the following cost heads:

Increase in Non – EPC Construction Cost	US\$0.42 million
Increase in Administration Costs	US\$1.56 million
Increase in Owner's Engineer's Cost	US\$0.90 million
O & M Mobilization Cost before COD	US\$3.00 million
- Allow working capital component for 12 years for initial spare parts.
- Allow the price change of HSD as an indexation factor on the working capital cost component of HSD storage.



- SPL requested that it may be permitted to submit its clarification on allowing the Federal Excise Duty of 1% and Sind Infrastructure Cess of 0.525% at the COD stage.
- SPL has now proposed a levelized tariff of US Cents 6.26 per kWh for the approval of the Authority.

3. **Issues**

3.1 In light of the information provided by the petitioner and proceedings of the case, the following main issues have emerged:

- Comparison of SPL's current project cost & generation tariff with Halmore Power Generation Company (Pvt) Ltd (HPGCL) and Sapphire Electric Company Ltd. (SECL).
- Non – EPC Cost
- Operation & Maintenance (O&M) Mobilization Cost before COD
- Working capital component for 12 years for initial spare parts
- Allowing price change of HSD as an indexation factor on the working capital cost component of HSD storage.
- Clarification on account of allowing the Federal Excise Duty of 1% and Sind Infrastructure Cess of 0.525% at the COD stage.
- Debt-Equity structure of 75:25

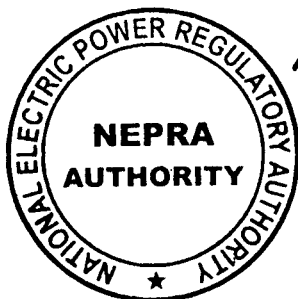
3.2 The details of the above issues and decision of the Authority is given in the following paragraphs.

4. **Comparison of SPL's current project cost & generation tariff with Halmore Power Generation Company (Pvt) Ltd (HPGCL) and Sapphire Electric Company Ltd. (SECL).**

4.1 **EPC Price**

4.1.1 According to the petitioner, Sapphire, Halmore and Saif projects are identical in every material respect, i.e., the size of the plant (225 MW), turbine manufacturer (General Electric) and O&M operator (General Electric). The locations are also in proximity to each other and the development timelines of the three projects are also essentially coincident. The petitioner has provided the following comparative analysis to justify its claim and pleads that all it needs is equality in treatment.

COSTS	SAPPHIRE (USD Million)	HALMORE (USD Million)	SAIF (USD Million)
EPC	158.80	172.00	159.00
Non EPC	16.71	18.83	12.53
Financial fees	2.93	21.55	2.94



Duties and taxes	TO BE ON ACTUALS		
IDC	TO BE ON ACTUALS		
Total of Non-EPC and financial costs	19.64	40.38	15.47
Per kWh levelized tariff in US cents	6.1714	6.273	6.0925

- 4.1.2 The Authority, having examined the relevant information in each of the above referred cases is of the opinion that although the three projects are the same but the terms and scope of the EPC contract are different for each project. The Authority made its assessment of the EPC cost for each of the above referred IPPs on the evidence provided. In the case of SECL, the EPC contract is in US dollars whereas for HPGCL's the EPC contract is 88.38% in Euros and 11.62% in US dollars. SPL's own EPC cost of USD 156.96 million (excluding piling work, worth USD 2.12 million) is 59.29% in US dollars and 40.70% in Euros. The main reason for higher Euro portion in the EPC price in the case of HPGCL was that its equipment was of European origin while in the other two cases it was of Chinese origin. The Authority, therefore, considers that the SPL and HPGCL cannot be compared in terms of the EPC cost on account of having different grounds, facts, circumstances and Euro/US\$ proportion in their respective EPC contracts. Any change in the Euro/US\$ parity would reflect more in the EPC of HPGCL due to higher Euro portion. In the Authority's opinion such a comparison is inappropriate. Further, due to having different currency composition of the EPC price, a meaningful comparison of EPC cost with any other IPP should be on the basis of the most recent information while SPL based its comparison on outdated numbers. In the instant case SPL's EPC price comparison with SECL would be more relevant than HPGCL. According to the analysis of EPC price on the basis of prevalent Euro/US\$ parity of 1.36 the updated EPC price of SECL and HPGCL works out to be US\$ 158.85 million (including piling cost of US\$2.12 million) and US\$ 169 million respectively which clearly indicates that the SPL's EPC price of US\$ 157.76 million is more comparable with SECL's EPC price.
- 4.1.3 The above analysis is for the purpose of comparison of the EPC price, otherwise this is not a contentious issue and needs no consideration of the Authority.

5. Non-EPC Price

The petitioner contended that it has been allowed US\$ 12.53 million on account of Non-EPC price while in other similar cases i.e. SECL and HPGCL the Authority allowed US\$ 18.83 million and US\$ 17.46 million respectively. The Authority having examined the item-wise cost allowed in all the three cases, observed that the



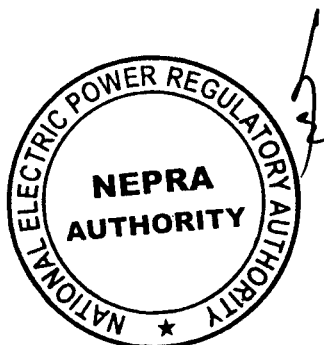
petitioner's contention is based on misunderstanding of the components of Non-EPC costs. The factual position is that the Authority had allowed US\$ 14.66 million and US\$ 16.88 million in the cases of HPGCL and SECL on account of project development cost, administration cost, construction insurance, utilities during construction, fuel cost during construction, consultants, independent engineer and owner's engineer cost and tariff petition and generation licence fees. It is observed that while comparing these costs SPL also included costs which were subject to adjustments as per actual at the time of COD. Moreover, in the case of SPL only such costs were disallowed on account of inadequate information/evidence. To the contrary, in the above referred cases of comparable generation companies, once these costs were disallowed by the Authority, the same were not agitated by the respective companies, hence no further question of submission of contracts arose. Nevertheless, in Authority's opinion non-provision of information on the ground that the same was not asked for in other cases is invalid, as it is the prerogative of the Authority to call for all necessary information required for arriving at an informed decision. The item wise assessment is given in the following paragraphs.

