



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph: +92-51-9206500, Fax: +92-51-2600026
Web: www.nepa.org.pk, E-mail: registrar@nepa.org.pk

No. NEPRA/TRF-122/UCH-II-2008/10809-10811

July 3, 2017

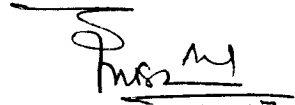
Subject: **Decision of the Authority in the matter of Tariff Adjustments at Commercial Operations Date of Uch-II Power (Pvt.) Ltd. [Case No. NEPRA/TRF-122/UCH-II-2008]**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annexure-I & II (50 pages) in Case No. NEPRA/TRF-122/UCH-II-2008.

2. The subject Decision 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) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

Enclosure: As above


03.07.17
(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 TARIFF ADJUSTMENTS AT COMMERCIAL
OPERATIONS DATE OF UCH-II POWER (PVT) LIMITED**

1. **Introduction:**

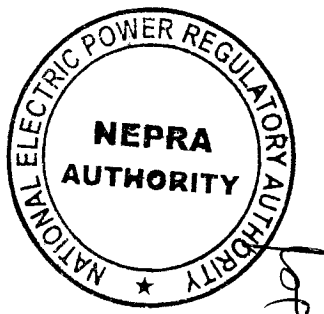
- 1.1. Pursuant to the tariff determination of Uch-II issued by the Authority on April 24, 2009 followed by below mentioned decisions of the Authority ;
- Determination of reference tariff dated April 24, 2009
 - Decision of the Authority regarding motion for leave for review filed by Uch-II dated June 26, 2009
 - Decision of the Authority pertaining to reconsideration request filed by MoWP dated October 16, 2009
 - Corrigendum regarding decision on the motion for leave for review filed by Uch-II dated December 28, 2010
 - Decision of the Authority in the matter of tariff modification petition filed by Uch-II dated April 22, 2015
 - Corrigendum regarding tariff modification decision dated May 12, 2015
 - Decision of the Authority regarding motion for leave for review of tariff modification decision dated October 01, 2015

(Collectively referred to as "Tariff Determination")

The determined levelled tariff of Uch-II vide tariff modification decision dated Oct 01, 2015 was Rs. 6.1889/kWh (US Cents 7.6929/kWh). Uch-II Power (Pvt) Limited (hereinafter referred to as "Uch-II" or "Petitioner"), after commencing commercial operations on April 04, 2014, submitted its request for adjustment of relevant components of its tariff through letter dated August 11, 2016 and subsequent documents submitted.

- 1.2. The summary of the project cost allowed in tariff determination is as follows:

Description	US \$ in M
EPC Cost	371.210
Custom duties & taxes	18.600
Insurance during construction	7.428
Financing fees and charges	22.055
Interest during construction	40.091
PPA Independent Engineer	0.217
Workers profit participation fund	0.131
WAPDA Standby L/C	0.499
Mobile equipment purchase	0.250



Handwritten signature



Long Term Service Agreement spares (LTSA)	4.945
*Non-LTSA spares	*5.108
O&M Mobilization	4.000
Owner's Engineer	5.854
IT and special equipment	1.243
Start-up & production	2.830
Land lease and office rents	1.000
Residential Colony	5.080
General & Administration	1.327
Project Development	8.474
Total Project Cost	495.234

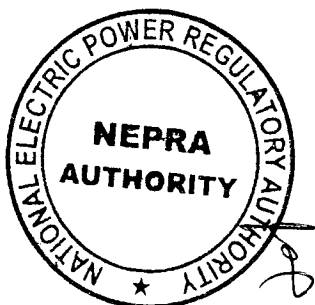
Note: Non LTSA cost was to be considered at the time of COD tariff adjustment if substantiated through documentary evidence.

- 1.3. The summary of the reference tariff determined is as follows:

Tariff Components	Year 1-10	Year 11-14	Year 15-25	Indexation
Capacity Charge PKR/kW/Hour				
O&M Foreign	0.1285	0.1285	0.1285	US\$/PKR & US CPI
O&M Local	0.0621	0.0621	0.0621	WPI
Insurance	0.0852	0.0852	0.0852	US\$/PKR
Debt Service	1.3223	0.1191		LIBOR/KIBOR
Return On Equity	0.4546	0.4546	0.4546	US\$/PKR
ROEDC	0.0932	0.0932	0.0932	US\$/PKR
Total Capacity Charge	2.1459	0.9427	0.8236	
Energy Charge On Operation On Gas Rs/kWh				
Fuel Cost Component	3.0900	3.0900	3.0900	Fuel price
Variable O&M				
Foreign	0.1173	0.1173	0.1173	US\$/PKR & USCPI
Local	0.0221	0.0221	0.0221	WPI

Levelling Tariff: Rs. 6.1889/kWh (US Cents 7.6929/kWh).

- 1.4. As per the aforementioned tariff determination Uch-II was required to file for COD tariff adjustment along with the relevant documentation within 30 days of COD. Uch-II vide letter dated April 29, 2014 requested the Authority for extension of 90 days for filing of COD tariff adjustment. Thereafter, Uch-II filed petition for tariff modification, the decision on tariff





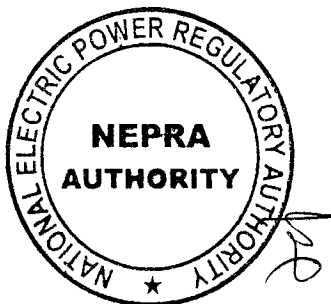
modification was issued on Oct 01, 2015. Uch-II filed its COD tariff adjustment request after 10 months of referred tariff modification decision of the Authority. The Authority condoned the delay in filing of COD tariff adjustment request and admitted the referred tariff adjustment request of Uch-II.

- 1.5. In support of COD tariff Adjustment request the Petitioner submitted various documents and information for the consideration of the Authority which included:
- Engineering, procurement and construction contracts and related contractual documents including notice to proceed issued to EPC contractors etc.
 - EPC invoices and payments particulars
 - Financing Agreements with the Banks / Lending institutions
 - Lender's interest payment advices
 - PPIB's letter No. 6(618)/PPIB/11/Fin dated May 07, 2011 regarding financial close.
 - National Transmission and Dispatch Company Limited's letter No. GM/CPPA/Mngr.(Tech-I)/Uch-II/5546-55 dated June 20, 2014 regarding notification of COD achieved by Uch-II
 - Relevant bank statements
 - Payment challans of duties, pay orders through which these duties were paid, bill of lading and declarations of import etc
 - Equity/debt schedules along with the bank statements reflecting equity injections and debt drawdown as claimed.
 - Insurance policies for construction and operations period along with their premium payment evidence.
 - Other relevant source documents, information & related schedules
- 1.6. Based on the source documents, information and justification submitted by the Petitioner, the Authority has decided to allow the following adjustments in the reference tariff of Uch-II in view of the request for COD tariff adjustment submitted by Uch-II.

One Time Adjustments of Project Cost:

2. EPC Cost:

- 2.1. The Petitioner was allowed an EPC cost of US \$ 370.254 million in the tariff determination dated April 24, 2009. In the tariff modification decisions dated April 24, 2015 and Oct 01, 2015 the following decisions with regard to the EPC cost were given by the Authority;
- a. Reduction of US \$ 1.830 million in EPC cost allowed earlier in the tariff determination dated April 24, 2009
 - b. US \$ 0.1 million increase due to change in tax allowed subject to documentary evidences to be presented by the Petitioner at the time of COD establishing that this cost is the part of EPC cost and required to be paid by the Petitioner.





- c. US \$ 2.287 million allowed for 220kV switchyard additional bay subject to adjustment at the time of COD adjustment on account of exchange rate variations, through verifiable documentary evidence.
- d. US \$ 0.500 million for detention and demurrage charges, bridge repair cost and road repair cost, due to force majeure events allowed, subject to verifiable documentary evidences to be submitted at COD.

2.2. The breakup of the allowed EPC cost is tabulated below;

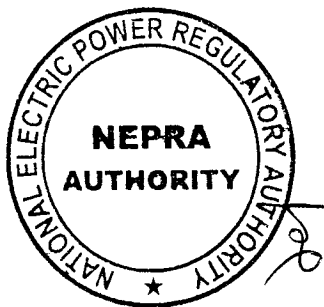
Description	€ in M	US \$ in M	*Equivalent US \$ in M
Hyundai Engineering Company Limited Korea (Offshore-I)	75.865	-	102.289
	-	131.469	131.469
Descon Engineering FZE Hamriya UAE (Offshore-II)	18.775	-	25.314
	-	57.851	57.851
Descon Engineering Limited Pakistan (Onshore)	-	51.500	51.500
Total EPC Cost			368.423
Other Cost			
**Change in Tax	-	**0.100	**0.100
Variation order due to NTDC for 220kV switchyard additional bay	-	2.287	2.287
Force Majeure Event Related Cost	-	0.500	0.500
Grand Total			371.210

* Converted at reference Euro/US \$ rate of 1.3483.

** Subject to verifiable documentary evidence at COD

2.3. Following scope of EPC works for each contractor has been submitted by the Petitioner;

Contractor	Description	Scope of work
Hyundai Engineering Company Korea Contract Value: € 75.865 M & US \$ 131.469 M	Offshore-I	Procurement, construction and testing/commissioning of the Gas Turbines (GTG), Steam Turbine (STG), Heat Recovery Steam Generators (HRSG)/Bypass Stack, Balance Of Plant (BOP) mechanical work, Switchyard transformers, Electrical, C&I, Ocean Transportation, Supervision and Inspection, Finance expenses (Bond Insurance, L/C etc), Training and Commissioning services for Offshore-I portion and Management/Engineering.

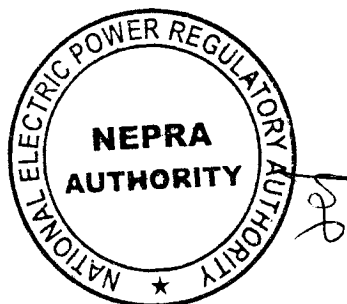




Descon Engineering FZE Hamriyah UAE Contract Value: € 18.775 M & US \$ 57.851 M	Offshore-II	Fuel gas system, compressed air system, fire-fighting system, main/auxiliary cooling water system, cooling tower, water supply/treatment system, waste water treatment system, telephone/PA/clock, others (workshop equipment/spare etc.) unit /auxiliary transformer, black start/emergency D/G, MV/LV SWGR, cabling/wiring/panel and others (CCTV/ LCD/ Fire Alarm etc).
Descon Engineering Ltd. Contract Value: US \$ 51.5 M	Onshore	Fuel oil system, portable water system, sewerage/storm water system, civil/building works, installation mechanical, and installation electrical.

