



Registrar

# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

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No. NEPRA/TRF-85/HPGCL-2007/13972-13974  
November 6, 2014

**Subject: Decision of the Authority in the matter of Motion for Leave for Review filed by Halmore Power Generation Company Ltd. (HPGCL) Pursuant to Rule 16(6) of NEPRA (Tariff Standards & Procedure) Rules, 1998 against the decision of the Authority Regarding Adjustments in Generation Tariff at Commercial Operation Date in Case # NEPRA/TRF-85/HPGCL-2007**

Dear Sir,

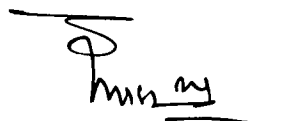
In continuation of this office letter No. NEPRA/TRF-85/HPGCL-2007/314-316 dated January 8, 2014 whereby Decision of the Authority in the matter of Tariff Adjustments at Commercial Operations Date of Halmore Power Generation Company Ltd. was sent to the Federal Government for notification in the official Gazette.

2. Please find enclosed herewith the decision of the Authority along with Annex-I, II & III (26 pages) in the matter of Motion for Leave for Review filed by Halmore Power Generation Company Ltd. against NEPRA's decision dated 08.01.2014 in Case No. NEPRA/TRF-85/HPGCL-2007.

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

3. Please be informed that Order of the Authority at para 9 of the Decision will supersede the earlier Order of the Authority intimated vide para 17 of the Authority's Determination dated January 8, 2014. Please note that Order of the Authority at para 9 of the Decision along with Annex-I, II & III needs to be notified in the official Gazette.

Enclosure: As above

  
( Syed Safeer Hussain )

Secretary  
Ministry of Water & Power  
'A' Block, Pak Secretariat  
Islamabad

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.



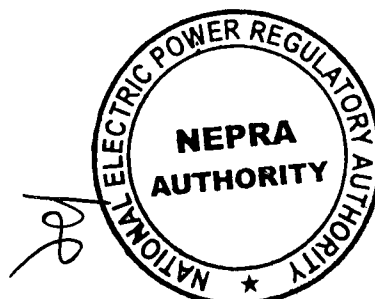
**DECISION OF THE AUTHORITY IN THE MATTER OF MOTION FOR LEAVE FOR REVIEW FILED BY HALMORE POWER GENERATION COMPANY LIMITED (HPGCL) PURSUANT TO RULE 16(6) OF NEPRA (TARIFF STANDARDS AND PROCEDURE) RULE; 1998 AGAINST THE DECISION OF THE AUTHORITY REGARDING ADJUSTMENTS IN GENERATION TARIFF AT COMMERCIAL OPERATION DATE IN CASE NO NEPRA/TRF-85/HPGCL-2007**

**1. Introduction**

- 1.1. Halmore Power Generation Company Limited (HPGCL), (hereinafter referred as "Petitioner") is a generation licensee of National Electric Power Regulatory Authority, (hereinafter referred as the "Authority"). A decision of adjustments in generation tariff of the petitioner at Commercial Operation Date (COD) was given by the Authority on January 08, 2014. Being aggrieved with said decision, the Petitioner filed a motion for leave for review on January 17, 2014 under Rule 16(6) of NEPRA (Tariff Standards and Procedure) Rules, 1998 (hereinafter referred as the "Rules").
- 1.2. In the motion for leave for review, the petitioner sought review to the extent of following items:
- EPC Cost
  - Non EPC costs
  - Other costs
  - ROEDC
  - Net Capacity
  - Inflationary impact on Local Expenditures during construction
  - Typo Errors

**2. Proceedings:**

- 2.1 As per Rule 16(6) of NEPRA (Tariff Standards and Procedure) Rules 1998 ("Tariff rules"), read with regulation 3(2) of the NEPRA (Review Procedure) Regulations, 2009, a motion for leave for review is competent only upon discovery of new and important matter of evidence or on account of some mistake or error apparent on the face of record or from any other sufficient reasons. Thus in order to examine the maintainability or otherwise of the motion for leave for review, the Authority considered it just and appropriate to provide an opportunity of hearing to the parties in terms of rule 16(7) read with regulation 3(8) of NEPRA (Review Procedure) Regulation, 2009 of the Tariff Rules. The hearing into the matter was conducted on



June 10, 2014 at NEPRA main office and the same was attended by the representatives of the Petitioner.

- 2.2 Having heard the contentions raised during the course of hearing and after going through the relevant record, the findings and decisions of the Authority on respective points agitated by the Petitioner are as under:

**3. EPC Cost :**

- 3.1 The Petitioner claimed €114.540 million on account of equipment supply as against the determined cost of € 110million and US \$ 21.13 million on account of construction cost as against the determined amount of US \$ 20 million at Para 4 of the decision dated December 26, 2007 out of which € 0.59 million on account of Balance of Payment and US \$ 1.90 million on account of construction cost was claimed on accrual basis.

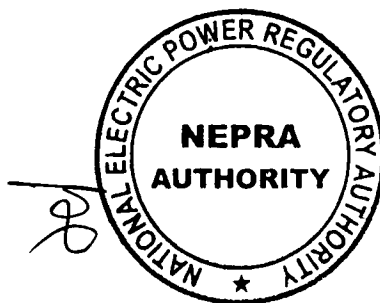
- 3.2 The petitioner submitted the written arguments in support of its claim as:

***"NEPRA has acknowledged the verification of incurred EPC costs of Euro 114.540 million on account of off-shore EPC cost and US \$ 21.125 million on account of On-shore EPC construction cost by independent auditor in para 2.1.6 and para 2.2.2 respectively of its impugned decision.***

***In para 2.1.8, para 2.1.9 and para 2.2.5 of impugned decision, NEPRA has declined to recover incurred and verified off-shore EPC costs of Euro 1.320 million on account of gas turbines, Euro 3.220 million on account of steam turbine and verified on-shore EPC-construction cost of US\$ 1.125 on following two grounds;***

- i. That the above mentioned declined costs cannot be adjusted because they are out of the scope of tariff adjustments at COD stage***
- ii. That the above mentioned declined costs were adjusted in the light of original determination and commitment given by HPGCL.***

***The Authority will appreciate that the original determination was based on turnkey contract arrangement with foreign EPC contractor SKODA which went bankrupt. In this case, HPGCL faced exceptional circumstances due to bankruptcy of its EPC contractor and there was***



