# NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
# NEPRA

Case No. NEPRA/TRF-80/SPL-2007
August 3, 2007

## DETERMINATION OF GENERATION TARIFF FOR SAIF POWER LIMITED (SPL)

**Petitioner**

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

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**AUTHORITY**

Mr. Zafar Ali Khan
Member

Mr. Nasiruddin Ahmed
Member

Lt. Gen. (R) Saeed uz Zafar
Chairman

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**Background**

Saif Power Ltd. (SPL) is established for setting up a Combined Cycle Thermal Power Plant based on dual fuel (Gas/HSD) approximately 225 MW at ISO gross conditions 209 MW net at 132 kV Bus Bar at reference conditions at Chak No. 56/5-L, Qadarabad, District Sahiwal in terms of the Policy for Power Generation Projects 2002 (the "Policy"). The primary source of fuel for the project is pipeline quality gas. The electricity generated will be sold to Central Power Purchasing Agency (CPPA) within NTDC.

2. SPL submitted its revised tariff application on July 9, 2007 (**Annex-I**) for approval of generation tariff. This tariff petition was admitted for consideration by the Authority on July 10, 2007 and was assigned case number NEPRA/TRF-80/SPL-2007. Salient features of the petition were advertised in the newspapers on July 16, 2007 to inform all the interested persons/stakeholders and to invite participation in the tariff-setting proceedings through their comments or by becoming a party to the proceedings as intervenors. Invitations were also sent to all stakeholders soliciting their views on the petition.

3. A public hearing on the petition was held on July 20, 2007 in NEPRA's main office. This hearing was participated by the applicant, stakeholders, commentators as well as members of general public.

**Relief Sought**

4. SPL submitted that it is facing the following direct negative impacts due to the increase in the Project cost as set forth in the petition:

(a) The Company's IRR is being reduced to around 10.5% which from the Company's perspective is in no way feasible for the implementation of this Project. The Company can only pursue the Project if a minimum 15% IRR is expected which again is on the minimum side as the IPPs in general have been asking for 18% IRR due to the interest rates prevalent in the market and due to the risks being undertaken in the PPA.

(b) The Company's Consortium of Lenders has refused to structure the debt in case the Company is unable to get relief from the Authority; firstly, the Lenders' requirements of certain benchmark financial ratios are not being met with the existing cost structure in the

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financial model, and secondly, according to the Lenders' interpretation, in case of termination of the PPA on the Company's event of default, the GOP (as per the Implementation Agreement) will only reimburse the debt portion actually allowed and approved by the Authority.

5. Therefore, In view of the facts and evidences provided in this Petition, the Company appeals to the Authority to:

- Determine the Company's EPC Cost as $95.188 million and Euro 47.501 million.
- The Custom duty amount may be changed accordingly by using the mechanism provided in earlier tariff determination by the Authority (5% of 70% of total EPC cost), while any increase on such amount should be a pass through to the Power Purchaser.
- Determine the cost of services of owner's engineers to $1.65 million.
- Determine the cost of annual fee of generation license amounting to $0.130 million and fee for revised tariff petition amounting $0.043 million.
- Determine the cost of initial spare parts at $4.7 million.
- The reference prices, exchange rate, KIBOR rate, WPI index and Calorific values for HSD may remain same as per earlier Tariff Determination by the Authority.
- Parity between Euro and US Dollar may be determined as Euro 1 = $ 1.3450 (June 25, 2007) and as such parity between Euro and Pak Rupee may be determined as Euro 1 = Rs.80.7.
- All other original determination by the Authority for which no change has been requested in this particular revised Tariff may remain the same as per original determination.
- Authority to make its determination within 15 days of receipt of this petition. The financing documents by the Lenders can only be processed when the prayed relief has been obtained from the Authority. Any delay in this regard would make the target date of opening the L/C in favour of

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the EPC Contractor (i.e., 31 July 2007) slip, thus opening up the prices of main equipments. Delay of every passing day will delay the whole process resulting in the overall delay in the Financial Close and in achieving the COD which our country cannot afford.

6. The Company's administrative costs have increased significantly due to the extension in time period to Financial Close as against the expected/anticipated period. Secondly, the Company's construction phase period has increased from 24 months to 28 months where again administrative costs are increasing. However, the Company is not claiming this increase from the Authority. The Company's insurance cost during the construction period has also increased due to increase in EPC cost but again the Company is not claiming such increase from Authority.

7. PPIB was asked to provide its comments/views on the revised petition of SPL. PPIB vide its letter No. 6(611)/PPIB/07/Fin dated 2nd August, 2007, has not supported the contention of the petitioner.