2.4. The Petitioner at the time of COD tariff adjustment has requested EPC Cost as per the following breakup as against the determined EPC cost breakup along with exchange rate variation;

Description	Purpose	Tariff Determination/Modification			Claimed at COD		
		€ in M	US \$ in M	Total US \$ in M	€ in M	US \$ in M	Total US \$ in M
Hyundai Engineering Company Limited Korea	Equipment Supply I	75.865	131.469	233.758	59.201	131.069	210.097
Hyundai Engineering Company Limited Thailand	Technical Service		-		16.664	-	22.110
Descon Engineering FZE Hamriya UAE	Equipment Supply-II	18.775	57.851	83.165	18.775	57.698	81.964
Consortium of Descon Engineering Limited Descon Integrated Limited for construction	Construction (80% DEPL)	-	51.500	51.500	-	41.128	51.287
	Construction (20% DIPL)					10.159	
Total EPC Cost				368.423	94.640	240.054	365.458



[Handwritten Signature]



Other Cost							
*GOP	*Change in Tax	-	*0.100	*0.100	0.024	0.100	0.126
Variation order due to NTDC	220kV switchyard additional bay	-	2.287	2.287	1.298	0.536	2.078
Force Majeure Event Related Cost	Detention and demurrage charges, bridge repair cost and road repair cost	-	0.500	0.500	-	0.379	0.379
Furniture and Fixture	Furniture and Fixture		-	-		0.178	0.179
Grand Total				371.210	95.962	241.648	368.220

* Subject to verifiable documentary evidence at COD

2.5. The head wise EPC cost has been discussed in detail below;

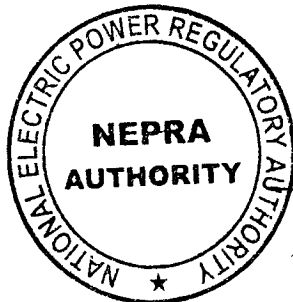
2.5.1 Hyundai Engineering Company Limited:

2.5.1.1 The Authority in the tariff modification decision had allowed Euro 75.865 million i.e. (US \$ 102.288 million) at reference €/US\$ 1.3483 and US \$ 131.469 million equivalent to a total of US \$ 233.758 million for procurement, construction and testing/commissioning of the Gas Turbines (GTG), Steam Turbine (STG), Heat Recovery Steam Generators (HRSG), Balance Of Plant (BOP) mechanical work, Switchyard transformers, Electrical, C&I, Ocean Transportation, Supervision and Inspection, Finance expenses (Bond Insurance, L/C etc), Training and Commissioning services, for off-shore-I portion and Management/Engineering.

2.5.1.2 Hyundai Engineering Company Limited Korea-Equipment Supply I

The Petitioner has now claimed Euro 59.201 million and US \$ 131.069 million (Total US \$ 210.097 million) for the equipment supplied. The Petitioner in support of its claim has submitted copies of the contracts (dated Jan 18, 2011) along with invoices, independent engineer's certificates certifying completion of milestone, withdrawal request, bank statement and exchange rate sheets etc. The contract for US\$ 131.469 million has been reduced to US\$ 131.069 million for reduction of scope in the contract due to change of transformer vector group having financial reduction impact of US\$ 0.400 million.

2.5.1.3 Based on the documentary evidence provided and verified, the Authority decided to allow US \$ 131.069 million (Rs. 11,872.270 million) and Euro 59.201 million (Rs.7,125.617 million) i.e. cumulative US\$ 210.097 million (Rs.18,997.888 million).



[Handwritten signature]

2.5.1.4 Hyundai Engineering Company Limited Thailand- Technical Service:

Technical services provided by Hyundai Engineering Company Limited amounting to Euro 16.664 million (US\$ 22.110 million) included;

- Supervision and engineering services,
- Supply of labour, material, equipment, spare parts and accessories,
- Making connections with all mechanical and electrical interface,
- Provision of all necessary commissioning equipment, construction utilities and supplies, temporary materials,
- Provisions of first fill and top ups of consumable, structure and facilities, storing and training etc.

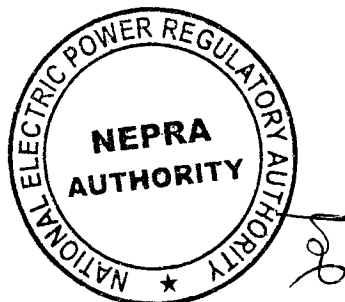
2.5.1.5 The Petitioner submitted copies of the contract (dated Jan 18, 2011) along with invoices, independent engineer's certificates certifying completion of milestone, withdrawal request, cheque, WHT receipts and bank statement etc. The payments were based on the contract milestone schedule certified by the owner's engineer M/s URS Scott Wilson for extent of work completion and release of payment.

2.5.1.6 Based on the documentary evidence provided and verified, the Authority decided to allow Euro 16.664 million (US \$ 22.110 million equivalent to Rs. 2,058.921 million).

2.5.2 Descon Engineering FZE Hamriya UAE- Equipment Supply-II:

2.5.2.1 The Authority in the tariff modification decision had allowed Euro 18.775 million and US \$ 57.851 million which is equivalent to total US \$ 83.165 million. The scope of Descon Engineering FZE Hamriyah UAE covers the following:

- Fuel gas system
- compressed air system
- fire fighting system
- main/auxiliary cooling water system
- cooling tower
- water supply/treatment system
- waste water treatment system
- telephone/PA/clock
- workshop equipment/spare
- unit /auxiliary transformer
- black start/emergency D/G, MV/LV SWGR
- cabling/wiring/panel
- CCTV/ LCD/ Fire Alarm /etc



2.5.2.2 The Petitioner submitted copies of the contract (dated Jan 18, 2011) along with invoices, independent engineer's certificates certifying completion of milestone, withdrawal request, bank statement and exchange rate sheets etc. The payments were based on the contract milestone schedule and were made after being certified by the owner's engineer i.e. URS Scott Wilson for completion and payment. The contract for US\$ 57.851 million was reduced to US\$ 57.698 million for reduction of scope in the contract due to removal of sponge cleaning system from condenser for an amount of US\$ 0.153 million.

2.5.2.3 Based on the documentary evidence provided and verified, the Authority hence decided to allow US \$ 57.698 million (Rs. 5,452. 516 million) and Euro 18.775 million (US \$ 24.226 million i.e. Rs.2,290.183 million) i.e. a cumulative amount of US\$ 81.964 million equivalent to Rs.7,742.699 million).

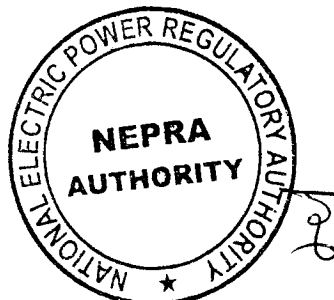
2.5.3 Descon Engineering Limited Pakistan (Onshore):

2.5.3.1 The Authority in the tariff determination had allowed US \$ 51.5 million for the onshore scope of Descon Engineering Ltd. Pakistan which includes fuel oil system, portable water system, sewerage/storm water system, civil/building works, installation mechanical, and installation electrical. The Petitioner has now claimed US \$ 51.287 million for a joint agreement of Descon Engineering Limited (DEL) (80%) and Descon Integrated Projects (Pvt) Limited for Construction (DIPL) (20%). The Petitioner in support of its claim has provided the copies of agreement duly signed on January 18, 2011, independent engineer's certificates certifying completion of milestone, invoices withdrawal requests, copy of cheque, WHT receipts and bank statement etc. The payments have been made as per the agreement i.e. 80% to DEL and 20% to DIPL after being certified by the owner's engineer i.e. URS Scott Wilson for extent of completion and periodic payment. It was also submitted by the Petitioner that the contract for US\$ 51.5 million was reduced to US\$ 51.287 million for reduction of scope due to reduction in the size of HSD tank with financial impact of US\$ 0.213 million

2.5.3.2 Based on the documentary evidences provided and verified, the Authority decided to allow US \$ 51.287 million (Rs. 4,790.005 million) for these onshore services rendered by DEL and DIPL.

2.5.4 Change in Withholding Tax

2.5.4.1 The Authority in tariff modification decision dated April 22, 2015 agreed to re-consider the claim of the Petitioner regarding change in withholding Tax of US\$ 0.085 million at the time of COD. The Petitioner has now claimed change in tax for US\$ 126,955 as per following:



Description	Payment Currency		
	US\$ in M	€ in M	Eqv. US\$ in M
Change in Tax (Flood Relief)	0.059	0.024	0.085
Change in WHT %age from %6 to 7%	0.041	-	0.041
Total			0.126

2.5.4.2 Petitioner submitted that change in tax was the result of the Income Tax (Amendment) Ordinance, 2011. A new section was inserted in the Income Tax Ordinance 2001, which states that:

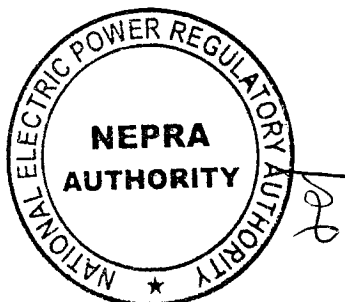
"(1) Subject to this Ordinance, a surcharge shall be payable by every taxpayer at the rate of fifteen per cent of the income tax payable under this Ordinance including the tax payable under Part V of Chapter X of Chapter XII, as the case may be, for the period commencing from the promulgation of this Ordinance, till the 30th June, 2011.

(2) Surcharge shall be paid, collected, deducted and deposited at the same time and in the same manner as the tax is paid, collected, deducted and deposited under this Ordinance including Chapter X or XII as the case may be.