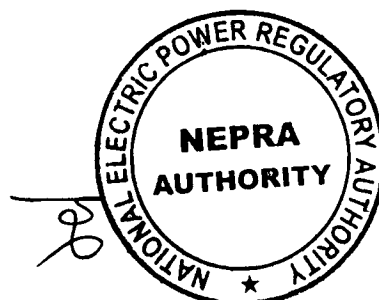


*never any willful default on HPGCL's part. In order to avoid further delays, HPGCL in good faith took the risk of completing the EPC contractors job itself resulted in renegotiation of the deal with other vendors for supply of gas and steam turbines. The costs which were assessed by the Authority at the time of original determination were based upon the EPC contract with the SKODA and previous locked price was renegotiated in good faith while dealing with other vendors.*

*In the aforesaid circumstances, had HPGCL filed a separate tariff petition for allowing the increased EPC cost prior to achieving COD, the increase in EPC cost would have been allowed by the Authority subsequently to its original tariff determination. The cost overruns which have been declined by NEPRA were necessary and critically important for establishment and successful completion of the project. These costs have not only been verified by independent auditor but also been justified as necessary and critical costs for realization of project, therefore are prudently incurred costs.*

*It is pertinent to mention here that the statement/commitment given by HPGCL must not be considered on standalone basis. The commitment by HPGCL was given on the basis of turnkey contract arrangement with SKODA. As stated earlier, SKODA went bankrupt; therefore the commitment which was given on the basis of turnkey contract arrangement with SKODA became null and void. Therefore, the commitment given by HPGCL has a background and cannot be considered on standalone basis which NEPRA has considered on standalone basis which is clear disregard to the principle of 'relevancy of statement' enunciated in Qanun-e-Shahadat Order, 1984.*

*Furthermore, by disallowing the actually EPC cost incurred by HPGCL, NEPRA has discriminated and disregarded its already established principle in other cases that 'EPC cost is subject to change on the basis of actually incurred cost in complying with Rule 17(3)(i) of NEPRA Tariff (Standard & Procedures) Rules 1998. Reliance is placed on the case of Engro Powergen Qadirpur Limited (Case No. NEPRA/TRF-72/EEL-2007 dated 3<sup>rd</sup> November 2010), the Authority reduced the EPC cost originally determined, on the ground that only actually incurred EPC cost is to be allowed.*



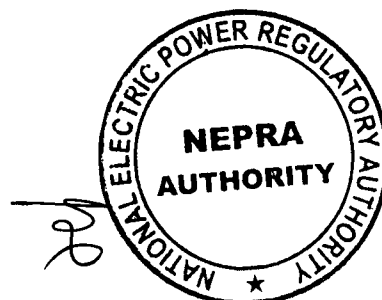


***If the Authority does not allow cost over-runs resulting from the aforesaid extraordinary circumstances, on the one hand, HPGCL's performance capability will suffer and, on the other hand, the confidence of stakeholders in the regulatory process will be eroded. Furthermore, HPGCL might not be able to sustain the burden of abnormal losses, eventually resulting in denial to consumers of electricity at affordable prices."***

- 3.3 The Authority has considered the arguments put forward by the petitioner. The Authority considers that the petitioner's arguments and commitments, which were given on the basis of turnkey contract arrangement with SKODA became null and void and therefore does not form the basis for claiming the cost overrun. If the petitioner's argument is accepted than the determination given by the Authority on the basis of documentary evidences provided by the petitioner also become null & void. On the basis thereon the instant adjustment would also be without legal basis.
- 3.4 The petitioner also relied upon the case of Engro Powergen Qadripur Limited and stated that the Authority in the referred case has varied the approved EPC price. The Authority has considered the contention of the petitioner and has seen that stance of the petitioner is not correct as in the case of Engro Powergen, the determination was based on the quotations, not on the basis of signed contract. Whereas the decision of HPGCL was issued after ECC decision dated May 23, 2007. The relevant extract of this decision are reproduced as under:

**"NEPRA should stop the practice of accepting EPC costs on the basis of quotations etc. Instead, they should base their determinations on firm (non-re-openable) competitive price duly initiated/ signed by the IPP/EPC contractors."**

- 3.5 The comparable cases for HPGCL are Sapphire Electric Company Limited (SECL) and Orient Power Company Limited (OPCL) not Engro Powerger Qadripur Limited. The Authority has also disallowed the EPC cost overruns to SECL and OPCL claimed at the time of COD on motion for leave for review. The relevant extracts of Sapphire and Orient determinations dated Nov 23, 2012 and Jan 12, 2012 are reproduced as under:



**"3.3 The Authority considered all the grounds agitated by the petitioner and in its opinion, the petitioner failed to provide any additional evidence, to establish its claim on account of increased EPC cost, which was not considered by the Authority in its decision dated August 17, 2011. The Authority already decided this issue in its determination dated September 21, 2011 as referred in paragraph 3.2 above after consideration of all relevant facts, circumstances and scope of adjustments at COD stage, therefore, the Authority is constrained to allow any relief sought by the petitioner on account of EPC"**

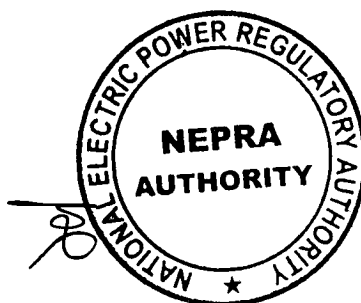
**"3.3 Having considered the petitioner's arguments, the Authority is of the view that all the arguments raised by OPCL are outside the scope set in the original determination of the Authority and there is no mechanism available in the said determination to allow adjustment on account of increase in EPC cost. In addition despite lengthy arguments on the respective point, the petitioner has failed to produce any evidence which was not considered at the time of giving impugned decision; therefore, the Authority has decided to maintain its earlier decision on the subject."**

- 3.6 Further, the Authority relied upon the written undertaking of the petitioner reflected in Para 2.3 and 2.4 of determination of HPGCL dated December 26, 2007, which is reproduced as;

***"2.3 The EPC price is not subject to reopening on account of any reasons, including but not limited to clearance of political tensions in Pakistan, delay in achieving financial close or delay on account of obtaining ECC's approval for having English Law in Lender's Direct Agreement etc.***

***2.4 Based on the HPGCL's assurances, documentary evidence and giving due consideration to stakeholders viewpoint especially PPIB, the Authority accepts HPGCL EPC Price € 110 million. This price, in all respects, is firm and more importantly, non-reopenable"***

- 3.7 Furthermore, The petitioner did not come for revision of Authority's earlier decision which means that the petitioner accepted the original determination taking all the risks of cost overrun, if any. In the Authority's opinion for any variation or change in the project cost prior approval of the Authority was required, which was not obtained. The Authority therefore is constrained not to entertain petitioner's



request in this regard at this stage. The Authority further considers the petitioner's argument that since the cost have been verified by the independent Auditor therefore should be allowed is not maintainable, as the audit was ordered by the Authority for specific purpose as per the approved TORs and the Authority can only allow verified costs within the scope of original tariff determination.