5.1 Non-EPC Construction Cost

- 5.1.1 The petitioner originally (case No. NEPRA/TRF-53/SPL-2006) requested US\$ 1.91 million and the same was allowed by the Authority. At the time of the original petition the basic information regarding the EPC and O&M contractors' was not available, therefore, the Authority had to rely upon the estimated figures provided by the petitioner and the benchmark available in other projects. This fact was also acknowledged by the petitioner while responding vide letter No. SPL/L0605/NEPRA-23 dated May 30, 2006 to information direction in the case No. NEPRA/TRF-53/SPL-2006. The extract of the letter is reproduced as under:

"Specific breakup of EPC cost and civil cost can only be provided once the EPC contract is finalized in relation to the full scope of work, parameters, and identification of the manufacturer of each equipment, major parts as well as the origin of the country. For the purpose of NEPRA and tariff determination, it is suffice to state that the civil construction and the related works would be roughly anywhere between to 15% to 17% of the EPC cost."

- 5.1.2 The petitioner in the above referred communication also provided the following breakup of the Non-EPC Construction Cost:





No.	Description	Total (US\$ Million)
1.	Access road from National Highway (at Qadirabad Exit)	0.344
2.	Water Supply pipeline and Tube-Well	0.333
3.	Office, Buildings, Hostels	1.202
4.	Architect Fees & Charges	0.033
Total		1.912

5.1.3 The petitioner at the time of revised tariff petition (Case No. NEPRA/TRF-80/SPL-2007) provided details of scope of work duly signed by both SPL and the EPC contractor according to which the following items were the SPL's responsibility:

- Administration Building
- Personnel Hostel
- Guest House
- Canteen
- Mosque

5.1.4 The petitioner, in support of its claim, provided a copy of the invoice from Hassan & Hassan Associates indicating a net estimated cost of Rs. 53.58 million for ancillary buildings such as gate house + external areas, office building, staff residence "Type-A", staff residence "Type B + C". In addition to the estimated cost of ancillary buildings there was a consultancy fee of Rs. 1.81 million. The petitioner also provided quotation of Rs. 4.62 million from Hassan Engineering Services dated August 10, 2007 for construction of access road.

5.1.5 Having considered all the evidence presented, the Authority assessed the cost of Non-EPC Construction cost as follows:

Description	Rupees
Access Road (US\$ 344000 * Rs. 60)	20,640,000.00
Gate house + External Areas	5,577,865.00
Water Supply Pipeline and Tube-Well	19,980,000.00
Office Building	14,709,000.00
Bachelors Accommodation	27,053,000.00
Architects Fees & Charges	1,808,235.00
Total	89,768,100.00
In US\$	1,496,135.00 (approximately US\$ 1.5 million)



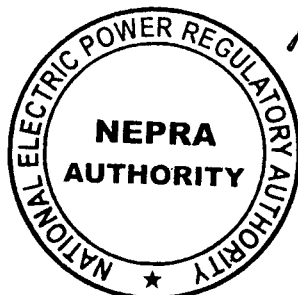
5.1.6 Since SPL did not provide any additional evidence in support of its request for enhancement of the non-EPC construction cost: therefore, the Authority finds no valid grounds to revise its earlier decision in this regard.

5.2 **O&M Cost before COD**

5.2.1 According to the petitioner the Authority in its 1st determination allowed US\$ 3 million as Pre-COD mobilization O&M cost to mobilize its team to the site, twelve (12) months before the COD, which will work alongside the EPC Contractor as per the O&M Agreement between the O&M Contractor (General Electric) and the Company. SPL stated that the O&M mobilization before COD is a one time cost which is not adjustable from the Post-COD portion of the Agreement. In support thereof, SPL has provided a letter from General Electric stating that it is a one time cost not adjustable due to a change in any other cost. The same letter and the relevant pages of the O&M contract were also provided by the petitioner during the determination of its Motion for Leave for Review dated October 1, 2007. The Company has reiterated its stance for allowing US\$ 3 million, which was previously disallowed by the Authority, which was misunderstood as a part of the EPC contract and verified to the Authority to be a part of O&M contract by submission of its relevant portions.

5.2.2 The Authority observes that all the relevant costs like O&M Operator's fee, cost of spares required for maintenance of plant, lubricants and other consumables were considered and allowed under variable O&M component. Further, to provide another opportunity to SPL to substantiate its claim for US\$ 3 million on account of O&M mobilization cost before COD and to ensure that the variable O&M cost allowed to the petitioner is sufficient to cover the O&M mobilization cost and cost of spares, the Authority had asked for the copy of the O&M contract. SPL, however, refused to provide the requisite documentary evidence on the ground that such contract was never submitted by the comparable IPPs, namely Sapphire Electric Company Limited (SECL), Orient Power Limited (OPCL) while Halmore Power Generation Limited (HPGCL) submitted the unofficial version. The Authority considering the evidence as inadequate to substantiate the petitioner's claim, disallowed the cost of pre-COD mobilization.