Provided that this surcharge shall not be payable for the tax year 2010 and prior tax years and shall be applicable, subject to the provisions of sub-section (1) for the tax year 2011 only"

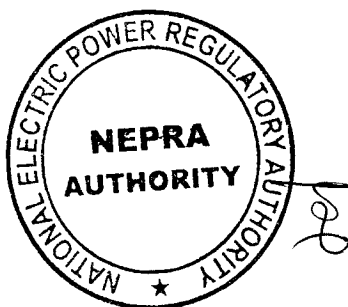
2.5.4.3 The details of WHT surcharge submitted by the Petitioner is as follows:

Offshore Contractor I b - Hyundai Engineering (Thailand) Co Limited					
Invoice #	Date	Amount (EUR)	WHT @ 6% (EUR)	15% Surcharge (EUR)	Equivalent Rs.
UCH2-INV-TSC-001	29 Sep 2011	2,499,674	149,980	22,497	2,814,102
Onshore Contractor I - Descon Engineering Limited					
Invoice #	Date	Amount (US\$)	WHT @ 6% (US\$)	15% Surcharge (US\$)	Equivalent Rs.
DEL/PPBU/8309	11 May 2011	6,100,000	366,000	54,900	5,749,457





- 2.5.4.4 In support of its claim, the Petitioner submitted notification of Income Tax (Amendment) Ordinance, 2001 for Flood Surcharge @ 15% on withholding tax payable. It also submitted the opinion vide its letter # T2470 dated December 9, 2016 of M/s A.F.Ferguson & Co (Tax Advisors) for implication of change in tax rate regarding M/s Descon Engineering Limited (DEL), further it also submitted an opinion vide its letter # T-900/2011/197 dated June 30, 2011 of M/s Grant Thornton as certificate of Additional Tax Cost resulting from Change in Tax on Technical Services Contract of Hyundai Engineering (Thailand) Co. Ltd. for Uch-II Expansion Project. The Petitioner also provided copy of the EPC contract which stated contractual obligation in such scenarios wherein tax implications was increased. Moreover, in view of changes made to applicable tax legislations, the Petitioner also confirmed that no subsequent tax reimbursement or adjustment of WHT deduction has been sought from FBR thereof either by Uch-II of the EPC contractor for this amount withheld and deposited in the Government Exchequer.
- 2.5.4.5 In addition to aforementioned claim of flood relief, the Petitioner also claimed an amount of US\$ 0.046 million (Rs. 4.893 million) as an impact of extra withholding tax which was changed from 6% to 7% during May 2016. This claim of the Petitioner was due to subsequent change in tax legislative which did not exist at the time of tariff modification that had implications for the subsequent payment made.
- 2.5.4.6 Giving due consideration to the Income Tax (Amendment) Ordinance, 2011 along with tax opinions from A.F. Ferguson & Co., and Grant Thornton together with relevant source documents of payments, bank statement and tax deposit receipts the Authority accepts the claim of the Petitioner.
- 2.5.4.7 In view of above, the Authority decided to allow a cumulative of US\$ 0.126 million (Rs. 13.287 million) for change in taxation framework along with exchange rate variation as allowed.
- 2.5.5 Variation Order due to NTDC-220kV switchyard additional bay:
- 2.5.5.1 The Authority in its tariff determination dated April 22, 2015 allowed US\$ 2.287 million under the head of EPC Cost due to subsequent construction of switchyard additional Bay on direction of NTDCL. This was subject to adjustment at the time of COD based on verifiable documentary evidences.
- 2.5.5.2 The Petitioner later incurred US\$ 2.078 million against the allowed amount US\$ 2.287 million. Following is the breakup of the cost incurred and claimed;



Variation Order	EPC Contractor	US\$ in M	€ in M	Equivalent US\$ in M
Technical Services Cost	Hyundai Engineering Thailand Co. Ltd	0.158		0.158
Expediting Cost & Cable Cost	DESCON Engineering Ltd	0.379		0.379
Additional Bay - Erection & Commissioning	DESCON Engineering Ltd		0.334	0.456
Additional Bay – Material	Hyundai Engineering Korea Co. Ltd		0.964	1.086
	Total	0.536	1.298	2.078

2.5.5.3 Further the Petitioner submitted invoices, payment vouchers and related evidences to support its claim which were duly verified. The audited accounts also incorporated the switchyard as an asset of Uch-II. During the visit to plant site on Jan 26, 2017, Additional bay was also physically verified.

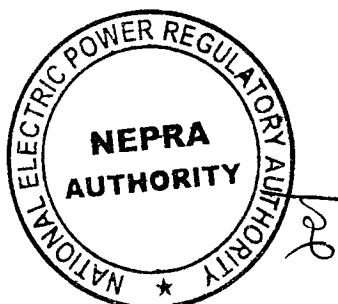
2.5.5.4 In view of relevant documentary evidences the Authority decided to allow actual cost incurred for switchyard additional bay amounting US\$ 2.078 million (Rs 217.783 million) to the Petitioner.

2.5.6 Force Majeure Event Related Cost:

2.5.6.1 The Authority in its review motion decision dated Oct 1, 2015 after considering the submissions of the Petitioner allowed the FME related cost of Rs. 40.185 million (equivalent to US \$ 0.500 million), subject to verifiable documentary evidence at the time of COD. The breakup of the cost allowed is as follows:

Cost Details	Allowed	Actual
	US\$ in M	US\$ in M
Detention and Demurrages Charges	0.393	0.299
Bridge Repair Cost (i.e. placement of frame structure)	0.052	0.039
Road Repair Cost	0.055	0.041
Total Cost	0.500	0.379

2.5.6.2 The Petitioner claimed US\$ 0.379 million and submitted the documentary evidence and source documents in support thereof i.e. invoices, payments vouchers, bank statement etc.




2.5.6.3 It was submitted that Detention and Demurrages Charges have been paid to the Karachi Port Trust (KPT) for the equipments during September 2012 to January 2013 due to the force majeure event that restricted mobility to plant site.

2.5.6.4 Likewise the cost of Bridge and road repair carried out by EPC contractor i.e. Descon Integrated Projects (Pvt) Ltd. Scope was also submitted that included supply of material, dumping, spreading, watering and compaction etc.

2.5.6.5 Based on the source documents and physical verification of bridge during the visit to plant site on Jan 26, 2017, the Authority decided to allow the claimed US\$ 0.379 million (Rs. 39.7 million) to the Petitioner with exchange rate variation.

2.5.7 Furniture and Fixture:

The Petitioner had claimed US\$ 0.178 million that have been earlier also not allowed by the Authority at the time of tariff determination. Therefore the claimed cost of US \$ 0.178 million being out of scope of COD adjustment was not considered.

3. Importation Cost:

3.1. The Authority in its tariff determination dated April 24, 2009 allowed US\$ 18.600 million on account of importation cost (duties and taxes) to be adjusted at COD as per actual.

3.2. The Petitioner has now claimed US\$ 13.550 million (Rs. 1,316.098 million) (including duties and taxes of LTSA and Non LTSA spares) on account of importation cost as per following detail submitted:

Description	Amount Rs. in M	Equivalent US\$ in M
Equipment Import		
Custom Duty (5%)	1,094.387	11.248
Sindh Excise Duty (0.85%)	168.104	1.763
Sub-total	1,262.491	13.011
LTSA Import		
Custom Duty	22.996	0.234
Sindh Excise Duty	4.264	0.043
Sub-total	27.26	0.278
Non-LTSA Import		
Custom Duty	23.137	0.230
Sindh Excise Duty	3.211	0.032
Sub-total	26.348	0.261
Total	1,316.099	13.550





- 3.3. The Petitioner in support of its claim submitted the copies of goods declaration, bank statement, duties payment challans, bill of lading etc.
- 3.4. Based on the documentary evidence submitted, the Authority has accordingly decided to allow the claimed and verified amount of US \$ 13.550 million (Rs. 1,316.098 million) incurred for duties and taxes which are of nonadjustable nature.

4. **Interest during construction:**

- 4.1. The Petitioner was allowed interest during construction (hereinafter referred to as "IDC") of US \$ 40.09 million in the tariff determination with following cost of debt for each category;

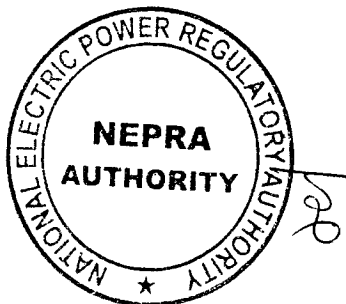
S.No.	Debt Facility	Cost of Debt
1.	ECA Facility USD	4% LIBOR plus 60 basis points
2.	USD Commercial	4% LIBOR plus 550 basis points
3.	DFI USD	4% LIBOR plus 400 basis points
4.	DFI Euro	4% LIBOR plus 400 basis points
5.	Local	12.81% KIBOR plus 300 basis points

While allowing the referred cost, the Authority in the tariff determination further stated that;

"....The Authority considers that all these terms are just indicative and would be firmed up at the time of financial close. Considering the financial implications of the financing costs on the tariff, the Authority has decided to adopt all the above assumptions for tariff determination. The relevant tariff components however will be adjusted on the basis of final agreement with the lenders."

- 4.2. Accordingly, the IDC was required to be adjusted at the time of COD as per actual loan disbursements made during the construction period allowed.
- 4.3. The Petitioner at the time of COD tariff adjustment submitted that it has acquired loan from DFIs in US \$ and Euro @ LIBOR plus 450 basis points and has claimed US \$ 32.948 million net of interest income, on account of IDC up to actual COD that is April 03, 2014. The breakup of loan acquired and related interest claim is as follows:

Description	Facility		Drawdown		Claimed IDC		
	Euro	US \$	Euro	US \$	Euro	Equivalent US \$	Equivalent PKR
Interest on ADB EUR Facility	37,160,000		35,200,000		3,414,000	4,527,676	442,978,402
Interest on IFC EUR Facility	37,160,000		35,200,000		3,414,245	4,528,009	443,012,023
Interest on KEXIM EUR Facility	37,160,000		35,200,000		3,365,788	4,463,291	436,379,676
Interest on ADB USD Facility		49,897,172		46,000,000		4,084,759	400,264,637
Interest on IFC USD Facility		49,897,172		46,000,000		4,085,208	400,308,811
Interest on IDB USD Facility		90,000,000		84,000,000		8,000,519	783,293,676
Interest on KEXIM USD Facility		49,897,172		46,000,000		4,149,096	406,853,891
Total			105,600,000	222,000,000		33,838,558	3,313,091,116
Less: Interest Income						(890,497)	(84,397,519)
Total Net IDC						32,948,061	3,228,693,597



[Handwritten signature]



4.4. The Petitioner in support of its claim has provided photocopies of financing agreement, bank interest payment advices, banks statements, etc.

4.5. The tariff determination with regard to the construction period provided that:

"The Authority has based its above determination on the following assumptions and the reference tariff will be changed accordingly in case there is any change in any of the following:

Construction period of 30 months as agreed with EPC contractor as the EPC Term Sheet. For any change in the construction period NEPRA's prior approval shall be required.---

4.6. As per the review of documents, the notice to proceed (NTP) has been issued to the EPC contractor on May 11, 2011 and the same date is accordingly considered to be the construction start date. Further, the Authority noted that the Power Purchase Agreement defines RCOD as follows:

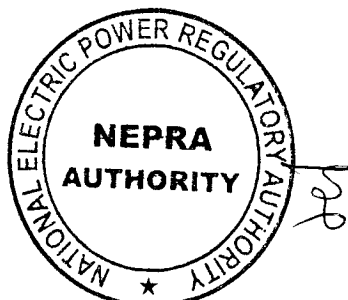
"The date that is thirty (30) months following the date on which financial closing occurs, as such date may be extended pursuant to section 6.5, section 8.1(b) or by reason of a force majeure event."