3.8 The Authority therefore decided to allow adjustments with in the premise of original determination. In view of the aforementioned reasons the petitioner's request for allowing cost overrun to the extent of € 4.540 million and US \$ 1.13 million in the EPC in not accepted.

3.9 The Authority also considered the arguments raised by the petitioner on account of EPC payable amounts, on the basis of signed contract and approved EPC cost and decided to allow the same, however, the Authority directs HPGCL to submit the documentary evidences of payments after payments have been made.

4. **Non EPC cost:**

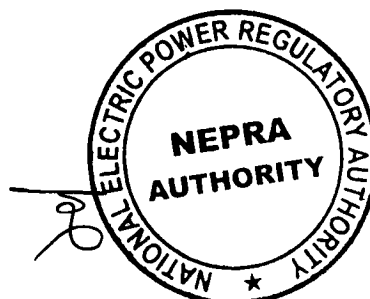
4.1 **Insurance during construction:**

4.1.1 The petitioner claimed that;

*"The reference insurance tariff component of PKR 0.0876/ kWh corresponds to the petitioner's first year's submitted insurance cost. Consequently, the actual denominator in the equation for calculating the following year's insurance tariff component should be the insurance cost of the base year. If the equation is to be used with a denominator of 1.35% of the EPC price, the reference component should be recalculated on the same basis, adjusting the impact of the change in exchange rate. Hence firm figure of EPC i.e. 1.35% be written in Para 17 (1) along with its exchange rate indexation mechanism."*

4.1.2 Para 17(I) of the referred determination is reproduced as follows:

*"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 a pass through."*





- 4.1.3 The above wording is very clear on the subject matter, and is consistent with the current practice in which the Authority has removed the ambiguity arose due to application of formula in other comparable cases. Therefore Authority decided not to accede with the request of the petitioner.

**4.2 Other Non EPC costs:**

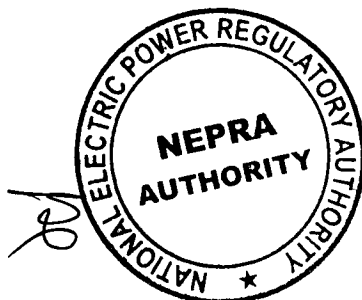
- 4.2.1 The petitioner in its review petition has submitted that;

*"8.3 The Petitioner submits that this Interpretation of the Authority is not just and fair, and that in comparison to other similar IPP cases, the Authority has discriminated against the Petitioner. One such case is that of Orient Power Company limited, where the Authority in its determination dated April 13, 2011 allowed the amount of USD 34.964 Million (as previously determined), against the claimed amount of USD 34.118 Million, for Non EPC cost. Similarly, USD 5.5 Million was allowed (as previously determined), against a claim of USD 3.1 Million for cost of initial spare parts, benefiting the company to the tune of USD 2.4 Million. In light of this, the Petitioner is aggrieved and fails to understand the principles and circumstances of denying the prudently incurred, claimed and verified cost of the Petitioner amounting to USD 16.454 Million, whereby Orient Power Company limited was granted an amount greater than what had been prudently incurred and claimed, in violation of NEPRA Rule 17(3)(I) of NEPRA Tariff (Standards & Procedures) Rules 1998.*

*8.4 The Petitioner, therefore, earnestly requests the Authority to approve full costs of Non EPC. Which the Petitioner has prudently incurred and has been duly verified."*

S No	Name of the Project	Date of Determination	Amount Claimed / Incurred	Amount Allowed
1	Orient Power Company Limited	April 13, 2011	USD 34.118 M	USD 34.964 M
2	HPGCL	January 8, 2014	USD 32.96 M	USD 16.506 M

- 4.2.2 The Authority considered that in the determination of OPCL Non EPC cost was allowed to US \$ 21.701 million against claimed US \$ 33.88 million. The





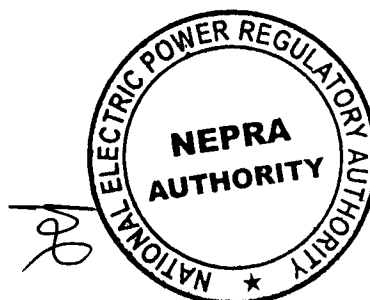


Authority directed HPGCL to substantiate its claim vide letter no NEPRA/R/TRF-85/10098 dated August 29, 2014. HPGCL vide letter No HPGCL/EXE-0272-2014 dated September 15, 2014 submitted its reply as follows;

**"On detailed scrutiny, after query raised from your side, it appears that amount of Non EPC costs allowed to Orient Power Company Limited which is written in petition as US \$ 34.964 million, was a typographical mistake presented advertently (instead of US \$ 22.7 million) and may be ignored by the Authority. However we reiterate our stance taken in review petition that we are allowed significantly lower Non EPC costs in comparison with other similar concerns and projects."**

- 4.2.3 The Authority considered the submission of HPGCL and did not found this response satisfactory and acceptable and showed their displeasure on the HPGCL management for submitting false and misleading facts and figures.
- 4.2.4 As the Non-EPC cost of HPGCL was determined on the basis of its petition, after considering the merits of the case in accordance with the procedures for tariff determination as per tariff rules, including participation of stakeholders in the public hearing of the case. Every case in cost plus regime of tariff determination is determined on the basis of its own merits and facts rather than merits of any other case. Further, HPGCL did not file any review against the Authority's decision on this account as per the prevailing laws within the stipulated time as per tariff rules, which shows the satisfaction of the petitioner with the Non-EPC cost determined by the Authority at the time of original determination.
- 4.2.5 The petitioner's claim to allow US \$ 32.96 million on account of NON-EPC cost against the Authority's COD adjustment determination dated January 10, 2014 in which Authority did not allow any cost overruns on this account as these costs were beyond the scope of instant adjustment. Since the instant adjustment has very restricted scope i.e. the adjustment for exchange rate variation in case of foreign cost, if any, or any other adjustment applicable in accordance with the Authority's determination; therefore the Authority has accordingly decided not to consider the amount in excess of originally determined amount of US\$ 16.506 million on account of Non-EPC cost.