5.2.3 SPL also refused to provide the copy of the requisite contract on the plea that it was a confidential document which is not maintainable as previously decided by the Authority, while deciding the SPL's case, wherein it was held that such an argument



was inconsistent with the procedure and laws for processing the tariff petitions. The relevant extract of the Authority's decision dated October 1st, 2007 is given hereunder;

- (i) As a *quasi-judicial* body, NEPRA has to make all the determinations on the basis of facts and evidence provided by the parties and available in its record. The Authority finds SPL's refusal to provide the O&M Contract contrary to law and regulatory practice. The confidentiality clause does not apply to NEPRA and it is the legal obligation of the petitioner to provide all pertinent information to arrive at a just and informed decision. Consequently, for lack of evidence, SPL request for O&M Costs during Construction cannot be entertained. Attention is drawn to Rule-10(1) and Rule-25 of Tariff Rules:

Rule-10 **Discovery**

(1) At any stage of the proceedings, the Authority may require any person to produce such documentary or other evidence as the Authority may consider necessary for the purpose of enabling it to conduct a fair hearing and to arrive at a just and informed decision.

Rule-25 **Confidentiality**

(2) Any person compelled to produce a document may claim that some or all of the information contained in a particular document is exempt from production in accordance with the confidentiality standards of the Authority. The person making such a claim shall file a statement specifying the justification for a claim of confidentiality. The Authority shall have the right to make the determination with regard to any claim of Confidentiality, provided that, in making such a determination, the Authority shall reject any general claims of confidentiality, and shall make its determination on a claim for confidentiality only on the basis of detailed information furnished to the Authority to make an informed decision of the request for confidential treatment.

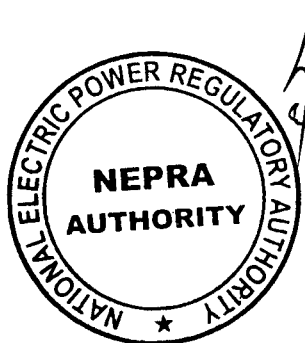
- 5.2.4 On the basis of the above mentioned reasons, the Authority considers that SPL's request for allowing O&M mobilization cost before COD is not maintainable and, therefore, has decided to maintain its earlier decision for not allowing the Pre-COD O&M cost of US\$ 3 million.





5.3 Increase in Administration Cost

- 5.3.1 The petitioner submitted that the Authority in its 2nd determination allowed US\$ 2.32 million (US\$ 1.32 million for development phase and US\$ 1.00 million for construction phase) as against US\$ 3.86 million originally allowed (US\$ 1.32 million for development phase and US\$ 2.56 million for construction phase). The petitioner in the Motion for Leave for Review requested to be allowed the same amount of US\$3.86 million against the Authority's determination dated August 3, 2007. The Authority did not accept the petitioner's request on the grounds that some of these costs were partially covered in the EPC contract and amount to duplication. Thus, overall administrative expenses of US\$ 2.32 million were maintained.
- 5.3.2 The petitioner has now provided copy of its audited accounts according to which during development phase the company's administrative expenses were US\$ 1.9 million. SPL has also submitted a certificate from the its auditors (Anjum Asim Shahid Rahman, Chartered Accountants) certifying that the petitioner has already incurred costs amounting to Rs. 125,283,384 till its financial close i.e. October 1, 2007 and amounting to Rs. 20,122,089 thereafter till March 31, 2008. According to the petitioner the development phase lasted longer than expected due to a variety of unanticipated factors, including delay in finalization of the project agreement due to which its expenditure has already exceeded the budget by US\$ 0.6 million. SPL further submitted that for the whole construction phase of 28 months it is left with only US\$ 0.4 million budget. According to SPL its expected expenses include clearing agent charges, staff salaries, traveling, boarding & lodging expenses, special security for the Chinese contractors etc and are expected to be around US\$2.75 million. SPL accordingly, requested to reinstate the remaining amount of US\$ 1.54 million reduced from the original assessed administrative expenses of US\$ 3.86 million.
- 5.3.3 The Central Power Purchasing Agency (CPPA) supported SPL's request for allowing US\$ 3.86 million subject to the provision of evidence such as audited accounts, etc.
- 5.3.4 Having examined the information and documentary evidence provided by the petitioner and based on CPPA's comments, the Authority considers that the petitioner request for allowing an additional amount of US\$ 1.54 million under the head of administrative expenses is justified. The Authority, therefore, has decided to allow an additional amount of US\$ 1.54 million to be adjusted at the time of COD on the basis of actual audited accounts subject to maximum of overall US\$ 3.86 million on account of the Administrative Cost.



5.4 Increase in Owner's Engineer's Cost

- 5.4.1 The petitioner stated that its previous request for allowing Owner's Engineer's cost was not based on the relevant agreement because it was not in place. It also stated that the relevant agreement has now been executed and signed according to which the cost of owner's engineer's would be US\$ 1.3 million. According to the petitioner this cost is only 0.8% of the EPC cost which is less than the minimum benchmark of 1% established internationally for owner's engineer's cost. The petitioner further submitted that the Authority has allowed US\$ 0.4 million as the cost of the owner's engineer's, therefore, it may be allowed the remaining amount of US\$ 0.9 million based on the agreement.
- 5.4.2 The CPPA's Representative during the hearing supported the petitioner's request on the basis that since SPL has signed Owner's Engineer contract therefore the cost may be allowed.
- 5.4.3 In the light of fresh evidences and CPPA's comments, the Authority has decided to allow SPL an additional amount of US\$ 0.9 million in this respect.