4.7. PPIB vide its letter no. 6 (618)/PPIB/11/Fin dated: May 07, 2011 had communicated NTDCL that under the provisions of the IA and letter of support, Uch-II Power Project has achieved its financial close. Accordingly, the referred date of PPIB's letter has been considered as the date of achievement of financial close by Uch-II.

4.8. As per the definition referred above the required commercial operations date which is to be 30 months from financial close works out to be Nov 07, 2013. Whereas, the certificate of commissioning of the complex issued by independent engineer Lehmayr International and confirmed by NTDCL vide letters No GM/CPPA/Mngr.(Tech-I) /Uch-II/5546-55 reflects COD achieved by Uch-II on April 04, 2014 which is beyond the allowed timelines by approx 5 months.

4.9. The Authority in the tariff Modification decision dated April 22, 2015 with regard to delay in achieving COD by Uch-II has decided as follows;

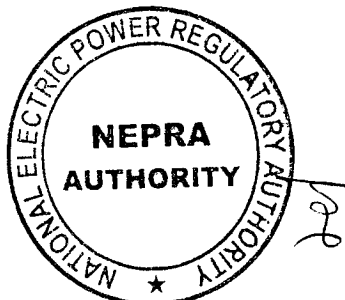
"The Authority considered the submissions of the Petitioner and noted that the Petitioner executed a PPA with NTDC on 19th January, 2011 and it achieved its Financial Close on 7th May 2011. The Required Commercial Operations Date ("RCOD") was thirty months after Financial Close as per PPA and Tariff





Determination and accordingly the RCOD was 8th November, 2013. In addition to signing PPA, the Petitioner executed Gas Supply Agreement with OGDCL for development of gas facilities and supply of gas for testing and commissioning of the Petitioner generation facility on RCOD however gas supplier declared Force Majeure Event due to restraining order passed by Islamabad High Court and accordingly claimed Force Majeure of 100 days under Gas Supply Agreement. As per documents and information available on record, this event had material effect on the performance of the Petitioner under PPA as its RCOD was essentially dependent on the development of gas facilities and supply of gas. In addition to that, as communicated by NTDC and PPIB, serious floods and rains in 2012 washed away the roads leading to Petitioner's generation site and affected the performance of its contractors. Therefore considering these two events i.e. claim of Force Majeure by OGDCL under GSA and heavy rains and floods, a force majeure of 62 days under the category of Other Force Majeure Events were agreed and accepted by NTDC and PPIB and accordingly RCOD was extended till 8th January, 2014. The Authority considered this extension in RCOD in the light of relevant provisions of determinations, power purchase agreements (PPA), written comments of power purchaser and all the documentary evidences submitted by the Petitioner and concluded that the extension in construction period as claimed by the Petitioner and recommended by NTDC in the light of PPA, and other documentary evidences is justified and hence decided to allow 62 days extension in the construction period."

- 4.10. Accordingly, the required COD of Uch-II after allowing 62 days extension in COD (i.e. Nov 07, 2013) works out as Jan 08, 2014.
- 4.11. In view of the above, the construction period from May 11, 2011 to Jan 08, 2014 (i.e. total of 32 months approx) is therefore considered for allowing construction period and computing related costs i.e. IDC, ROEDC and Insurance during construction cost.
- 4.12. As per the review of documentary evidence submitted, actual interest paid as per the rates (i.e. LIBOR plus 450 basis points) agreed with lenders for the allowed construction period works out to be US \$ 28.963 million (Rs. 2,838.647 million). This amount is net of interest income of US \$ 0.890 million (Rs. 84.392 million) for the allowed construction period. Moreover, restricting the amount of IDC upto assessed debt (i.e. US 345.460 million), eventually the amount of IDC works out to be US \$ 27.542 million (Rs. 2,699.325 million) and has been allowed accordingly.





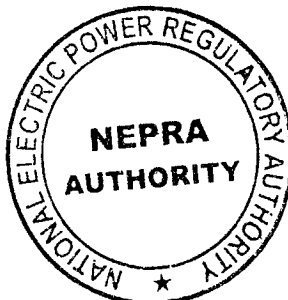
5. **Financing Cost**

- 5.1. At tariff determination dated April 24, 2009, financing fees and charges were assessed as US\$ 22.055 million including US\$ 11.25 M on account of ECA financing (premium). This was subject to adjustment as per actual at the time of COD on provision of documentary evidence with a maximum of 3% of the borrowing other than ECA premium.
- 5.2. Later in the review motion decision dated June 26, 2009, the Authority removed the maximum ceiling of 3% and decided to allow the financing fee and charges on actual basis to be approved by the Authority before the Financial Close on the basis of proper documentary evidence. It was also clearly referred that for claiming debt arrangement fee and other cost of debt, the lenders should be International Reputable Banks, Import Export Banks (e.g. Exim Bank) and multilateral financial institutions (e.g. Asian Development Bank, International Finance Corporation etc.)
- 5.3. The Petitioner at the time of COD tariff adjustment submitted that it has acquired loan from foreign development financial institutions (DFIs) in US dollars and Euro. It was also confirmed that no ECA facility has been obtained by Petitioner, hence financial charges of US \$ 11.25 million on ECA facility has neither been incurred nor claimed by the Petitioner.
- 5.4. Below is the breakup of total commitment under the financing agreement:

Name of lenders	Amount US\$ in M	Amount Euro in M	Total Equiv US\$ in M
International Finance Corporation	49.897	37.160	100.000
Asian Development Bank	49.897	37.160	100.00
The Export Import Bank of Korea	49.897	37.160	100.00
Islamic Development Bank	90.000	0	90.000
Total	239.691	111.480	390.000

- 5.5. The financial charges claimed by the Petitioner at COD are tabulated below:

Description	US \$ in M	Equivalent Rs. in M
Arrangement fee	5.015	427.994
Commitment Fee	4.288	390.179
Mandate fee	0.276	23.683
Agency fee	0.471	43.406
Reimbursable	0.146	13.046
DSRA LC commission	0.035	3.437
Total	10.231	901.746





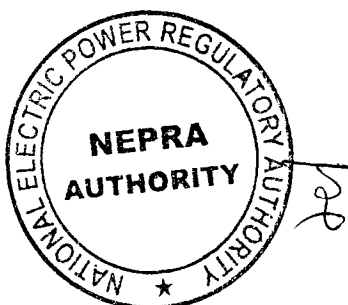
- 5.6. The Petitioner in support of its claim has provided photocopies of financing agreement, bank advices, banks statements, etc.
- 5.7. As per the financing agreement the Petitioner had to pay 1.25% per annum of the commitment to the lenders as arrangement fee and 0.75% per annum of the available commitment of the debt amount as commitment fee. The mentioned mandate fee and agency fee were also required to be paid by the Petitioner under the financing agreement entered.
- 5.8. The aforementioned claimed DSRA LC cost of US\$ 0.035 million includes US \$ 0.005 million for the construction phase due to delayed COD and US \$ 0.03 million for the operations period. The Authority in its decision dated Oct 16, 2009 had allowed the DSRA LC cost for the operation period only. The decision is reproduced as under;

"The Authority has decided to allow letter of credit cost with respect to debt service reserve account during the operational period subject to verifiable documentary evidences at the time of COD"

- 5.9. Accordingly, the DSRA LC cost for the operations period has been considered and allowed in the lending fee for the first year of operations.
- 5.10. Furthermore, the reimbursement of traveling expense to lenders being as per Section (5) Clause (5.5) of the common term agreement and also stated in the mandate letter issued by the lenders to Uch-II and was directly incidental to the financing agreement has been allowed.
- 5.11. Based on the documentary evidence provided and verified, the Authority hereby allows financial charges of US\$ 10.196 million (Equivalent Rs 893.327 million).

6. **Insurance during construction:**

- 6.1. The Authority had allowed US \$ 7.428 million (at reference exchange rate of Rs. 80.45/US \$) as insurance during construction in the tariff determination dated June 26, 2009. The Tariff Determination allowed adjustment of this cost at COD, on the basis of actual amount not exceeding 1.35% of EPC cost.
- 6.2. The Petitioner claimed actual paid insurance premium of US \$ 5.787 million (Rs. 536.984 million) (i.e. 1.57% of EPC cost) for the actual construction period insurance and submitted relevant documents and related evidence i.e. insurance policies, premium payment receipts, bank statement etc, in support thereof.





6.3. Based on the documentary evidence provided and verified, the Authority has decided to allow insurance cost during construction consistent with the allowed construction period i.e. from May 11, 2011 to Jan 08, 2014 and the allowed benchmark of 1.35% of the EPC cost. Accordingly, the allowed insurance during construction cost is US \$ 4.968 million (Rs. 396.296 million).

7. **Independent Engineer:**

7.1. The cost of independent engineer was not allowed in the original tariff determination however, the Authority in its tariff modification decision dated April 22, 2015 allowed US \$ 0.217 million (Euro 0.161 million) for independent engineer subject to submission of verifiable documentary evidence. This cost was to be incurred by the company under the PPA for observing the construction of the complex and the commissioning tests.

7.2. The Petitioner in its COD tariff adjustment request submitted that Lahmeyer International GmbH was hired for witnessing and certifying the construction of complex and the commissioning tests. The contract with Lehmayr International GmbH was signed on June 1, 2013. The scope of services of Independent Engineer included;

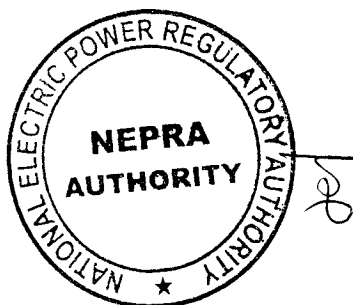
- Review of EPC contractor's test and commissioning programme
- Tests prior to Synchronization
- Test upon and after synchronization of the complex and commissioning tests
- Reliability and initial capacity test
- Certificate that the construction has been carried in accordance with the PPA
- Certificate of delay in commissioning
- Independent engineer deliverables

7.3. The Petitioner has claimed US \$ 0.214 million (Euro 0.142 million) on this account. In support of its claim has submitted NTDCL's approval letter for the appointment of independent engineer, consultancy agreement, certificates of capacity test, commissioning, and compliance of construction issued by independent engineer, invoices, WHT challan, payment evidences, ex rate sheets etc.

7.4. Based on the documentary evidence provided and verified the Authority has decided to allow the claimed US \$ 0.214 million (Rs. 21.355 million) on account of Independent Engineer cost incurred.