4.3 **Financing Fee:**

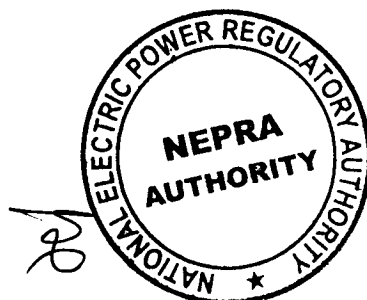


4.3.1 The petitioner in its review petition has submitted that:

***"7.1 The Authority, in its determination dated December 26, 2007, has assessed USD 21.255 Million as financing fees, subject to an adjustment, on the basis of financing arrangement, proposed by the Petitioner from the foreign lenders. The Petitioner would like to bring to the Authority's notice that due to subsequent changes in financing arrangements from foreign lenders to local lenders, resulting changes to the terms of financing, the Petitioner has now claimed PKR 537.106 Million (USD 7.106 Million) as financing fees at the COD stage. The Authority has allowed the financing fees on the basis of actual verifiable expenditure. Restricted up to 3% of borrowings, as has been done under comparable cases. The petitioner's actual verifiable expenditure amounts to PKR 537.106 Million, which is lower than the maximum of 3% of borrowings whereas the Authority has approved PKR 347.989 Million. This has been tabulated below for reference.***

<b><i>Particulars</i></b>	<b><i>PKR (Million)</i></b>
<b><i>Long Term loan</i></b>	<b><i>14,683.091</i></b>
<b><i>Working Capital</i></b>	<b><i>1,816.000</i></b>
<b><i>SNGPL Guarantee</i></b>	<b><i>1,131.11</i></b>
<b><i>NTDC Guarantee</i></b>	<b><i>500.000</i></b>
<b><i>Total Borrowings</i></b>	<b><i>18,130.201</i></b>
<b><i>3% of Total Borrowings</i></b>	<b><i>543.906</i></b>
<b><i>Financing Fees claimed by Petitioner</i></b>	<b><i>537.016</i></b>

***7.2 It is evident from the table above that calculations at the rate of 3% of the borrowings amounts to PKR 543.906 Million, and the claimed amount of PKR 537.106 Million is within the admissible limit of 3% laid down by the***





**Authority. Therefore, the disallowed portion of PKR 189.117 Million needs to be adjusted into the tariff.**

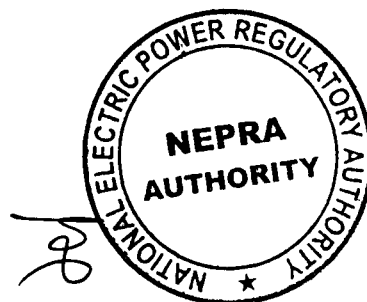
**7.3 Moreover, the Petitioner would like to submit that all the borrowing / financial facilities stated above were essentially required during the construction phase and financing fees were incurred against each facility stated above during the construction phase."**

4.3.2 The relevant extracts from the COD decision has been reproduced as follows:

**"5.1 The Authority had assessed US \$ 21.255 million as financing fees and adjustments of financial advisory fee up to a maximum limit of 1.2% of borrowing in the determination on the basis of financing arrangement proposed by the petitioner from the foreign lenders. However, due to subsequent changes in financing arrangement from foreign lenders to local lenders and resulting changes in terms of financing. HPGCL has claimed Rs. 537.106 million (US \$ 7.106 million) as financing fees at the COD stage, which has also been verified by the Auditors.**

**5.2 The Authority in all the other comparable cases have allowed the financing fee on the basis of actual verifiable expenditure restricted up to 3% of borrowings. Therefore, on the principle of fairness, equity and justice the Authority has decided to give same treatment in the instant case, which on the basis of revised allowed project cost, has been works out as PKR 347.989 million (US\$ 4.604 million)".**

4.3.3 The petitioner has claimed US \$ 7.106 million against the allowed amount of US \$ 4.064 million in Para 5.2 of decision dated January 10, 2014 which has been calculated on the basis of actual verifiable expenditure restricted up to 3 % of borrowing. The same treatment has been adopted with all the comparable cases so petitioner's claim is found to be unjustified therefore Authority decided not to accede with petitioner's request.



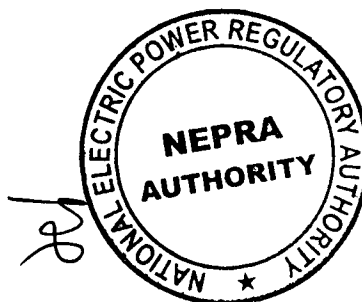


#### **4.4 Duties and Taxes:**

- 4.4.1 The petitioner claimed US \$ 5.660 million Rs. 473.140 million including the duty paid on the import of spare parts and other parts as against the previously determined amount of Rs 440.575 million (US \$ 5.183 million).
- 4.4.2 After detailed scrutiny the Authority has found that duties of spare parts was not allowed in any other cost nor these were included in O & M cost therefore the Authority has decided to allow duties and taxes on the import of spare parts amounting to Rs. 22.562 million and other spare parts amounting to Rs. 12 million also verified by their independent Auditors.

#### **4.5 Interest during construction:**

- 4.5.1 The Authority in Para 4.4 of decision dated January 08, 2014 decided to allow IDC upto RCOD amounting to Rs. 3052.950 million (US \$ 36.240 million) against the claimed amount of US \$ 50.994 million calculated up to actual COD.
- 4.5.2 The petitioner in its review petition dated January 17, 2014 again claimed US \$ 50.994 million upto actual COD and submitted that the petitioner is entitle to the recovery of full amount of IDC because the Authority in its determination dated December 26, 2007 promised to allow the actual IDC at COD.
- 4.5.3 Further the petitioner in Para 6.3 of its review petition dated January 17, 2014 stated that the RCOD and COD are the subject matters of the PPA and are to be decided mutually by the power purchaser and the power producer. According to the standard PPAs proper penalty is imposed for any delinquency on part of the power producer. Therefore, deductions made by the Authority, in the opinion of the petitioner, results in dual penalization for the power producer.
- 4.5.4 The Authority has considered the argument of petitioner and has noted that the petitioner was allowed a construction period in the original tariff determination and on the basis of that petitioner agreed a construction period with power purchaser therefore the Authority can only consider allowing interest during construction to the extent of RCOD agreed between petitioner and power purchaser. Further the Authority has already considered this issue and no new issue and important matter of evidence have been produced by the petitioner. The Authority is of the view that the request of the petitioner on this issue does not





merit consideration and therefore the Authority has decided to maintain its earlier decision on the subject.