**Issues**

8. The following main issues have emerged from the tariff petition;

i. EPC price
ii. Owners' Engineers Cost
iii. Tariff Petition and Generation License Cost
iv. Initial Spare Parts
v. Financial Advisory Cost
vi. Currency Variation during Construction Period
vii. All other assumptions not addressed in this Modified/Revised Petition

**EPC Price**

9. SPL has submitted that its EPC cost has increased substantially because the manufacturers and EPC contractors are increasing their prices on monthly basis (charging demand premium). According to SPL, it has become very difficult to find a good EPC contractor in the last few months as all good contractors are already booked.

10. SPL stated that in a booming supplier's market the validity period of the terms/prices given to the customers is very short. Until the LC for the full amount is open in favour of the manufacturer/supplier on or before the validity

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expiry date of the proposal, both the price and the delivery time remain exposed to change. The petitioner further stated that the booking for time slot can be maintained by making payment although no significant in value term but the price cannot be fixed.

11. SPL in its petition has provided EPC negotiating history. According to SPL it invited potential EPC contractors through newspapers advertisement and website advertisement to bid for the project. Out of the pre-qualified contractors only four parties bid for the projects; two of them were Chinese, one was an Iranian Company and one was a Turkish company. One of the Chinese Company did not meet the requisite criteria in their bid. The Company's board of directors did not take the risk of working with Iranian Company due to the political environment with respect to US-Iran conflict although the Iranians were good on merit. The Turkish Company GAMA became unreasonable during the course of discussions and asked for a payment of US$ 8 million to book the time slots with their lenders. The amount was non-refundable in case the financial close was not achieved and Notice To Proceed (NTP) was not issued within 75 days time. The Company also contacted significant number of EPC contractors but everyone was already booked. According to SPL one of the EPC Contractor Doosan gave the cost of EPC contract US$ 200 million. Another Chinese Contractor M/s Harbin showed interest and quoted a price of US$ 168 million based on GE's old price which with the new price would be around US$ 178 million. Siemens Sweden quoted a price of US$ 175 million with a net capacity of 190 MW.

12. The petitioner now has signed EPC contract with CMEC, China at a value of US$ 93,068,800 plus Euro 47,501,000 (US dollars 156.96 million). The scope of soil investigation, soil replacement and piling works is out of EPC contract scope. The cost of such works is around US$ 2 million based upon the quotations received from local companies for this particular work.

13. Based on all the relevant information and documentary evidence including EPC contract provided by the petitioner, the Authority considers that under the prevalent market conditions the EPC cost of US$ 93,068,800 plus Euro 47,501,000 (US dollars 156.96 million at exchange rate US$ 1.345 to one Euro) is reasonable. Regarding the cost for piling works and soil investigation

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report, the Authority considers that these costs are not yet final therefore would need to be adjusted based upon the actual subject to maximum of US$ 2.12 million.

**Non-EPC Cost**

14. The Authority while examining the EPC contract observed that some of the items allowed under Non-EPC cost in the Authority's determination dated August 3, 2006 have now been included in the scope of final EPC contract. The Authority therefore decided to re-assess the Non-EPC cost items allowed in the last determination. In this regard the costs of office building and hostels under the head of Non-EPC civil construction cost are being re-assessed as US$ 0.20 million. The overall cost for other Non-EPC civil construction cost is therefore, being revised to US$ 0.912 million.

Administrative Cost

15. The examination of EPC contract revealed that the costs of administration and other services or items required to complete the works were included in the lump sump fixed price on turnkey basis. In view of the obligations of construction contractor, the administration costs allowed to SPL needs to be re-assessed. The Company will have to incur its expenditures at the Company's head office. The Authority has also considered the administrative costs allowed in other similar projects and considers that US$ 1 million will be a reasonable administrative cost and is therefore being allowed.

Utilities during Construction

16. According to the EPC contract the cost of utilities during construction is the contractor's obligation. SPL in this regard was asked to provide justification. According to the explanation given by the SPL, the words used in the EPC contract are in general terms. The exact scope is defined in the Matrix signed between the two parties. The major items of the utilities during construction are water and electricity, which are to be provided by the Company from the start of the project to the commissioning date. The Authority after having considered all the evidence provided, decided to maintain its earlier decision and has decided to allow cost of utilities during construction US$ 0.5 million.

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Fuel Cost during Construction

17. According to the scope of the construction contract, fuels during construction and chemicals are within its scope. In the earlier determination the cost of fuel during construction was separately allowed to SPL. An explanation in this regard was obtained from SPL. According to the explanation given by SPL, the cost of fuel during construction requested is to be used during testing. The Authority after examining the relevant documentary evidence accepted the SPL's explanation and decided not to exclude US$ 0.3 million fuel cost during construction from the Non-EPC cost.