8. **Workers Profit Participation Fund (WPPF):**

8.1. The Authority at the time of tariff modification decision, while considering the fact that the cost for WPPF being legitimate and was not envisaged at the time of previous tariff





determination, decided to allow the cost of WPPF to the Petitioner for contribution made by the company at 5% of the profit before tax for the relevant year into Workers Welfare Fund, under the Companies Profits (Workers' Participation) Act, 1968, subject to provision of verifiable documentary evidences at the time of COD tariff adjustment.

- 8.2. The Petitioner in its COD tariff adjustment request has submitted following year wise cost incurred on account of WPPF:

Financial Year	Profit before tax Rs. in million	Amount @ 5% on PBT Rs. in M	Amount US \$ in M
2012	210.359	10.518	0.099
2013	67.497	3.374	0.034
Total		13.893	0.133

- 8.3. The Petitioner in support of its claim has submitted letter from Ministry of Overseas Pakistanis And Human Resource Development Workers Welfare Fund department dated Sep 24, 2013 regarding submission of WPPF fund, Trust deed, treasury challan deposited in Government treasury, bank statement, letter from WWF regarding acknowledgement of payment etc.
- 8.4. It was justified by the Petitioner that the company had to comply with Companies Profits (Workers Participation) Act, 1968 read with the Companies Profits (Workers Participation) Rules, 1971 which states that;

"The scheme applies to all companies engaged in industrial undertakings which satisfy any one of the following conditions, and to such other companies as the [Federal Government] may, by notification in the official Gazette, specify in this behalf, namely

- The number of workers employed by the company at any time during a year is [50] or more.*
- The paid-up capital of the company as on the last day of its accounting year is Rs. 20 Lakh or more.*
- The value of the fixed assets of the company (at cost) as on the last day of the accounting year is Rs. 40 Lakh or more.*

Provided that for the companies established on or after 1st day of July 2006."

- 8.5. The Authority considered that Uch-II is an industrial undertaking with paid up capital more than Rs. 20 Lakh and was required to contribute in the WPPF fund of Ministry of Overseas Pakistanis And Human Resource Development Workers Welfare Fund department @ 5 % of its profit during such period as per section 3 (b) of the said Act.





8.6. The profits earned before the commercial operations by Uch-II are primarily the interest earned on bank deposits and exchange gains as indicated in the financial statements for the FY 2012 and 2013.

8.7. Using the audited figures of profit before interest and taxes (PBIT) for the FY 2012 and 2013 along with evidences of payments submitted by the Petitioner, the Authority hereby allows US \$ 0.133 million (Rs. 13.893 million) for workers profit participation fund.

9. **Seller SBLC**

9.1. The Authority in its tariff determination dated April 24, 2009 has allowed US \$ 0.499 million to Uch-II on account of WAPDA standby LC.

9.2. The Petitioner at the time of COD tariff adjustment request has submitted that under section 2.7 of the PPA the Petitioner as its performance guarantee was required to maintain letter of credit with effect from the effective date of PPA until the date that is fifteen business days following the achievement of COD. The Petitioner submitted that it had maintained LC with Standard Chartered Bank on which commission at the rate of 1.6% p.a. was paid, accordingly US \$ 0.486 million (Rs. 47.954 million) has been claimed by the Petitioner. The Petitioner in support of its claim has submitted invoices, payment evidence, bank statements etc.

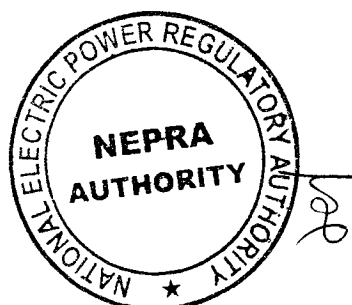
9.3. Based on the documentary evidence provided and verified cost till the date that is fifteen business days following the RCOD, the Authority decided to allow SBLC claimed cost of US \$ 0.461 million (Rs.45.508 million).

10. **Mobile Equipment:**

10.1. The Authority at the time of tariff determination dated April 24, 2009 while considering the available information and CPPA's comments that Uch-II is the extension of Uch-I and facilities available at Uch-I should be shared, hence allowed US \$ 0.25 million for pickup trucks and site vehicles.

10.2. Uch-II at the time of tariff modification requested following costs under this head;

Description	Cost US \$ in M
Site Vehicles	0.286
Fork Lifter	0.081
Store Stackers	0.055
Total Cost	0.422





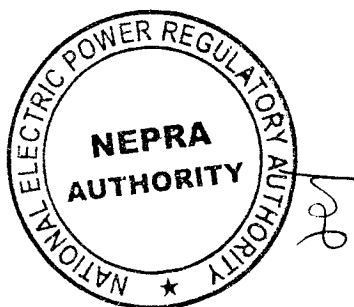
- 10.3. The Authority at para 8.2.3 of tariff modification decision dated April 22, 2015 decided as under;

"... the Authority has allowed the cost of mobile equipment in the project cost, considering the synergies of Uch-I and to optimize the use of available resources which is evident from the actual costs on this account. The increase of US\$ 0.172 million requested by the Petitioner is not a material variation from the originally determined cost. The Authority noted that instead of the existing resources such as using existing fork lifter and Store Stacker of Uch-I, the Petitioner procured the same in contravention to the Authority's directions at its own discretion, without approval of the Authority. The Authority has therefore decided to decline the request of the Petitioner on account of mobile equipment."

- 10.4. The Petitioner now at the time of its COD tariff adjustment request dated August 11, 2016 requested US \$ 0.339 million (Rs. 33.023 million). The breakup of the claimed mobile equipment cost is as under;

Description	Amount	Amount
	US \$ in M	Rs. in M
Site Vehicles	0.237	23.019
Fork Lifters	0.060	5.925
Stock Stacker	0.041	4.069
Total	0.339	33.023

- 10.5. The Petitioner submitted that *"Uch-II and Uch Power Limited both are separate companies with separate financing structure. Both the companies have their own warehouse and outages schedule therefore require their own store stacker and fork lifter..."*
- 10.6. In support of its claim the Petitioner has submitted the copies of purchase order, invoices, WHT payment challans, evidence of AC installation, registration charges, bullet proofing cost along with payment evidence.
- 10.7. Based on the documentary evidence submitted and related cost incurred, the Authority has decided to allow mobile equipment cost upto US \$ 0.250 million (Rs. 24.327 million) as determined at actual exchange rate (Rs. 97.71/US \$).



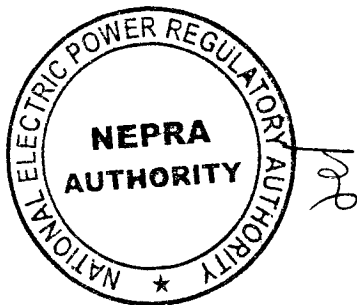


11. **Long Term Service Agreement Spare**

- 11.1. The Authority in the original tariff determination dated April 24, 2009 did not allow the cost for LTSA spares as the cost of initial spare parts was already included in the O & M cost. Later, the Petitioner in its motion for leave for review requested the Authority to allow US \$ 4.945 million on account of initial spares as part of the project cost instead of allowing as the part of variable O & M. The Petitioner while justifying its request stated that the LTSA payments includes purchase of spare parts, repair and technical services and it has to pay for these spare parts upfront for the execution of first scheduled outage to be carried out at the end of the first year of commercial operations. The Petitioner at the time of tariff determination also provided letter from LTSA contractor (GE) containing list of spares and also confirmed that the same are not covered under the EPC warranty.
- 11.2. The Authority at that time after considering the Petitioner's arguments and evidence had thus excluded an amount of US \$ 4.6 million from the O& M cost and allowed the same as part of project cost.
- 11.3. The Petitioner now in its COD tariff adjustment request has claimed US \$ 4.846 million (Rs. 490 million) on account of LTSA. Below is the breakup of LTSA claimed cost;

Description	Expenditure Rs. in M	Equivalent US \$ in M
LTSA Cost	451.342	4.600
Custom Duty	22.996	0.234
Sindh Excise Duty	4.264	0.044
Total	478.603	4.878

- 11.4. Petitioner in support of its LTSA cost claim of US \$ 4.6 million (RS. 451.342 million) has submitted PO, Invoices, payment evidence, WHT challan, exchange rate which has been verified. During the visit to the plant on Jan 26, 2017, a sample of spares was also physically verified.
- 11.5. For duties and Sindh tax claim Uch-II has submitted certificate of origin, shipping invoice, packing list, delivery/pickup note, airway bills, GD, custom duty and cess payment challan.
- 11.6. Based on the documentry evidence submitted and verified, the Authority has decided to allow US\$ 4.6 million (Rs. 451.342 million) for LTSA spare. Whereas, the incidental duties and taxes of US \$ 0.277 million (Rs. 27.260 million) for these LTSA spares has been allowed and incorporated in the relevant project cot sub head.



Handwritten signature



12. **Non-Long Term Service Agreement Spare:**

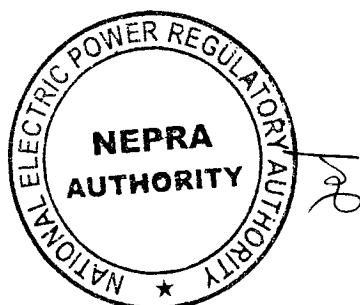
- 12.1. The Authority at the time of tariff determination did not allow the non LTSA spares cost and stated that the cost of non-LTSA spares can be considered at the time of COD tariff adjustments if substantiated through documentary evidence.
- 12.2. The Petitioner in COD tariff adjustment request has claimed US \$ 4.846 million (Rs. 490.217 million) on account of non-LTSA cost as per the below mentioned cost breakup;

Description	Amount US \$ in M	Amount Rs. In M
Non LTSA Cost	4.585	463.872
Custom Duty	0.229	23.136
Sindh Excise Duty	0.031	3.211
Total	4.846	490.221

- 12.3. The Petitioner in support of Non-LTSA cost claim has submitted PO, Invoices, payment evidence, WHT challan, exchange rates sheets etc.
- 12.4. The Authority while considering the cost of the non-LTSA also noted that the Regulatory Commission in the regional country has established a benchmark/ceiling of 4% (upper limit) of the Plant and Machinery cost (P&M cost) as maximum initial spares inventory for gas turbine based combined cycle power projects.
- 12.5. The claimed cost for LTSA and non LTSA spares is 3.31% of the P & M cost of US\$ 294.139 million which is within the regionally established benchmark of 4% of P & M cost. The Authority also noted that this cost is not included in the O & M cost being allowed. Accordingly the Authority decided to allow the cost of non-LTSA spares of US \$ 4.585 million (Rs.463.873 million). Further, the incidental cost of Custom Duty of US\$ 0.229 million (Rs. 23.136 million) and Sindh Excise duty of US\$ 0.031 million (Rs. 3.211 million) have been allowed and incorporated under the relevant project cost sub head.