**5. ROEDC Calculation:**

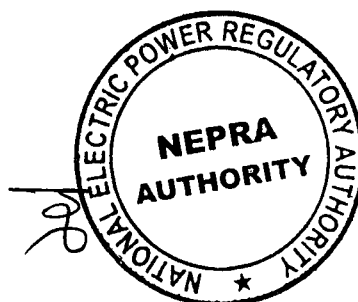
- 5.1 The petitioner claimed that the Authority has adopted the basis of weighted average, which is detrimental to the interest of the petitioner. The petitioner is of the view that the calculation should have been made on the basis of first in first out. The petitioner also submitted that; if there is any cost overrun of the project, it takes place at the end of the construction period, immediately before COD. Therefore, it would have been fair and prudent, if the Authority had applied the basis of FIFO in calculating the ROEDC.
- 5.2 In the light of petitioner's submissions and arguments, the Authority decided to reconsider its decision and have decided to revise the ROEDC calculation on the basis of petitioner's claim.

**6. Net Capacity:**

- 6.1 HPGCL in Para 10.1 and 10.2 of its motion for leave for review petition dated January 17, 2014 has stated that

*"10.1 The petitioner achieved its COD on June 25, 2011 under a situation whereby the confirmed gas period was expiring on June 30, 2011. Consequent to this fact, the petitioner accepted the tested capacity, which was lower than the capacity contracted under the PPA. Had the petitioner not accepted the lower capacity the COD would have been delayed for an indefinite period, till such time the gas was made available to the petitioner for reliability run test (RRT). The petitioner would also like to bring to the Authority's notice that during the period of RRT weather conditions were extremely unfavorable and the pressure of the gas was not upto the required mark. Though, the project was unable to achieve the contracted capacity of 209 MW but it was within the admissible limits of PPA i.e. upto 10% below the contracted capacity.*

*10.2 The petitioner later on, had the original contracted capacity revised as per section 2.9(a) (Reduction in contracted capacity) of the*



***PPA, by paying liquidated damages to NTDC. The approved project capacity is now 206.817 MW. The petitioner feels that it has been penalized twice, once through payment of liquidated damages to NTDC and second on account of calculation of tariff based on a higher net capacity. The Authority is therefore humbly requested to consider the request of the petitioner in revision of using 206.817 MW as net capacity, instead of 209 MW for purposes of tariff calculation."***

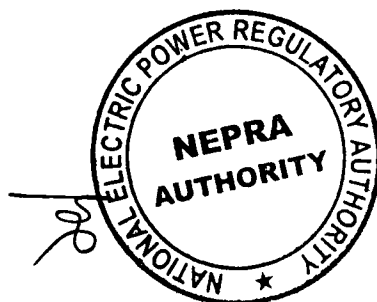
- 6.2 Further this was also confirmed by HPGCL during the hearing dated June 10, 2014. It is worthwhile to mention here that, this short capacity was choice of HPGCL not due to any other reason as mentioned by their representative during the hearing dated June 10, 2014, relevant extracts are reproduced as below:

***"We had a choice that if our tested capacity during the IDC test comes within the range of initial contracted capacity we may go for retesting. We can go for retesting for three times. In our particular case there was one issue that there was no gas available we went to NTDC and requested them to give us firm commitment of gas supply so that we may go for retesting they said either you can go through this process or you can get the approval for this capacity after paying liquidated damages, which was paid in US \$"***

- 6.3 The Authority after considering the petitioner's claim in the light of original determination, which clearly specified that, the tariff adjustment will be made only if net capacity is established higher than 209 MW. Further, according to the submission of the petitioner the reason only for the lower capacity was non-availability of gas, which according to the power policy is the responsibility of the petitioner, and consumers cannot be burdened higher tariff due to establishment of lower capacity than the contracted capacity, established due to any failure of the petitioner and decided not to accept petitioner's request for adjustment of capacity. However, the Authority decided to provide the petitioner a chance to establish its capacity in the months when gas is available and adjust their PPA accordingly.

**7. Inflationary impact on Local Expenditures during construction:**

- 7.1 The petitioner submitted that the rapid inflation has a direct bearing on the costs incurred in Pakistan currency. The construction of the project started in 2007 and was completed in 2011. During this period there has been perpetual inflation



globally and rapid devaluation of PKR which resulted in an increase of the PKR cost. During this interim period between 2007 and 2011 the parity of Dollar vs. PKR had been on the very higher side. The parity rate fluctuated from PKR 60/USD to PKR 85.9/USD and WPI (local) escalated from 117.8 to 215.17. Therefore, the petitioner humbly requests the Authority to take into consideration the effect of the inflation and devaluation of Pak Rupee and revise the non-EPC cost suitably.

- 7.2 The Authority considered the points raised by the petitioner and has decided that the claim of the petitioner is not acceptable as no such mechanism is provided in the determination. Further it is also not allowed to any other IPP therefore cannot be allowed to HPGCL. Regarding the delay in COD adjustment decision was mainly due to the reason that the required information was provided in bits & pieces and material information was not provided correct first time and was later altered/ corrected by HPGCL.

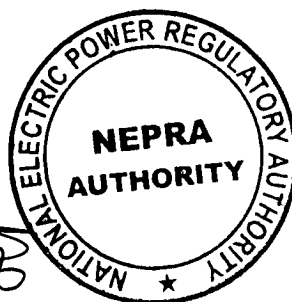
**8. Typo Errors:**

- 8.1 The typo errors in the determination have been identified by the petitioner, following typo errors although have no impact on tariff determination, but these are rectified as under;

- a) In Para 1.1, "June 15, 2011" should be read as "June 25, 2011";
- b) In Para 2.1.12 amount of Balance of plant verified should be read as €12.072 instead of €12.076

**9. ORDER:**

Pursuant to Rule 6 of the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 read with section 31(4) of Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, and in supersession to the Authority's determination dated January 8, 2014 in the Matter of tariff adjustment at Commercial Operation Date (COD) of Halmore Power Generation Company Limited (HPGCL), HPGCL is hereby allowed to charge, the following approved revised tariff for delivery of electricity to CPPA of NTDC for procurement on behalf of Ex-WAPDA Distribution Companies with effect from COD:

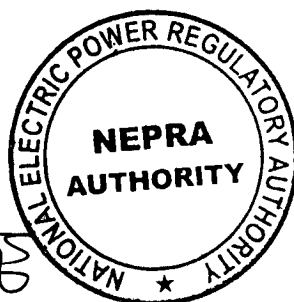




**REVISED REFERENCE TARIFF**

Tariff Component	Years 1 to 10	Years 11 to 30	Indexation
Capacity Charge (Rs./kW/Hour)			
Fixed O & M			
• Local	0.0713	0.0713	WPI
• Foreign	0.1021	0.1021	US \$/PKR & US CPI
Insurance	0.0983	0.0983	US \$/PKR
Cost Of Working Capital- Gas Operation	0.0561	0.0561	KIBOR
Debt Service-Local	1.6450	-	KIBOR
Return On Equity	0.4226	0.4226	US\$/PKR
Return On Equity During Construction	0.2048	0.2048	US \$/PKR
<b>Total Capacity Charge Gas</b>	<b>2.6040</b>	<b>0.9590</b>	
In case the plant operation on HSD, cost of working capital shall be paid on 15 days inventory level basis as Rs.0.1201/kW/Hr.			