First Fill of Lubes and Chemicals

18. The cost of first fill of lube and chemicals is within the scope of the construction contract. SPL stated that since the EPC contract was not finalized at the time of filing the previous petition therefore the cost was provided as Non-EPC. Having considered the explanation given by the petitioner the Authority has decided to exclude the cost of first fill of lubes and chemicals of US$ 0.5 million from Non-EPC cost.

Operation and Maintenance During Construction

19. The Authority, while examining the item wise cost allowed to SPL in the previous determination, observed that the operation and maintenance cost during construction of US$ 3 million was required to be substantiated by documentary evidence because SPL has finalized its EPC as well as O&M contract. SPL was asked to provide justification in this regard. According to the explanation given by the SPL, this cost is related to O&M operator who will come with his team one year before the COD and will work together with EPC contractor on the plant. SPL was asked to provide copy of the O&M contract to establish the SPL's claim. SPL did not provide the copy of the O&M contract on the plea that the O&M contract was not yet signed between the parties and is confidential. SPL however provided a copy of one page of the O&M contract in support of its claim. The Authority observed that this cost was on account of payments for services performed during mobilization phase which will be subject to adjustment per section 5.11 of the O&M Contract. The copy pertaining to the aforementioned section was not provided. In the absence of complete

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information, the Authority is constrained not to accept SPL's claim. The Authority has therefore decided to exclude the amount of US$ 3 million from the Non-EPC cost.

Owners' Engineer Cost

20. SPL stated that in its original petition it had applied for costs in relation to the Lenders' Engineer and the Independent Engineer and had erroneously not covered its cost for the Owners' Engineer. According to SPL it is the Lenders requirement to appoint the Owners' Engineer. The SPL requested to allow the Owner's Engineer cost of US$1.65 million including traveling, boarding and lodging expenses.

21. The Authority considers that SPL's request is not realistic. The Authority considers that the cost for the Owner's Independent Engineer should be half of the cost allowed in the previous determination. The Authority has therefore decided to allow additional cost of US$ 0.4 million in this regard.

Tariff Petition and Generation License Cost

22. The Authority has considered SPL's request for cost of US$ 0.17 million on account of Annual Generation License Fee payable under Part I to the Schedule of the National Electric Power Regulatory Authority (Fees) Rules, 2002. The cost being legitimate is therefore allowed as such, subject to adjustment as per actual at COD.

Initial Spare Parts

23. According to SPL, in its Tariff Application to NEPRA dated April 19, 2006, the Company had requested for a working capital component for the purchase of Initial spare parts, which are not a part of the standard scope of EPC contract. Similarly, such spare parts are also not covered in the standard scope of O&M Contract and the Company is required to pay a substantial amount of US$ 4.7 million to acquire these parts.

24. The Authority has carefully examined the documentary evidence provided by SPL in support of its claim. The Authority considers that SPL could not establish its claim according to the information provided by it. The Authority observed that the cost of initial spare parts was part of O&M contract therefore the Authority has decided not to accept SPL's request in this context.

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Financial Advisory Cost

25. The Authority has considered SPL's request for allowing 1.2% of the borrowing as advisory fee. The Authority considers that this cost should be adjusted at COD as per the actual subject to maximum of 1.2% of the borrowing amount.

Currency Variation During Construction Period

26. The Authority has considered SPL's request to allow adjustment in the relevant components of project cost during construction phase on account of variation in Dollar/Rupee parity and Euro/Rupee parity. The Company will provide particulars of transaction/payments along with evidence of applicable rate for the purpose of such adjustment. The reference components of project costs are;

| | | |
|---|---|---|
| US$ | 93,068,800 | equivalent |
| Euro | 47,501,000 | US$ 156.9 m |
| Reference Rupee/Dollar parity | 60 | |
| Reference Rupees/Euro parity | 82.045 | |

All Other Assumptions not Addressed in This Modified/Revised Petition

27. The Authority has considered SPL's request to allow induction of both foreign equity and foreign debt in this project costs. SPL has further stated that the company will submit its revised debt structure when it is materialized. The Authority views SPL's request as reasonable therefore, has decided to accept the same.

28. In view of the above the Authority hereby approves the 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 |
| Euro | 47,501,000 | US$ 156.9 m |
| Reference Rupee/Dollar parity | 60 | |
| Reference Rupees/Euro parity | 82.045 | |

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| | | |
|---|---|---|
| ii) | Non-EPC | 8.343 million US$ |
| iii) | Financial Advisory Fee | 2.94 million US$ |
| iv) | Custom Duties & Taxes | 7.37 million US$ |
| v) | IDC | 17.83 million US$ |

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 | 0.0669 | 0.0669 | US CPI & $ to Rupee |
| O&M Local | 0.0446 | 0.0446 | WPI |
| Cost of Working Capital * | 0.0164 | 0.0164 | KIBOR |
| Insurance | 0.0695 | 0.0695 | US$ to Rupee |
| Debt Service | 0.9056 | - | KIBOR |
| Return on Equity | 0.1989 | 0.1989 | US$ to Rupee |
| ROE during Construction | 0.0161 | 0.0161 | US$ to Rupee |
| **Total Capacity Charge** | **1.3179** | **0.4122** | |
| * In case of HSD plant operation on HSD cost of working capital shall be paid on 15 days inventory level basis as Rs. 0.0351/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 | 6.7153 | 6.7153 | 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-II & III.