13. **O & M Mobilization:**

- 13.1. The Petitioner at the time of initial tariff determination requested US\$7.07 million as O&M Mobilization. The Petitioner submitted that the scope of the ESBI during the pre-operational phase included review operational design, recruiting staff, provide training in plant safety and similar areas, preparation of O&M manuals, development of integrated Business Management System, and provide operational support to EPC contractor. Authority after deliberation allowed US\$ 1 million against the requested amount of US\$ 7.07 million.



[Handwritten signature]

- 13.2. The Authority also considered that most of the already trained professionals are working on Uch-I and most of the activities like preparation of O&M manuals, integrated management system are already in place; therefore, US\$ 1 million was allowed.
- 13.3. Uch-II later revised and reduced the scope of O&M services with ESBI who agreed to reduce the fee to US\$ 5.457million based on revised scope and revised fee quote, Uch-II submitted a review petition with the Authority on May 6, 2009. The Authority considered the Petitioner's arguments that being a foreign company the Petitioner has to engage foreign experts. Further due to the location and size of the project the Petitioner would have to pay extra cost. In view thereof, the Authority allowed US\$ 4 million for O & M mobilization cost for ESBI.
- 13.4. Later, the Petitioner in the COD adjustment claimed US \$ 4.383 million (Rs. 431.689 million) till actual COD. ESBI refused to further reduce its fee quote. Accordingly, Uch Power (Private) Limited (UPL) which is an associated company of Uch-II and was also rendering services to Uch-I was appointed to provide O&M services for Uch-II.
- 13.5. The Petitioner submitted that it had entered into the "operation and maintenance agreement" with UCH Power (Pvt) Limited on May 02, 2011. The Petitioner also submitted that it had received NOC from Private Power & Infrastructure Board (PPIB) on January 8, 2011 for appointment of UPL as "O&M Operator" for Uch-II.
- 13.6. The Petitioner submitted that the billing has been made by UPL to Uch-II as per detail below;

Description	Amount US\$ in M
Fixed Fee	1.500
Staff Fee	2.000
Additional claimed due to delayed COD	0.883
Total	4.383

- 13.7. The Authority considered that the amount allowed for O & M mobilization was against the quote of the Foreign Service provider i.e. ESBI whereas later the Petitioner could not finalize the terms with ESBI and have appointed its associated company i.e. Uch Power Company Limited for the purpose and has claimed US\$ 4.383 million for O & M mobilization. The Authority noted that the amount allowed was originally for the mobilization of the subsidiary of Electricity Supply Board of Irish (ESBI) which had claimed this amount based on its international experience of being owner, operator & developer of 5000 MW generating capacity in Ireland only. Moreover the cost allowed included the actual mobilization of the



global experience expats and related team members whereas in this subsequent scenario the Uch Power Limited engaged was already based in Uch.

13.8. The Authority noted that the earlier claimed cost was against a complete organizational hierarchy of officials with global expertise that were to be dedicated for Uch-II along with ESBI head office (Ireland) support also. The Authority also noted that the cost drivers, cost breakup & cost incidental were not available against this claim submitted for the associated company of the Petitioner and a lumpsum payment arrangement has been agreed on account of fixed fee and staff fee.

13.9. Considering aforementioned aspects, the Authority decided not to allow this cost claimed for Uch Power Private Limited on account of O & M mobilization.

14. Owner's Engineer:

14.1. The Authority in the tariff determination had allowed owner's engineer cost of US \$ 5.854 million subject to production of documentary evidence at the time of COD.

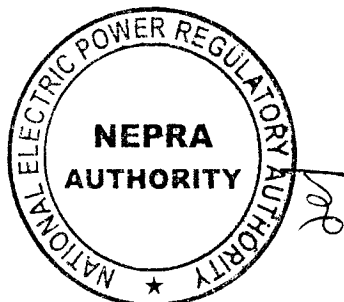
14.2. The Petitioner at the time of tariff determination had submitted that the scope of Owner's Engineer work will include; design review of the EPC contract, engineering and specification; supervise the EPC contractor during layout and set-up of site facilities; inspection of equipment at manufacturing site, supervise the production of testing and operational maintenance documents etc.

14.3. The Petitioner in COD adjustment request submitted that the Scott Wilson (URS) was selected as Owner's Engineer based on the experience, technical competence, availability of competent team of Expats / local Engineers and lowest cost for the above referred scope. The Petitioner has claimed US \$ 5.636 million (Rs. 539.293 million) in its COD adjustment request as per the below mentioned breakup:

Description	US\$ in M	Rs. In M
Professional Fee	5.542	529.743
Associated Cost	0.094	9.549
Grand Total	5.636	539.291

14.4. The Petitioner in support of its claim has submitted copy of contract, invoices, WHT challans, payments evidence etc.

14.5. Based on the documentary evidence provided and verified, the Authority decided to allow claimed US \$ 5.6358 million (Rs. 539.291 million) on account of owner's engineer cost.





15. **IT and Special Equipment:**

- 15.1. The Authority in the tariff determination has allowed US \$ 1.243 million (Rs. 99.999 million) for IT & special equipment cost. The cost was allowed to cover all IT infrastructure required for the project site and Islamabad office as well as some special purpose equipment.
- 15.2. The Petitioner in the COD tariff adjustment request has claimed US\$ 0.636 million (Rs. 65.160 million) as IT and special equipment as per the below referred breakup;

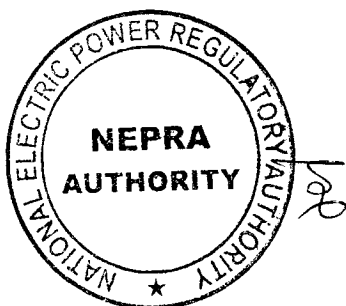
S.No	Description	Amount Rs in Million	Amount US\$ in Million
i.	Hardware and Special Equipment	43.782	0.427
ii.	IT Software	21.378	0.208
Total		65.160	0.636

- 15.3. The Petitioner in support of its claim has submitted copies of invoices, WHT challans, payment evidence etc. The hardware and related equipments were physically verified on sample basis during visit to plant site and also to the corporate office located in Islamabad.
- 15.4. Based on the documentary evidence provided and verified, the Authority has decided to allow the claimed US \$ 0.636 million (Rs. 65.160 million) on account of purchase of IT and special equipments.

16. **Startup and Production:**

- 16.1. The Authority vide its decisions dated April 24, 2009, June 26, 2009 and October 1, 2015 respectively, allowed related cost for Start-up and Production.
- 16.2. The Petitioner requested an amount of Rs. 555.695 million exclusive of GST (US\$ 5.302 million) for start-up and production cost. As per summary below:

Description	Measuring Unit	Requested	Rs. in M	Rs. in M exclusive of GST	US \$ in M
HSD Consumed	(Ltrs)	3,570,091	355.044	355.044	3.358
Electricity Charges	(GWh)	3 GWh	87.219	52.260	0.510
Total Gas Charges	(MMBTU)	1,957,701	1,243.681	1,242.843	12.395
Water Charges	(Gallons)	202,371,707	3.228	3.228	0.033
Electricity Sale	(Units)	225,692,000	(1,078.190)	(1,097.680)	(10.994)
Total Start-up Cost			610.982	555.695	5.302





16.3. **HSD and Electricity Charges:**

16.3.1 The Authority allowed US\$ 2.789 million for HSD and Electricity Charges. The cost of HSD and electricity capped at 3 million litres (2610 tonnes) and 1.3 GWh respectively.

16.3.2 The Petitioner consumed 3,570,091 litres against the allowed quantity of 3,000,000 ltrs of HSD. HSD was supplied by Pakistan State Oil (PSO), the Petitioner provided all HSD invoices issued by PSO together with payment vouchers and bank statements. Further, the Petitioner also provided details of receipt and issue of HSD during the testing phase. As per the procurement detail, the approx purchase rate of Rs. 99.46/Ltr for the cost of 3,000,000 litres used (exclusive of sales tax) during testing of power plant. Therefore the Authority allows Rs. 298.393 million (US\$ 2.821 million) at an average exchange rate of Rs. 105.74/US\$ against HSD. The Authority allowed the cost of HSD to the extent of the consumption ceiling of 3 million litres approved.

16.3.3 For electricity charges, the Petitioner requested an amount of Rs. 52.260 million (US\$ 0.510 million) exclusive of GST on account of consumption of 3.0 GWh. The Petitioner submitted the bills/invoices raised by NTDCL. The Authority allowed the electricity charges upto approved limit of 1.3GWh at the electricity charges rate of Rs.17.89/unit which cumulates to Rs. 23.250 million (US\$. 0.227 million)

16.4. **Gas Cost:**

16.4.1 Cost of Gas consumption during testing and start-up was allowed on actual basis till actual COD in the Authority's decision dated Oct 01, 2015. The Petitioner submitted that it used 19,57,701 MMBTU during testing phase at the cost of Rs. 1,242.844 million (US\$ 11.710 million) exclusive of FED & GST. The table below reflects the actual amount paid and accrued in this regard;

Gas(Quantity(MMBTU))	Total Amount (US\$ in M)	Total Amount (Rs in M)
1,957,701	10.484	1,043.398
1,957,701 (Accrual)	1.910	199.446
Total	12.395	1,242.844

16.4.2 The Petitioner submitted that it had included an amount of Rs. 199.446 (US\$ 1.901 million) as an accrual for the gas price @ US\$ 5.9679 per MMBTU in view of the Gas Price Agreement signed between the Petitioner and gas producer i.e. OGDCL on Oct 14, 2013. As per the GPA, the gas price was to be notified. The Authority noted that the notification is yet to be made. Ministry of Petroleum and Natural Resources vide its letter dated May 23, 2013 expressed



Handwritten signature



that it has no objection to the negotiated price and also mentioned that there is no need for approval of Government for the GPA being a 3rd party sale.

16.4.3 The Authority also considered the Oil & Gas Regulatory Authority's (OGRA) letter No. OGRA-10-9(69)/2013 dated Sep 19, 2016 wherein its comments to Ministry of Petroleum and Natural Resources for the draft summary for the ECC and clarified that determination and notification of Uch II gas price will be made when the Gas Price Agreement is entered into between seller, the buyer and the GoP.

16.4.4 UCH-II vide its email dated April 24, 2017 communicated that it has been paying OGDCL on reference gas price of US\$ 5.0102/MMBTU and has booked an accrual for the difference between the price as per GPA (US\$ 5.9679/MMBTU) and reference gas price.