<u>Tariff Component</u>	Years 1 to 10	Years 11 to 25	Indexation
<b>A) Energy Charge On Operation On Gas</b>			
Fuel Component	1.7787	1.7787	Fuel Price
Variable O& M	0.2737	0.2737	US \$/PKR & US CPI
Total Variable Charge A	2.0524	2.0524	
<b>B) Energy Charge on operations on HSD Rs./kWh</b>			
Fuel cost component	6.7151	6.7151	Fuel Price







Variable O & M	0.3951	0.3951	US \$/PKR & US CPI
Total Variable Charge B	7.1102	7.1102	

Note:

- i) Capacity charge Rs./kW/hr. is applicable to the dependable capacity at the delivery point.
- ii) Dispatch criterion will be based on the energy charge.
- iii) The above tariff is applicable for a period of 30 years commencing from the date of the commercial operations.
- iv) Component wise tariff for operations on Gas and HSD is indicated at **Annex-I** and **Annex-II**.
- v) Debt Servicing Schedule is attached as **Annex-III**

#### I) Adjustment in Insurance Component

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 a pass through.

#### II) Pass-Through Items

i) 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, exploration has been accounted for in the tariff. If HPGCL 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 will be considered as a pass-through (as Rs./kW/hour) hourly payment spread over a 12 months period in addition to the capacity purchase price in the reference tariff. Furthermore, in such a scenario, HPGCL shall also submit to CPPA details of any tax shield savings and CPPA shall deduct the amount of these savings from its payment to HPGCL on account of taxation.

ii) Withholding tax on dividend is also a pass-through item just like other taxes as indicated in the government guidelines for determination of tariff for new IPPs. In a reference tariff

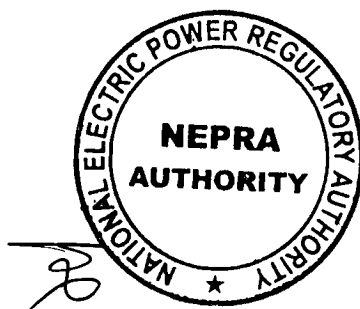




table withholding tax number is indicated as reference and CPPA shall make payment on account of withholding tax at the time of actual payment of dividend subject to maximum of 7.5% of 15% of reference equity i.e. hourly payment (Rs./kW/hour) spread over a 12 months period.

$$= [15\% * (E(REF) + ROEDC (REF))] * 7.5\%$$

Withholding Tax Payable

Where:

E (REF) = Adjusted reference equity at COD

ROEDC (REF) = Reference return on equity during construction

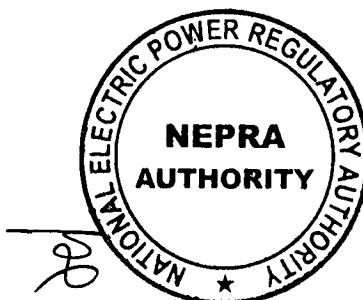
iii) In case Company does not declare a dividend in a particular year or only declares a partial dividend, then the difference in the withholding tax amount (between what is paid in that year and the total entitlement as per the net return on equity) would be carried forward and accumulated so that the company is able to recover the same in hourly payments spread over 12 months period as a pass-through from the power purchaser in future on the basis of the total dividend payout.

i) Indexations/adjustment

The following indexations shall be applicable to reference tariff.

a) **Indexations applicable to O & M:**

The local component of fixed O & M part of capacity charge will be adjusted on account of local inflation (WPI) and foreign component on account of US CPI and dollar/rupee exchange rate. Quarterly adjustment for local inflation, foreign inflation and exchange rate variation will be made on P July, 1<sup>st</sup> October, 1<sup>st</sup> January and 1<sup>st</sup> April based on the latest available information with respect to WPI notified by the Federal Bureau of Statistics, US CPI notified by the 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

$$F O\&M_{(LREV)} = \text{Rs. } 0.0713 \text{ per kW per hour} * WPI_{(REV)} / 193.44$$

$$F O\&M_{(FREV)} = \text{Rs. } 0.1021 \text{ per kW per hour} * US \text{ CPI}_{(REV)} / 218.803 * ER_{(REV)} / 85.90$$

Where:

$$F O\&M_{(LREV)} = \text{The revised applicable fixed O\&M local component of the capacity charge indexed with WPI}$$

$$F O\&M_{(FREV)} = \text{The revised applicable fixed O\&M foreign component of the capacity charge indexed with US CPI (all urban) and exchange rate variations}$$

$$WPI_{(REV)} = \text{The revised wholesale price index (manufacturers)}$$

$$WPI_{(REF)} = 193.44 \text{ wholesale price index (manufacturers) of November 2010 notified by the Federal Bureau of Statistics}$$

$$US \text{ CPI}_{(REV)} = \text{The revised US CPI (all urban consumers)}$$

$$US \text{ CPI}_{(REF)} = 218.803 \text{ US CPI (all urban consumers) for the month of November 2010 as notified by the US Bureau of Labor Statistics}$$

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

$$ER_{(Ref)} = \text{The reference exchange rate of Rs. } 85.90 = 1 \text{ US\$}$$



ii) Variable O & M

$$V O\&M_{(Revg)} = \text{Rs. } 0.2737 \text{ per kW per hour} * WPI_{(REV)} / 193.44$$

$$V O\&M_{(Revd)} = \text{Rs. } 0.3951 \text{ per kW per hour} * US CPI_{(REV)} / 218.803 * ER_{(REV)} / 85.90$$