6. Working Capital Component for 12 years for Initial Spare Parts

- 6.1 The petitioner has requested to allow the cost of working capital for maintaining inventory of initial spare parts amounting to US\$ 4.7 million which are required to be kept for the entire 30 years period. The petitioner, however, requested to allow this cost for a period of 12 years which is the tenor of the loan from the Consortium of Lenders. SPL in support of its claim has also provided letters from Independent Engineering/Consultant companies and from General Electric, specifying the costs and the need of these spares (same letters were provided in the Motion for Leave for Review).
- 6.2 The Authority, in its determination, disallowed this cost due to non-provision of documentary evidence i.e. the O&M Contract. In the Motion for Leave for Review SPL attached letters from Stone & Webster certifying that the cost of initial spare parts was over and above the O&M contract fee and did not form part of the EPC contract. SPL also submitted the letter from the O&M contractor in support of its claim. The request was turned down because CPPA opposed the SPL's request for allowing cost of initial spare parts. According to the CPPA the power plant was covered through one (1) year warranty for the first year of operation, therefore, there was no requirement of such spare parts. Moreover, since the cost of spare parts has to



be paid through variable O&M hence it is the responsibility of the O&M contractor: therefore, there was no justification for allowing such a cost.

6.3 During the recent hearing, the CPPA's representative commented that they have been agitating that this should neither be part of the EPC cost nor should it be a part of the working capital: but a precedent has been set that if these are not included in the EPC, they should be financed as a part of the working capital.

6.4 The Authority considers that according to the evidence provided by the petitioner, the initial spare parts either can be the part of EPC or O&M. In order to establish this fact, both the contracts i.e. EPC and O&M were required. Due to the reasons as mentioned at para 5.2.1 & 5.2.2, the SPL was unable to establish whether the variable O&M cost allowed to the petitioner reasonably covers the cost of initial spare parts. The Authority has also not allowed such cost in the cases of SECL and HPGCL, as well. In view, thereof, the Authority has decided to maintain its earlier decision in this regard.

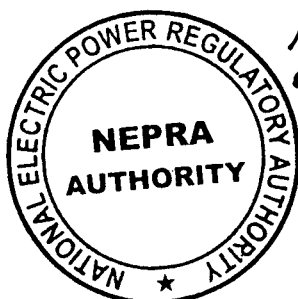
7. **Allowing price change of HSD as an indexation factor on the working capital cost component of HSD storage**

7.1 The petitioner requested that, in addition to adjustment allowed for variation in KIBOR on the cost of working capital component, the adjustment for variation in HSD price may also be allowed. The CPPA's representative opposed the petitioner's request for allowing adjustment on account of price variation of HSD, on the grounds that if this is allowed in the instant case it will have to be allowed to all other Independent Power Producers (IPPs).

7.2 The Authority considers that the petitioner's request for adjustment of cost of working capital component on account of fuel price variation is not justified as there is an automatic inbuilt mechanism to account for such a variation through adjustment in fuel cost component. The Authority further considers that since such cost has not been allowed to any other IPP, therefore, the same cannot be allowed in the instant case.

8. **Clarification on account of allowing the Federal Excise Duty of 1% and Sind Infrastructure Cess of 0.525% at COD stage.**

8.1 According to the petitioner, in the year 2007, the Government of Pakistan had levied Special Excise duty of 1% on the imported value of all shipments and no exemption is available for the IPPs. The new duty has been incorporated in the Federal Excise Act,

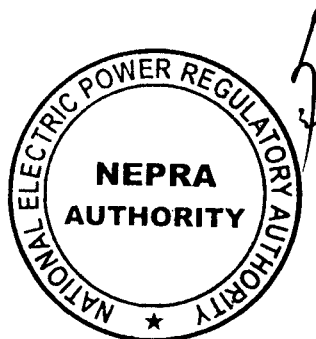


2005 through Finance Act, 2007. SRO No. 665 dated June 29, 2007 is relevant in this regard. SPL has already paid this particular duty on its first shipment which arrived in early April 2008. Another levy named as Sind Infrastructure Cess has also been levied on imported equipments @ 0.52% of the value of imported equipments. SPL has requested the Authority to issue clarification for allowing reimbursement of such duty costs on an actual basis at the time of COD for which supporting evidence would be provided by the Company.

- 8.2 Considering the request being reasonable, the Authority has decided to allow the adjustment with respect to Federal Excise Duty of 1% and Sind Infrastructure Cess of 0.525 % at the time COD as per actual.

9 Comparison of Levelized Tariff

- 9.1 The petitioner, while comparing its levelized tariff, with the other two similar projects has contended that it has been allowed the lowest levelized tariff among all. HPGCL has been given the highest tariff of US cents 6.27/kWh.
- 9.2 The Authority considers that the tariff for different projects cannot be the same because of the different parameters and different assumption although having similar equipment and the same configuration. The price of the same equipment may vary for different projects due to different origin of manufacture i.e. in some cases it may be Chinese while in other cases it may be European. It is again dependent upon the scope of the contract, currency in which the payments are required to be made and the timing of the contract. The projects may have different financial structures (debt-equity composition) and different borrowing terms. SPL has debt: equity ratio of 80: 20 whereas HPGCL and SECL both have debt: equity ratios of 75:25. HPGCL tariff was higher due to two main reasons; i) about 88% EPC cost is in Euro, ii) borrowing has been arranged on the terms entirely different which involves an upfront fee of about USD 17.00 million in the shape of Export Credit Insurance premium for maintaining fixed Commercial Interest Reference Rate (CIRR) - an official lending rate of Export Credit Agency ("ECA") which will remain constant throughout the period of financing.
- 9.3 The Authority carried out an exercise in order to make a fair comparison of the tariff of the three comparable IPPs at current Euro/US\$ parity of 1.3472 (Rs. 81.9683/US\$ & Rs. 110.428/Euro) and KIBOR of 14.80% (plus 300 basis points), according to which SPL's levelized tariff works out to be US Cents 6.04/kWh (this tariff equates with levelized tariff of US Cents. 6.14/kWh as against previously determined levelized



tariff of US Cents 6.09/kWh on the same assumptions of determination dated October 1st, 2007). The levelized tariff in the instant case, is the highest as against the updated tariffs of US Cents 6.02/kWh and US Cents 5.40/kWh in the cases of SECL and HPGCL respectively. From the aforementioned comparison it is quite evident that the levelized tariff in the case of HPGCL, which was highest at one point of time, is the lowest at the current reference parameters. In view of aforementioned, the Authority considers that the comparison of the levelized tariff for IPPs can be different at different points of time depending on the change in the basic parameters. The main reason for the tariff being lowest in the case of HPGCL is due to fixed interest rate while in other cases the financing is local and due to high KIBOR rate on account of which the tariffs in the cases of SPL and SECL became higher than HPGCL. Another important factor which affects the levelized tariff is the financial structure of the IPPs i.e. debt - equity ratio.