16.4.5 In view of the submission and documentary evidence provided by the Petitioner, the Authority decided to allow at this stage an amount of Rs. 1,043.398 million (US\$ 10.485 million) which has actually been paid by the Petitioner for the gas during the pre COD phase. Further the Authority allowed to revisit this component if the relevant Authority decides and notifies the price of the gas for the dedicated gas field for Uch-II power plant having a retrospective price implication.

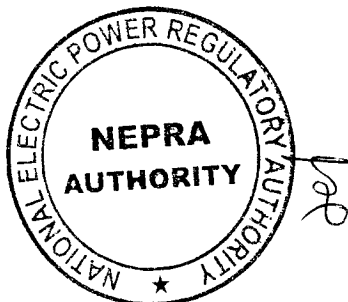
16.5. **Water Charges:**

16.5.1 The Authority in its decision dated April 22, 2015 also allowed 207.87 million imperial gallons at the cost of US\$ 32,695 (Rs.3.2 Million) for Water Charges which translates into Rs. 15.95/1000 imperial gallons.

16.5.2 The Petitioner requested Rs. 3.2 million (US\$ 32,695) for consuming 202.372 million gallons of water which was supplied by pat feeder canal division of Government of Balochistan at the rate of Rs.15.95/1000 imperial gallons. The same cost as verified through documentary evidence was approved by the Authority accordingly.

16.6. **Sale of Electricity: (Pre-COD):**

16.6.1 The Petitioner declared sale of 451.384 million units of electricity during testing to NTDC at an amount of Rs. 1,097.680 million (US\$ 10.994 million) exclusive of GST amount. It is pertinent to mention here that an amount of Rs. 176.150 million (US\$ 1.687 million) has been included in the claimed amount as a differential of gas price adjustment, which in fact has been included as an estimated gas price without the issuance of notification by OGRA, therefore the same will be adjusted at the time of actual payment by the Petitioner to OGDCL. In support, the Petitioner submitted invoices raised for electricity sale and payments received accordingly. The Authority decided to accept Rs. 921.530 million (US\$ 9.31 million) actually received by the Petitioner which is exclusive of accrued revenue and yet to be



Handwritten signature



received by the Petitioner, therefore the same will be adjusted at the time of actual receipt of amount from NTDC.

16.6.2 Following is the component wise allowed cost by the Authority;

Description	Allowed Units	Allowed (Rs. in M)	Allowed (US\$ in M)
HSD Consumed (Ltrs)	3,000,000	298.393	2.822
Total Gas Charges (MMBTU)	1,957,701	1,043.398	10.485
Electricity Charges (GWh)	1.3	23.250	0.227
Water Charges (Gallons)	202,371,707	3.228	0.033
Electricity Sale (UNITS)	225,692,000	(921.529)	(9.307)
Total Start-up Cost		446.740	4.260

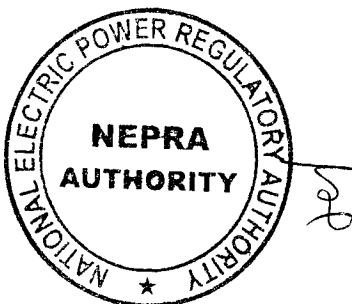
16.6.3 In view of the submitted evidence with exchange rate variation, the Authority decided to allow US\$ 4.260 million (Rs. 446.740 million) to the Petitioner.

17. **Land Lease and Office Rents:**

17.1. The Authority in its decision dated April 24, 2009 considered that the costs like rent, electricity, utilities and communication, repair, security, janitorial etc consumables, stationary, postage, conveyance, vehicle maintenance and fuel, travel boarding and lodging, cost of facilities and services sharing and renovation cost are relevant. Based on the item wise claimed cost, the Authority had allowed US\$ 1.00 million on this account.

17.2. The Petitioner has now submitted that Rs. 99.837 million (US\$ 1.067 million) was incurred under this head of land lease and office rent with following breakup;

Description	Rs. in M	US \$ in M
Land Lease Cost	6.182	0.073
Rent	7.695	0.082
Entertainment	0.535	0.006
Travelling (Boarding & Lodging)	14.074	0.144
Printing & Stationery	1.259	0.014
Security Cost	53.369	0.564





Reimbursement	1.850	0.020
Legal Consultant	0.840	0.010
One time capex	13.658	0.151
Others	0.377	0.004
Total	99.838	1.068

17.3. Petitioner submitted relevant source documents including lease agreements, invoices payment evidence etc. Based on verification of these documents the Authority allowed the cost upto the approved limit of US \$ 1.00 million (Rs. 93.511 million).

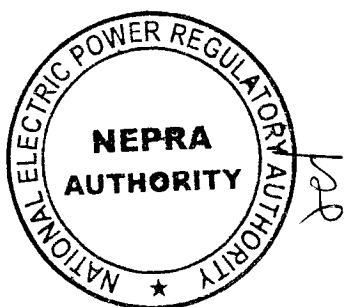
18. **Residential Colony:**

18.1. The Authority in its decisions dated April 24, 2009 and June 26, 2009 for tariff determination and review motion respectively had allowed cost for Residential Colony. The Authority had allowed US\$ 5.08 million on the basis of construction cost of Rs. 3,500 per sq. ft for villas, mosque and mess while Rs. 3,000 per sq. ft for apartments, barracks, club house and mess. This cost also included 2km long road, foot path on sides of the road, walkways for the pedestrian, soft landscape, typical boundary wall as in Uch-I and interfacing & furnishing cost. The Authority considered this cost as maximum ceiling which was subject to adjustment at the time of COD substantiated by documentary evidence.

18.2. The Petitioner requested for US\$ 6.042 million (Rs.570.882 million) for the Residential Colony. To support the claim, the Petitioner also submitted details including capitalized cost in audited financial statements, cost breakups, payment evidences, bank statements and tax challan etc.

18.3. Against the allowed cost of US\$ 5.080 million, the Petitioner claimed the cost of US\$ 6.042 million as per summary below;

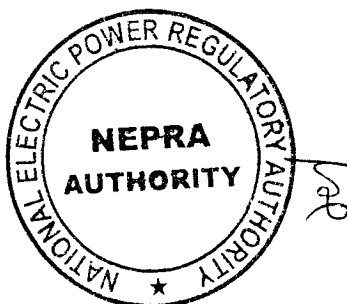
Particulars	US \$ in M	Rs. in M	Remarks
Construction Cost (Residential Colony, Villas, club house etc.)	4.780	444.217	IKAN (Contractor)
Construction Cost (Variations)	0.319	32.142	IKAN (Contractor)
Furniture & Furnishing	0.468	48.012	(ChenOne, Gul Ahmed, Interwood, Masters etc.)
Landscaping	0.341	34.011	Greeneries Contractor)
Design, Engineering & Construction Supervision	0.134	12.500	ICON (Architect)
Total	6.042	570.883	





- 18.4. The Petitioner stated that it entered into agreement with IKAN Engineering services for a contract price of PKR 444.21 million. The final colony scope had to be optimized including changes in covered area and road length. ICON Architecture and Design were also engaged to provide services for the residential colony design, engineering and construction supervision.
- 18.5. During the visit to the project site on Jan 26, 2017, the residential colony, villas, club house, etc. were physically verified. Based on documentary evidence and physical verification, confirmation the Authority therefore decided to allow the expenditure in the instant account upto the maximum allowed limit of US\$ 5.08 million (Rs. 480.009 million) for tariff adjustment at COD.
19. **General and Administration:**
- 19.1. The Authority in its decision dated April 24, 2009 allowed US\$ 1.327 million on account of general and administration expenses to cover the insurance (excluding plant related), site office expenditure, travel and subsistence etc.
- 19.2. The Petitioner claimed US\$ 1.630 million (Rs. 161.340 million) as General & Administrative Expenses in its COD tariff adjustment request as per detail given below;

Account Head	Amount in Rs.	Amount in US\$
Bank Charges	194,450	2,132
Legal Fees	68,458,415	702,298
Travel and subsistence (Plant G&A)	14,224,421	146,827
Entertainment	104,337	1,041
Professional fees (Plant G&A)	13,345	156
Office costs (Plant G&A)	3,576,350	36,783
Income Tax Consultancy	3,240,468	32,397
Security charges	230,393	2,412
Audit Fees	1,042,953	11,207
Other consultants (local)	14,693,564	141,080
Human resource consultants	206,753	2,353
Insurance	1,015,892	10,245
Financial Consultancy	488,686	5,315
Bonus	85,950	995
Postage & courier	499,705	5,114
Catering guest house with allied	27,233,428	264,284





services-Guest house, Sukkur.		
Phone and Fax	223,782	2,212
NEPRA fee (Licensing Fee)	12,595,922	134,065
Vehicle maintenance	1,545,029	14,851
Health & safety (Plant G&A)	3,757,056	36,685
Printing & Stationery	327,176	3,127
Non-EPC Training	7,073,976	69,848
IT costs (Plant G&A) Lease line and Mail Manager	34,175	351
Hardship Allowance	473,931	4,801
TOTAL	161,340,157	1,630,578

19.3. The Petitioner submitted relevant working including audited financial statement, cost breakups, payment evidence, bank statements and tax challans etc. to support its claim.

19.4. The Authority decided to allow upto US\$ 1.327 million (Rs. 131.265 million) as approved in the tariff determination on account of General & Admin expenses.

20. **Project Development:**

20.1. The Authority in its decision dated April 24, 2009 had assessed US\$ 8.474 million for Project Development Cost that entailed Staff Cost, Technical Consultancy, Legal Cost, Financial Advisory and Technical Advisory, Studies and Proposal Fee etc. The summary below incorporates the relevant cost heads claimed on account of project development;

Particulars	Determined US \$ in M	Claimed Amount (US\$ in M)	Claimed Amount (Rs in M)	Remarks
Staff Time Cost- including fee and bonues	5.000	4.984	443.974	Intl Power Global Dev. Ltd.,
Technical Consultancy fee	0.493	0.479	34.561	David Redfearn/Knowis Inc.
Legal fee	1.381	4.069	352.532	Latham & Watkins, Kabraji & Talibuddin etc
Financial & Tech Advisory fee	0.206	0.485	38.285	Shaw & E&Y Consultant



12



Lenders & Fin Advisor fee	1.000	2.692	229.617	Haider Mota, Shearman & Sterling, SC
Environmental Studies	0.382	0.293	21.443	Helcrow, ICON
Guarantee Fee	0.012	0.122	10.243	HSBC
Total	8.474	13.123	1,130.655	

20.2. The Petitioner submitted detailed cost breakups, payment evidence, accounts reconciliation of all above heads along with the COD adjustment request.