Where:

$$V O\&M_{(Revg)} = \text{The revised applicable fixed O\&M local component of the capacity charge indexed with WPI}$$

$$V O\&M_{(Revd)} = \text{The revised applicable fixed O\&M foreign component of the capacity charge indexed with US CPI (all urban) and exchange rate variations}$$

$$WPI_{(REV)} = \text{The revised wholesale price index (manufacturers)}$$

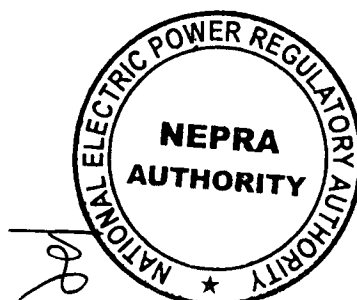
$$WPI_{(REF)} = 193.44 \text{ wholesale price index (manufacturers) of November 2010 notified by the Federal Bureau of Statistics}$$

$$US CPI_{(REV)} = \text{The revised US CPI (all urban consumers)}$$

$$US CPI_{(REF)} = 218.803 \text{ US CPI (all urban consumers) for the month of November 2010 as notified by the US Bureau of Labor Statistics}$$

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

$$ER_{(Ref)} = \text{The reference exchange rate of Rs. } 85.90 = 1 \text{ US\$}$$



**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 according to the following formula:

$$\Delta I = P (LREV) * (KIBOR (REV) - 13.40\%) / 4$$

Where:

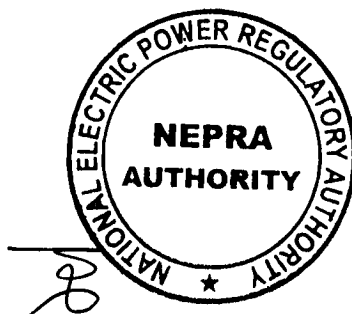
$\Delta I$  = The variation in interest charges applicable corresponding to variation in quarterly KIBOR.  $\Delta I$  (1.) can be positive or negative depending upon whether KIBOR (REV) is > or < 13.40%. The interest payment obligation will be enhanced or reduced to the extent of  $\Delta I$  for each period of quarter under adjustment.

$P(REV)$  = The outstanding principal (as indicated in the attached debt service schedule to this order) on a quarterly basis on the relevant calculation 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 will be adjusted on account of the fuel price variation as and when notified by the relevant authority, which in the instant case is the Oil & Gas Regulatory Authority (OGRA). In this regard, the variation in HPGCL's allowed rate relating to fuel cost shall be revised according to the following formula:

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



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

AND

$FCd_{(Rev)}$  = Rs. 6.7151 per kWh. \*  $[FPd_{(Rev)}$  Rs. Per MMBTUs]/ Rs. 954.27 per MMBTU (Excl-GST)

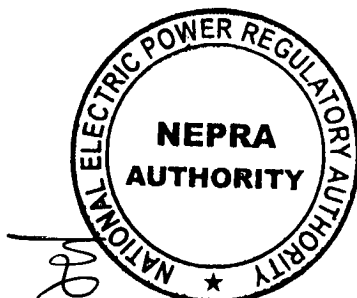
Where:

$FCd_{(Rev)}$  = Revised fuel cost component of variable charge on Diesel.

$FPg_{(Rev)}$  = 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. 37.29 per litre
- GST 15%
- HSD Fuel Price without GST (GCV) Rs. 32.43 per litre
- 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 following reference values





- Reference specific gravity @ 15°C or 15.6°C 0.84
- Reference calorific value (Gross) 42,880.7 BTUs/kg

**d) Adjustment of Return on Equity:**

Return on equity component of the tariff will be quarterly adjusted on account of variation in PKR/US\$ parity according to the following formula;

$$ROE_{(Rev)} = Rs. 0.4226 \text{ per kW per hour} * ER_{(Rev)} / ER_{(Ref)}$$

Where;

$ROE_{(Rev)}$  = Revised return on equity component in R./kW/h

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

$ER_{(Ref)}$  = The reference exchange rate of Rs. 85.90 = 1 US\$.

**e) Adjustment of Return on Equity during Construction (ROEDC):**

Return on equity during construction will be quarterly adjusted on account of variation in PKR/US\$ exchange rate according to the following formula;

$$ROEDC_{(Rev)} = Rs. 0.2048 \text{ per kW per hour} * ER_{(Rev)} / ER_{(Ref)}$$

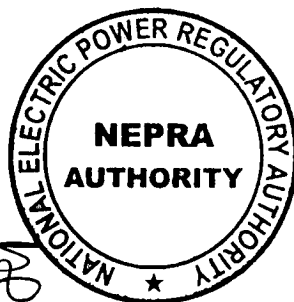
Where:

$ROEDC_{(Rev)}$  = Revised return on equity during construction

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

$ER_{(Ref)}$  = The reference exchange rate of Rs. 85.90 = 1 US\$.

Adjustments on account of local inflation, foreign inflation, foreign exchange variation, KIBOR variation and fuel price will be approved and announced by



the Authority for immediate application within seven working days after receipt of HPGCL's request for adjustment in accordance with the requisite indexation mechanism stipulated herein.

**IV) Terms and Conditions of Tariff:**

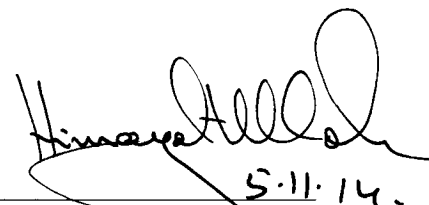
- i) Use of gas will be considered as primary fuel.
- ii) All new equipment will be installed and the plant will be of standard configuration.
- iii) Dispatch criterion will be based on Energy Charge.
- iv) Diesel oil will be used only for startups and other contingent requirements. Use of Diesel Oil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

**AUTHORITY**



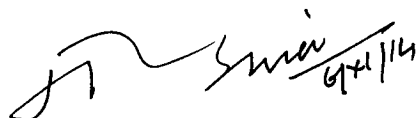
05.11.14

(Khawaja Muhammad Naeem)  
Member



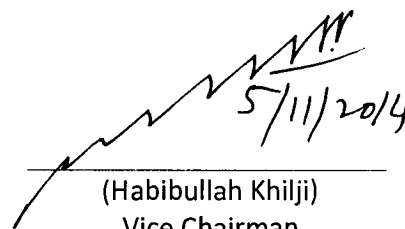
05.11.14

(Himayat Ullah Khan)  
Member



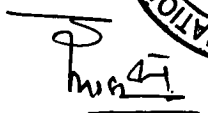
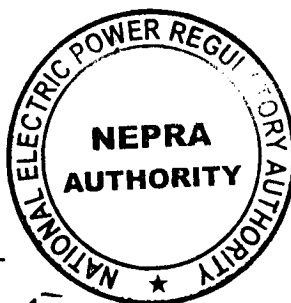
04/11/14