10. Debt-Equity Ratio

- 10.1 The Authority made its previous determinations on the basis of debt-equity ratio of 80:20. However, in the instant petition, the petitioner has indicated that its debt-equity ratio was 75:25 at the time of financial close.
- 10.2 The Authority therefore based its determination in the instant case on 75:25 debt-equity ratio.
11. In light of the aforesaid, the Authority hereby revised the generation tariff of Saif Power Limited (SPL) as set out in the following order:

ORDER

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

i)	EPC;		
	US\$	93,068,800	} equivalent US\$ 157.062 m
	Euro	47,501,000	
ii)	Rupee/Euro parity	Pak Rs. 110.428	
iii)	Rupee/Dollar parity	Pak Rs. 81.9683	
iv)	Piling Work and Soil Investigation	US\$ 2.12 million	
v)	Non-EPC	US\$ 16.257 Million	
vi)	Lenders Advisory Fee	US\$ 2.94 Million	
vii)	Custom Duties	US\$ 5.50 Million	
viii)	Taxes	US\$ 1.88 million	
ix)	IDC	US\$ 25.47 Million	
	Total Project Cost	US\$ 211.224 million	





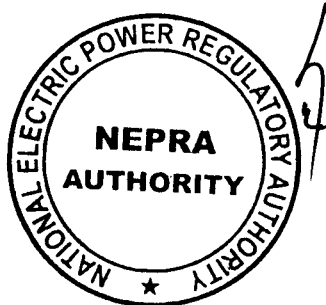
Based upon the above assessment of Project Cost the Reference Tariff determined by the Authority is indicated in the following table;

REFERENCE TARIFF

Tariff Components	Year 1 to 10	Year 11 to 30	Indexation
Capacity Charge (PKR/kW/Hour)			
O&M Foreign	0.0976	0.0976	US CPI & \$ to Rupee
O&M Local	0.0502	0.0502	WPI
Cost of Working Capital *	0.0455	0.0455	KIBOR
Insurance	0.0949	0.0949	US\$ to Rupee
Debt Service	1.5310	-	KIBOR
Return on Equity	0.3601	0.3601	US\$ to Rupee
ROE during Construction	0.0292	0.0292	US\$ to Rupee
Total Capacity Charge	2.2084	0.6774	
* In case of HSD plant operation on HSD cost of working capital shall be paid on 15 days inventory level basis as Rs. 0.0974/kW/hour			
A) Energy Charge on Operation on Gas Rs./kWh			
Fuel Cost Component	1.8573	1.8573	Fuel Price
Variable O&M	0.2547	0.2547	US CPI & US\$ to Rupee
B) Energy Charge on Operation on HSD Rs./kWh			
Fuel Cost Component	12.1651	12.1651	Fuel Price
Variable O&M	0.3676	0.3676	US CPI & US\$ 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-II & III.

Pursuant to Rule 6 of the NEPRA Licensing (Generation) Rules 2000, Saif Power Limited (SPL) 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 above mentioned tariff 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. Adjustment in EPC Cost (One Time)

The Authority has assessed EPC cost as US\$ 157.062 million comprising of US\$ 73 million plus Euro 47.501 million for equipment and US\$ 20 million for construction. Since the exact timing of payment to EPC contractor is not known at this point of time therefore an adjustment for foreign currency fluctuation for the portion paid in the relevant foreign currency will be made. In this regard, the sponsor will be required to provide all the necessary relevant details along with documentary evidence. Based upon such information the relevant currency of EPC cost components shall be established and applied to the corresponding EPC cost components. The relevant tariff components i.e. Insurance, ROE, ROEDC, Principal Repayment and Interest Charges shall be adjusted only for currency fluctuation against the reference parity values.

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 relevant tariff components including fuel cost component shall be adjusted at the time of Commercial Operation Date (COD) based upon the Initial Dependable Capacity (IDC) to be carried out for determination of contracted capacity. Adjustment shall not be made if IDC is established less than net capacity of 209 MW at reference site conditions. The adjustments shall be made according to the following formula:

- | | |
|---------------------------------|-------------------------------------|
| i) O&M Foreign | = 0.0976/tested IDC x 209 MW |
| ii) O&M Local | = 0.0502/tested IDC x 209 MW |
| iii) Insurance | = 0.0949/tested IDC x 209 MW |
| iv) Cost of Working Capital-Gas | = 0.0455/tested IDC x 209 MW |
| v) Cost of Working Capital-HSD | = 0.0974/tested IDC x 209 MW |
| vi) Debt Service | = 1.5310/tested IDC x 209 MW |
| vii) Return on Equity | = 0.3601/tested IDC x 209 MW |
| viii) ROE during Construction | = 0.0292/tested IDC x 209 MW |
| ix) Variable O&M - Gas | = 0.0318+0.2229/tested IDC x 209 MW |
| x) Variable O&M - HSD | = 0.0460+0.3216/tested IDC x 209 MW |



- b) Debt Service, Return on Equity (ROE) and Return on Equity during Construction (ROEDC) shall be adjusted at COD as per actual based upon the authentic documentary evidence to be provided by SPL 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) Cost of Piling Works and Soil Investigation;
 - iv) Custom Duties & Taxes including Federal Excise Duty of 1% and Sindh Infrastructure Cess of 0.525%
 - v) Interest During Construction;
 - vi) Change in Financing Structure due to change in Foreign/ Local Borrowing Composition
 - vii) Cost of working capital based on HSD price prevailing at the time of COD.