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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. One Time Adjustment

a) Adjustment due to variation in net capacity

The reference tariff has been determined on the basis of net capacity of 208.965 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. The adjustments shall be made according to the following formula:

| | | |
|---|---|---|
| i) O&M Foreign | = | 0.0669/tested IDC x 208.965MW |
| ii) O&M Local | = | 0.0446/tested IDC x 208.965MW |
| iii) Insurance | = | 0.0695/tested IDC x 208.965MW |
| iv) Cost of Working Capital-Gas | = | 0.0164/tested IDC x 208.965MW |
| v) Cost of Working Capital-HSD | = | 0.0351/tested IDC x 208.965MW |
| vi) Debt Service | = | 0.9056/tested IDC x 208.965MW |
| vii) Return on Equity | = | 0.1989/tested IDC x 208.965MW |
| viii) ROE during Construction | = | 0.0161/tested IDC x 208.965MW |
| ix) Variable O&M - Gas | = | 0.0218+0.1528/tested IDC x 208.965MW |
| x) Variable O&M - HSD | = | 0.0315+0.2205/tested IDC x 208.965MW |

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

v) Interest During Construction;

vi) Change in Financing Structure due to change in Foreign/ Local Borrowing Composition

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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 SPL according to the following formula;

Insurance (Revised) = AIC/$2.12 million x 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 SPL is obligated to pay any tax on its ROE, the exact amount paid by the company may be reimbursed by CPPA to SPL 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:

Withholding Tax Payable = $[\{15\% * (E_{(REF)} - E_{(Red)}\} + ROEDC_{(Ref)}] * 7.5\%$

Where:

$E_{(REF)}$ = Reference Equity (US$ 39.836 million x 60)

$E_{(Red)}$ = Equity Redeemed

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$ROEDC_{(REF)}$ = 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

$$F\ O\&M\text{-}Local_{(Rev)} = Rs.\ 0.0446/kW/Hour * WPI_{(REV)} / 117.45$$

$$F\ O\&M\text{-}Foreign_{(Rev)} = Rs.\ 0.0669/kW/Hr * US\ CPI_{(REV)} / 200 * ER_{(FREV)} / 60$$

Where:

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

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

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

$WPI_{(REF)}$ = 117.45 average quarterly wholesale price index (manufacturers) for the quarter ending April 2006 notified by Federal Bureau of Statistics

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

US $CPI_{(REF)}$= 200 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 O&M-Gas $_{(REV)}$ = Rs. 0.1746 per kWh * US $CPI_{(REV)}$ /200 * $ER_{(REV)}$ / 60

V O&M-HSD $_{(REV)}$ = Rs. 0.2520 per kWh * US $CPI_{(REV)}$ /200 * $ER_{(REV)}$ / 60

Where:

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

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

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

US $CPI_{(REF)}$ = 200 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.

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;

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$\Delta$ I = $P_{(REV)}$ * ($KIBOR_{(REV)}$ - 9.05%) / 4

Where:

$\Delta$ I = the variation in interest charges applicable corresponding to variation in quarterly KIBOR. $\Delta$ I can be positive or negative depending upon whether KIBOR REV > or < 9.05%. The interest payment obligation will be enhanced or reduced to the extent of $\Delta$ I 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) <u>Fuel Price Variation</u>

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:

FCg(Rev) = Rs. 1.7787 per kWh * FP(Rev)/Rs. 266.83 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) = Rs. 6.7153 per kWh * [$FPD_{(Rev)}$ Rs.per MMBTUs]/Rs. 954.27 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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| | |
|---|---|
| HSD Fuel price with GST (GCV) | Rs. 37.29 per litre |
| GST | 15% |
| HSD fuel Price without GST (GCV) | Rs. 32.43 per liter |
| HHV-LHV Adjustment Factor | 1.06 |
| HSD Fuel Price without GST (NCV) | Rs. 34.37 per litre |
| HSD Fuel Price without GST | Rs. 954.27 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.

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Incentive for Early Commissioning

In case SPL achieves Commercial Operation Date (COD) prior to October 31st, 2008, an incentive equivalent to Rs. 0.1795 per kW per hour shall be paid in addition to the normal capacity payment during the period commencing from COD till October 31st, 2008.

**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.

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