(Maj (R) Haroon Rashid)  
Member



5/11/2014

(Habibullah Khilji)  
Vice Chairman



06.11.14

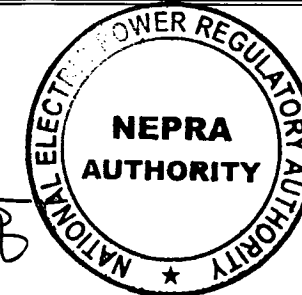


**Halmore Power Generation Company Limited**  
**Tariff at COD (GAS)**

Annex- I

Year	Variable Charge (PKR/kWh)			Capacity Charge (PKR/kW/Hour)									
	Fuel	Variable O & M	Total	Fixed O & M		Insurance	Working Capital Component	Return on Equity	Return on Equity during Construction	Withholding Tax	Loan Repayment	Interest Charges	Total Capacity Charge
		Foreign		Local	Foreign								
1	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.3505	1.2944	2.6471
2	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.4117	1.2333	2.6471
3	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.4834	1.1615	2.6471
4	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.5677	1.0772	2.6471
5	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.6667	0.9782	2.6471
6	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.7830	0.8620	2.6471
7	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	0.9195	0.7254	2.6471
8	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	1.0798	0.5651	2.6471
9	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	1.2681	0.3768	2.6471
10	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	1.4893	0.1557	2.6471
11	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
12	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
13	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
14	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
15	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
16	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
17	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
18	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
19	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
20	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
21	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
22	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
23	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
24	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
25	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
26	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
27	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
28	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
29	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
30	1.7787	0.2737	2.0524	0.0713	0.1021	0.0983	0.0561	0.4226	0.2048	0.0471	-	-	1.0022
<b>Levelized Tariff ( 1-30 years)</b>			<b>2.0524</b>	<b>0.0713</b>	<b>0.1021</b>	<b>0.0983</b>	<b>0.0561</b>	<b>0.4226</b>	<b>0.2048</b>	<b>0.0471</b>	<b>0.4618</b>	<b>0.6104</b>	<b>2.0744</b>

Net Capacity	209.000	MW
Reference Exchange Rate (PKR/IS\$)	85.90	
Reference US CPI	218.8030	
Reference WPI (manufacturers)	193.4400	
Levelized Tariff (at 60% plant factor) PKR per kWh	5.5097	(US cents/kWh) <b>6.4141</b>



**Halmore Power Generation Company Limited**  
**Tariff at COD (HSD)**

Annex- II

Year	Variable Charge (PKR/kWh)			Capacity Charge (PKR/kW/Hour)									
	Fuel	Variable O&M	Total	Fixed O & M		Insurance	Working Capital Component	Return on Equity	Return on Equity during Construction	Withholding Tax	Loan Repayment	Interest Charges	Total Capacity Charge
		Foreign		Local	Foreign								
1	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.3505	1.2944	2.7111
2	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.4117	1.2333	2.7111
3	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.4834	1.1615	2.7111
4	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.5677	1.0772	2.7111
5	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.6667	0.9782	2.7111
6	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.7830	0.8620	2.7111
7	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	0.9195	0.7254	2.7111
8	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	1.0798	0.5651	2.7111
9	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	1.2681	0.3768	2.7111
10	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	1.4893	0.1557	2.7111
11	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
12	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
13	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
14	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
15	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
16	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
17	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
18	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
19	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
20	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
21	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
22	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
23	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
24	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
25	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
26	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
27	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
28	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
29	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
30	6.7151	0.3951	7.1102	0.0713	0.1021	0.0983	0.1201	0.4226	0.2048	0.0471	-	-	1.0661
<b>Levelized Tariff ( 1-30 years)</b>			<b>7.1102</b>	<b>0.0713</b>	<b>0.1021</b>	<b>0.0983</b>	<b>0.1201</b>	<b>0.4226</b>	<b>0.2048</b>	<b>0.0471</b>	<b>0.4618</b>	<b>0.6104</b>	<b>2.1384</b>

Net Capacity 209.000 MW  
 Reference Exchange Rate (PKR/US\$) 85.90  
 Reference US CPI 218.80  
 Reference WPI (manufacturers) 193.44  
 Levelized Tariff (at 60% plant factor) PKR per kWh 10.6741 (US cents/kWh) 12.4262



# Halmore Power Generation Company Limited

## Debt Repayment Schedule

Year	Quarter	Principal Amount Million Rs.	Repayment Million Rs.	Mark Up Million Rs.	Debt Service Million Rs.	Principal Amount Million Rs.	Annual Principal Repayment Rs/Kw/hr	Annual Interest Rs/kW/hr	Annual Debt Serving Rs/kW/hr
1	1	14,683	151	602	753	14,532			
	2	14,532	157	596	753	14,375			
	3	14,375	164	589	753	14,212			
	4	14,212	170	583	753	14,041	0.3505	1.2944	1.6450
2	5	14,041	177	576	753	13,864			
	6	13,864	184	568	753	13,680			
	7	13,680	192	561	753	13,488			
	8	13,488	200	553	753	13,288	0.4117	1.2333	1.6450
3	9	13,288	208	545	753	13,079			
	10	13,079	217	536	753	12,863			
	11	12,863	226	527	753	12,637			
	12	12,637	235	518	753	12,402	0.4834	1.1615	1.6450
4	13	12,402	244	509	753	12,158			
	14	12,158	254	498	753	11,904			
	15	11,904	265	488	753	11,639			
	16	11,639	276	477	753	11,363	0.5677	1.0772	1.6450
5	17	11,363	287	466	753	11,076			
	18	11,076	299	454	753	10,777			
	19	10,777	311	442	753	10,466			
	20	10,466	324	429	753	10,142	0.6667	0.9782	1.6450
6	21	10,142	337	416	753	9,805			
	22	9,805	351	402	753	9,454			
	23	9,454	365	388	753	9,089			
	24	9,089	380	373	753	8,709	0.7830	0.8620	1.6450
7	25	8,709	396	357	753	8,313			
	26	8,313	412	341	753	7,901			
	27	7,901	429	324	753	7,472			
	28	7,472	447	306	753	7,025	0.9195	0.7254	1.6450
8	29	7,025	465	288	753	6,560			
	30	6,560	484	269	753	6,077			
	31	6,077	504	249	753	5,573			
	32	5,573	524	228	753	5,048	1.0798	0.5651	1.6450
9	33	5,048	546	207	753	4,502			
	34	4,502	568	185	753	3,934			
	35	3,934	592	161	753	3,342			
	36	3,342	616	137	753	2,727	1.2681	0.3768	1.6450
10	37	2,727	641	112	753	2,085			
	38	2,085	667	86	753	1,418			
	39	1,418	695	58	753	723			
	40	723	723	30	753	(0)	1.4893	0.1557	1.6450