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 the production of authentic documentary evidence by SPL according to the following formula;

$$\text{Insurance (Adj.)} = \text{AIC} / 2.12 * P_{(\text{Act})} * \text{ER}_{(\text{Rev})} / 81.9683$$

Where;

- AIC = Adjusted Insurance Component (Rs. kW/hr) as per IDC Test
 $P_{(\text{Act})}$ = Actual Premium or 1.35% of the adjusted EPC whichever is lower
 $\text{ER}_{(\text{Rev})}$ = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan at Invoice date



Adjustment of Withholding Tax

Pass-Through Items

No provision for income tax, workers' profit participation fund and workers' welfare fund, any other tax, excise duty or other duty, levy, charge, surcharge or other governmental impositions, payable on the generation, sales has been accounted for in the tariff. If SPL is obligated to pay any tax on the income purely generated from its operation i.e. Electricity Generation of power producer, the exact amount should be reimbursed by CPPA 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, SPL may also submit to CPPA details of any tax shield savings and CPPA will deduct the amount of these savings from its payment to SPL 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. CPPA (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:

$$\text{Withholding Tax Payable} = [(15\% * (E(\text{Ref}) - E(\text{Red})) + \text{ROEDC}(\text{Ref})) * 7.5\% * \text{ER}(\text{Rev}) / 81.9683]$$

Where:

$E(\text{Ref})$ = Adjusted Reference Equity at COD

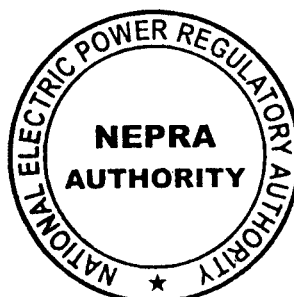
$E(\text{Red})$ = Equity Redeemed

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

$\text{ER}(\text{Rev})$ = The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

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.

Indexations:

The following indexation shall be applicable to the reference tariff as follows;

a) Indexation applicable to O&M

The Fixed O&M local component of Capacity Charge will be adjusted on account of Inflation (WPI) and Fixed O&M foreign component 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 15th July, 15th October, 15th January and 15th April based on the latest 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:

(i) Fixed O&M

$$F \text{ O\&M-Local}_{(Rev)} = \text{Rs. } 0.0502/\text{kW/Hour} * WPI_{(REV)} / 132.1$$

$$F \text{ O\&M-Foreign}_{(Rev)} = \text{Rs. } 0.0976/\text{kW/Hr} * US \text{ CPI}_{(REV)} / 213.528 * ER_{(FREV)} / 81.9683$$

Where:

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

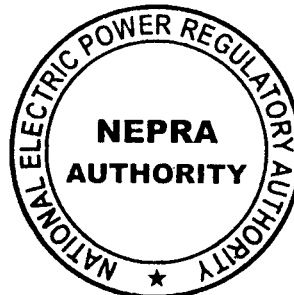
$F \text{ O\&M}_{(FREV)}$ = The revised applicable Fixed O&M Foreign Component of the Capacity Charge indexed with US CPI and Exchange rate variations.

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

$WPI_{(REF)}$ = 132.1 wholesale price index (manufactures) of March 2008 notified by Federal Bureau of Statistics

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

$US \text{ CPI}_{(REF)}$ = Reference US CPI (All Urban Consumers) of 213.528 for March 2008 as notified by the US Bureau of Labor Statistics





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

$ER_{(REF)}$ Reference TT & OD selling rate of US dollar of Rs. 81.9683 per US\$ 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:

$$V \text{ O\&M-Gas}_{(REV)} = \text{Rs. } 0.2547 \text{ per kWh} * US \text{ CPI}_{(REV)} / 213.528 * ER_{(REV)} / 81.9683$$

$$V \text{ O\&M-HSD}_{(REV)} = \text{Rs. } 0.3676 \text{ per kWh} * US \text{ CPI}_{(REV)} / 213.528 * ER_{(REV)} / 81.9683$$

Where:

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

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

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

$WPI_{(REF)}$ = 132.1 wholesale price index (manufactures) of March 2008 notified by Federal Bureau of Statistics

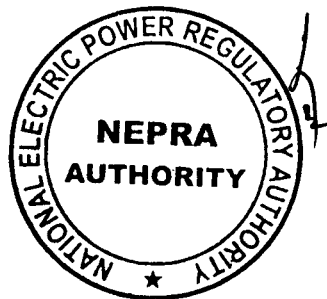
$US \text{ CPI}_{(REV)}$ = The revised average quarterly US CPI

$US \text{ CPI}_{(REF)}$ = Reference US CPI (All Urban Consumers) of 213.528 for March 2008 as notified by the US Bureau of Labor Statistics

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

$ER_{(REF)}$ Reference TT & OD selling rate of US dollar of Rs. 81.9683 per US\$ 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.



b) **Adjustment for KIBOR variation**

The interest part of fixed charge 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/LIBOR according to the following formula;

$$\Delta I = P_{(REV)} * (KIBOR_{(REV)} - 14.80\%) / 4$$

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 > or < 14.80%. 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.

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 SPL's allowed rate relating to fuel cost shall be revised according to the following formula:

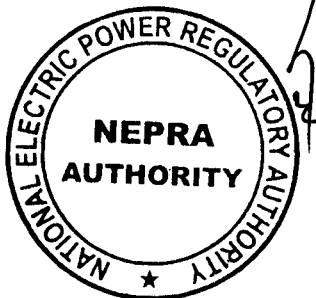
$$FC-Gas_{(Rev)} = Rs. 1.8573 \text{ per kWh} * FP(Rev) / Rs. 278.62 \text{ per MMBTU}$$

Where:

$FC-Gas_{(Rev)}$ = Revised fuel cost component of Variable Charge on gas

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

$FC-D_{(Rev)}$ $Rs. 12.1651 \text{ per kWh} * [FPD(Rev) \text{ Rs. Per MMBTU}] / Rs. 1728.69 \text{ MMBTU (Excl-GST)}$



2



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;

HSD Fuel price with GST (GCV)	Rs. 68.14 per liter
General Sales Tax (GST)	16%
HSD fuel Price without GST (GCV)	Rs. 58.74 per liter
HHV-LHV Adjustment Factor	1.06
HSD Fuel Price without GST (NCV)	Rs. 62.27 per liter
HSD Fuel Price without GST	Rs. 1728.69 per MMBTU *
* Calculated by using the following reference values	
Reference Specific Gravity @ 15 °C or 15.6 °C 0.84	
Reference Calorific Value (Gross)	42,880 BTUs/Kg

- ii). In case of adjustment in HSD fuel component, SPL shall submit request for adjustment duly supported with the supplier's certificate indicating flash point, specific gravity and calorific value duly verified by the power purchaser. The Power Purchaser shall make all necessary arrangements to satisfy it regarding the Authenticity and validity of the information provided by SPL. In case of any dispute or discrepancy the power purchaser shall seek third party verification which for technical issues shall be HDIP and for price issues shall be OGRA. SPL shall be allowed immediate adjustment by the Authority within 7 days of such request with requisite certificates and verifications.
- iii). Adjustment on account of inflation, foreign exchange variation, KIBOR variation and fuel price variation will be approved and announced by the Authority within seven working days after receipt of SPL's request for adjustment in accordance with the requisite indexation mechanism stipulated herein.
- iv). Any change or modification regarding application of US CPI on foreign component of O&M cost and application of local CPI instead of WPI on local



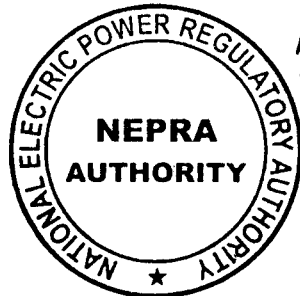


component of O&M cost made through GOP Policy shall also be applicable to SPL. However the change or modification shall be applicable from the date of issue of such Policy and shall not be applicable retrospectively.

Terms and Conditions of Tariff:

- i) Use of Gas will be considered as primary fuel.
- ii) All new equipment will be installed and the plant will be of standard configuration.
- iii) Dispatch criterion will be based on the Energy Charge.
- iv) Diesel oil will be used only for startups and other contingent requirements. Use of Diesel oil shall be allowed in accordance with the GOP's fuel policy announced from time to time.
- v) General assumptions of SPL which are not covered in this determination may be dealt with in the PPA according to its standard terms.

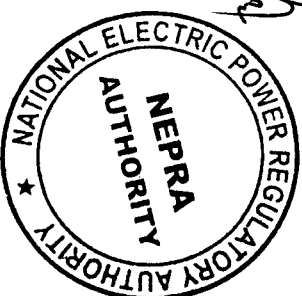
The above tariff and terms and conditions be incorporated as the specified tariff approved by the Authority pursuant to Rule 6 of the Licencing (Generation) Rules, in a Power Purchase Agreement between SPL and CPPA.



SAIF POWER LIMITED
PLANT OPERATION ON GAS

Annexure I

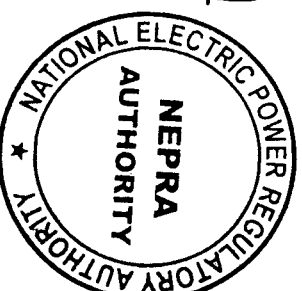
Year	Energy Charge (Rs./Kwh)			Capacity Charge (Rs./Kwh/Hour)										Capacity Charge	Tariff	
	Fuel	Variable O&M	Total	Escalable (Fixed O&M) Foreign	Escalable (Fixed O&M) Local	Financing Cost on Working Capital	Escalable (Insurance)	Return on Equity	Return on Equity for Construction Period	Withholding Tax @ 7.5%	Loan Repayment	Interest Charges	Total	Rs. / Kwh at 60% PF	Rs. / Kwh	¢ / Kwh
1	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.2868	1.2442	2.2376	3.7294	5.8413	7.1263
2	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.3413	1.1987	2.2376	3.7294	5.8413	7.1263
3	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.4062	1.1247	2.2376	3.7294	5.8413	7.1263
4	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.4835	1.0475	2.2376	3.7294	5.8413	7.1263
5	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.5755	0.9555	2.2376	3.7294	5.8413	7.1263
6	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.6850	0.8460	2.2376	3.7294	5.8413	7.1263
7	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.8153	0.7157	2.2376	3.7294	5.8413	7.1263
8	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.9704	0.5606	2.2376	3.7294	5.8413	7.1263
9	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	1.1550	0.3760	2.2376	3.7294	5.8413	7.1263
10	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	1.3747	0.1563	2.2376	3.7294	5.8413	7.1263
11	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
12	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
13	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
14	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
15	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
16	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
17	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
18	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
19	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
20	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
21	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
22	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
23	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
24	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
25	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
26	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
27	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
28	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
29	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
30	1.8573	0.2547	2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	-	-	0.7066	1.1777	3.2896	4.0133
Levelized Tariff (1-30 Years)			2.1119	0.0976	0.0502	0.0455	0.0949	0.3601	0.0292	0.0292	0.4045	0.5934	1.7045	2.8409	4.9528	6.0424

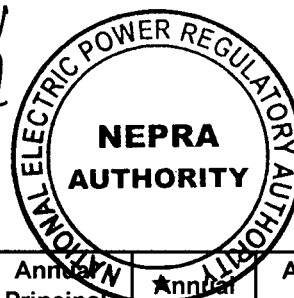


**SAIF POWER LIMITED
PLANT OPERATION ON HSD**

Annexure II

Year	Variable Charge (Rs./kWh)			Capacity Charge (Rs./kW/Hour)										Capacity Charges	Total	
	Fuel	Variable O&M	Total	Escalable (Fixed O&M) Foreign	Escalable (Fixed O&M) Local	Financing Cost on Working Capital	Escalable (Insurance)	Return on Equity	Return on Equity for Construction Period	Withholding Tax @ 7.5%	Loan Repayment	Interest Charges	Total	Rs. / kWh at 60% PF	Rs. / kWh	¢ / kWh
1	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	1.2442	2.2896	3.8159	16.3486	19.9450
2	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	1.1897	2.2896	3.8159	16.3486	19.9450
3	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	1.1247	2.2896	3.8159	16.3486	19.9450
4	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	1.0475	2.2896	3.8159	16.3486	19.9450
5	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	0.9555	2.2896	3.8159	16.3486	19.9450
6	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	0.8460	2.2896	3.8159	16.3486	19.9450
7	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	0.7157	2.2896	3.8159	16.3486	19.9450
8	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	0.5606	2.2896	3.8159	16.3486	19.9450
9	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	0.3760	2.2896	3.8159	16.3486	19.9450
10	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	1.1550	2.2896	3.8159	16.3486	19.9450
11	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	1.3747	0.7586	1.2643	13.7969	16.8320
12	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
13	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
14	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
15	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
16	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
17	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
18	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
19	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
20	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
21	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
22	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
23	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
24	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
25	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
26	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
27	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
28	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
29	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
30	12.1651	0.3676	12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	-	0.7586	1.2643	13.7969	16.8320
Levelized Tariff (1-30 Years)			12.5326	0.0976	0.0502	0.0974	0.0949	0.3601	0.0292	0.0292	0.0292	0.4045	0.5934	1.7865	2.9275	18.8611





**SAIF POWER LIMITED
Debt Servicing Schedule**

Period	Local Debt					Annual Principal Repayment Rs./kW/ Month	Annual Interest Rs./kW/ Month	Annual Debt Servicing Rs./kW/ Month
	Principal Million \$	Repayment Million \$	Mark-Up Million \$	Balance Million \$	Debt Service Millin \$			
	158.42	1.50	7.05	156.92	8.55			
	156.92	1.56	6.98	155.36	8.55			
	155.36	1.63	6.91	153.72	8.55			
	153.72	1.71	6.84	152.01	8.55			
1	158.42	6.40	27.79	152.01	34.19	209.33	908.29	1,117.62
	152.01	1.78	6.76	150.23	8.55			
	150.23	1.86	6.69	148.37	8.55			
	148.37	1.95	6.60	146.42	8.55			
	146.42	2.03	6.52	144.39	8.55			
2	144.39	7.62	26.57	144.39	34.19	249.15	868.46	1,117.62
	144.39	2.12	6.43	142.27	8.55			
	142.27	2.22	6.33	140.05	8.55			
	140.05	2.32	6.23	137.74	8.55			
	137.74	2.42	6.13	135.32	8.55			
3	135.32	9.07	25.12	135.32	34.19	296.55	821.07	1,117.62
	135.32	2.53	6.02	132.79	8.55			
	132.79	2.64	5.91	130.16	8.55			
	130.16	2.76	5.79	127.40	8.55			
	127.40	2.88	5.67	124.52	8.55			
4	124.52	10.80	23.39	124.52	34.19	352.97	764.65	1,117.62
	124.52	3.01	5.54	121.52	8.55			
	121.52	3.14	5.41	118.38	8.55			
	118.38	3.28	5.27	115.10	8.55			
	115.10	3.43	5.12	111.67	8.55			
5	111.67	12.85	21.34	111.67	34.19	420.11	697.50	1,117.62
	111.67	3.58	4.97	108.09	8.55			
	108.09	3.74	4.81	104.35	8.55			
	104.35	3.90	4.64	100.45	8.55			
	100.45	4.08	4.47	96.37	8.55			
6	96.37	15.30	18.89	96.37	34.19	500.04	617.58	1,117.62
	96.37	4.26	4.29	92.11	8.55			
	92.11	4.45	4.10	87.66	8.55			
	87.66	4.65	3.90	83.02	8.55			
	83.02	4.85	3.69	78.17	8.55			
7	78.17	18.21	15.98	78.17	34.19	595.16	522.46	1,117.62
	78.17	5.07	3.48	73.10	8.55			
	73.10	5.29	3.25	67.80	8.55			
	67.80	5.53	3.02	62.27	8.55			
	62.27	5.78	2.77	56.49	8.55			
8	56.49	21.67	12.52	56.49	34.19	708.38	409.23	1,117.62
	56.49	6.03	2.51	50.46	8.55			
	50.46	6.30	2.25	44.16	8.55			
	44.16	6.58	1.97	37.58	8.55			
	37.58	6.88	1.67	30.70	8.55			
9	30.70	25.79	8.40	30.70	34.19	843.15	274.47	1,117.62
	30.70	7.18	1.37	23.52	8.55			
	23.52	7.50	1.05	16.02	8.55			
	16.02	7.83	0.71	8.18	8.55			
	8.18	8.18	0.36	(0.00)	8.55			
10	(0.00)	30.70	3.49	(0.00)	34.19	1,003.54	114.07	1,117.62

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