20.3. The Petitioner claimed US\$ 13.123 million against the allowed cost of US\$ 8.474 million for Project Development.

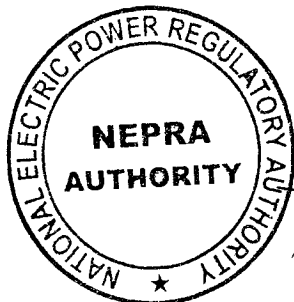
20.4. Based on verifiable documents the Authority decided to allow upto the approved amount US\$ 8.474 million (Rs.730.513 million) to the Petitioner as Project Development Cost accordingly.

21. **Summary of the Project Cost:**

21.1. The Authority at the time of tariff determination allowed project cost of US \$ 495.232 million (Rs. 39,841.417 million) with necessary adjustments allowed at COD. Uch-II claimed project cost of US \$ 478.916 million (Rs. 44,447.674 million) at the COD stage.

21.2. Based on decisions in the preceding paragraphs, the overall project cost allowed at COD adjustment stage to Uch-II, works out to US \$ 460.931 million (Rs. 38,423.224 million) as summarized in table below;

Description	Assessed	
	US\$ in M	Rs. in M
EPC Cost	368.043	33,860.286
Custom duties & taxes	13.550	1,316.100
Insurance during construction	4.968	396.296
Financing fees and charges	10.196	898.328
Interest during construction	27.543	2,699.326
PPA Independent Engineer	0.214	21.355
Workers profit participation fund	0.134	13.893
WAPDA Standby L/C	0.461	45.508
Mobile equipment purchase	0.250	24.328
Long Term Service Agreement spares (LTSA)	4.600	451.343
Non-LTSA spares	4.585	463.873
Owner's Engineer	5.637	539.292
IT and special equipment	0.636	65.160
Start-up & production	4.260	446.740
Land lease and office rents	1.000	93.511
Residential Colony	5.080	480.009
General & Administration	1.327	131.265
Project Development	8.474	730.514
Total Project Cost	460.958	42,677.127





22. **Capital Structure:**

22.1 The reference tariff was determined on the basis of 75:25 debt equity contributions. The Petitioner in the COD tariff adjustment request has submitted that debt equity contribution is 74.64:25.36. The actual debt and equity injections verified reflected minor difference with the actual capital structure as 74.94:25.06 hence the same is being allowed by the Authority now.

23. **ROE and Return on Equity During Construction (ROEDC):**

23.1. The Authority has allowed 15% return on equity in the tariff determination. Return on equity during construction (ROEDC) was also the part of tariff determination.

23.2. The tariff determination states that:

ROE and ROEDC shall be adjusted on account of actual variation in Drawdown at the time of COD.

23.3. The tariff determination also provides that the;

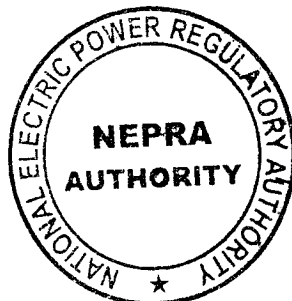
Relevant reference tariff components shall be adjusted at COD on account of variation in Dollar/Rupee parity.

23.4. The Petitioner in its COD adjustment petition has requested ROE US \$ 18.219 million and ROEDC of US \$ 36.286 million @ 15% on equity injections of US \$ 121.459 million. The claimed component of ROE and ROEDC are Rs/kW/hr 0.5348 and Rs/kW/hr 0.1622 respectively.

23.5. The Petitioner further submitted that for the True-up of tariff at COD both these components have been computed based on the actual disbursement of Equity and using the same rate of 15% as allowed by the Authority.

23.6. As per the submitted details the equity injected is US \$ 121.459 million. However, equity determined based on the assessed project cost and actual equity contribution of 25.06 % works out to be US \$ 115.498 million (Rs. 12,161.982 million). Accordingly, on the basis of assessed equity of US \$ 115.498 million the component of ROE works out as Rs. 0.5470/kW/hr.

23.7. Similarly, the ROEDC for the allowed construction period works out to be US \$ 33.956 million. After prorating the amount to assessed equity of US \$ 115.498 million (Rs. 12,161.982 million) at COD the amount of ROEDC works out to US \$ 32.289 million (Rs. 3,400.128 million). Accordingly the allowed component of ROEDC works out to be Rs. 0.1577/kW/hr.



[Handwritten signature]



24. Debt Repayment:

- 24.1. The terms of the loan were not firmed up at the time of tariff determination and the Authority in the tariff determination dated April 24, 2009 stated that;

"The Authority considers that all the terms are just indicative and would be firmed up at the time of financial close. Considering the financial implications of the financing costs on the tariff, the Authority has decided to adopt all the above assumptions for tariff determination. The relevant tariff components however will be adjusted on the basis of final agreement with the lenders."

- 24.2. The financing agreements submitted by the Petitioner at the time of COD adjustment reveal that the loan has been arranged in a manner that any interest under the loan will accrue from day to day and shall be calculated on the day count convention basis i.e. on the basis of actual number of days elapsed instead of the notional 360 days normally used by financial institutions. The same mechanism for the interest payment has been allowed by the Authority in CPGCL tariff determination wherein the Authority examined the foreign loan agreement along-with other online sources including Interest Rate Instruments & Market Conventions Guide by OpenGamma (a financial markets data provider) and found that the day count convention for all currencies except pound sterling is actual days/ 360. The interest payment mechanism being in line with the established financing norms is hence acceptable. Accordingly, debt repayment at COD has been allowed to be calculated as per the actual terms agreed with the lenders.

25. Adjustment due to variation in net capacity

- 25.1. The tariff determination with regard to variation in net capacity provided that:

"The reference tariff has been determined on the basis of minimum net capacity of 375.20 MW at delivery point, at following reference site conditions;

- *Ambient temperature 27.3° C*
- *Relative humidity 48.5%*
- *Atmospheric pressure 1006 mbara*

All the relevant tariff components shall be adjusted at the time of COD based upon the Initial Dependable Capacity (IDC) to be carried out for determination of contracted capacity. Adjustments shall be made according to the following formula:

$$CC_{(Adj)} = CC_{(Ref)} \times 375.20 \text{ MW} / NC_{(IDC)}$$



[Signature]

No Adjustment shall be made if IDC is established at less than the net capacity of 375.20 MW at reference site conditions.

Note:

Reference capacity charge components of Tariff i.e. Revised O&M Foreign, Revised O&M Local, Insurance, Debt Servicing, Return on Equity and ROEDC to be adjusted as per IDC test.

- 25.2. The capacity test certificate issued by Lahmeyer International on actual COD i.e. April 03, 2014 has established initial tested capacity of 380.75 MW against reference capacity of 375.20 MW. Accordingly relevant tariff components have been adjusted and allowed by the Authority for the revised capacity.

26. **Adjustment due to variation in net efficiency**

- 26.1. The Authority determined net thermal efficiency of Uch-II as 49.360% and provided following adjustment in its decision dated Oct 16, 2009;

"In case net minimum thermal efficiency of the company is proved to be higher than 49.360% at COD then reference fuel cost component shall be adjusted accordingly.

The adjustment shall be mad as per the following formula;

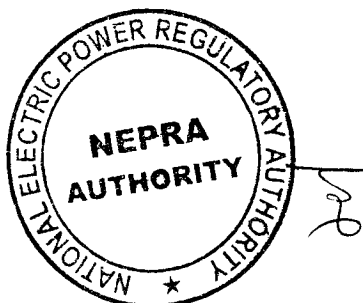
$$FC (Adj) = Rs. 3.0900 \text{ per kwh} / 6913 \times HR_{(T)}$$

Where;

FC (Adj) = Adjusted fuel cost component at the time of heat rate test at COD

HR_(T) = Net Efficiency in Btu per kwh established after Heat Rate Test at the time of COD."

- 26.2. Heat Rate Test (the Test) jointly performed by the CPPA and the Petitioner and certified by independent engineer Lahmeyer International at the time of actual COD i.e. April 03, 2014 established 48.33% efficiency.
- 26.3. Since the tested efficiency (48.33%) being lower than the determined efficiency (49.360%), therefore no adjustment due to variation in net efficiency is required to be made in the fuel cost component of the reference tariff.



27. **Insurance during Operations:**

27.1. The Petitioner was allowed insurance component of Rs. 0.0852/kW/hr. The tariff determination specified that:

“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 Uch-II according to the following formula;

$$\text{Insurance}_{(Adj)} = AIC / P_{(Ref)} \times P_{(Act)} / 80.45 \times ER_{(Rev)}$$

Where;

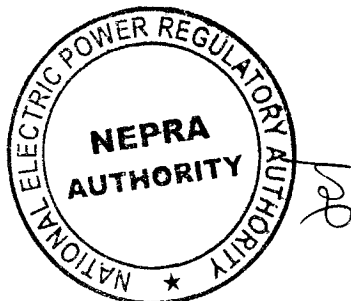
<i>AIC</i>	=	<i>Adjusted Insurance Component (Rs. kW/hr) as per IDC Test</i>
<i>P_(Ref)</i>	=	<i>Reference Premium US\$ 3.4801 million</i>
<i>P_(Act)</i>	=	<i>Actual Premium or 1.35% of the adjusted EPC whichever is lower</i>
<i>ER_(Rev)</i>	=	<i>The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan at Invoice date</i>

27.2. The Petitioner has claimed Rs. 0.1022/kWh by applying exchange rate variation to the reference component for the 1st year of operations. The insurance for the operation phase is to be adjusted based on the documentary evidence for which Petitioner provided photocopies of Insurance policies, premium invoices and bank statements for payments.

27.3. Based on the documentary evidence submitted, the allowed insurance component of tariff for the first year of operation works out to be Rs.0.0891/kW/hr and is being allowed accordingly.

28. **Lender's fee (operations):**

28.1. The Authority in the tariff determination dated Oct 16, 2009 had allowed adjustment of costs borne by the Petitioner as a result of foreign currency lending from international lenders, during the term of the debt subject to verifiable documentary evidence at the time of COD with a maximum cap of US\$ 500,000 per annum. These costs include Letter of Credit (LC) with respect to Debt Service Reserve Account (DSRA) and other lenders advisors cost (technical, legal, insurance, gas etc.), trustees, inter-creditor agents, administrators, supervisor etc.







- 28.2. Below is the breakup of cost claimed by the Petitioner on account of lender's fee for the 1st and 2nd agreement year of operations;

S.No	Description	Amount US \$ in M	Amount Euro in M
1st Agreement Year (20 Dec 2013-15 Dec 2014)			
1.	DSRA LC Cost	0.067	0.030
2.	Lender's Agency Fee	0.149	
3.	Lender's legal Advisor	0.028	
2nd Agreement Year (16 Dec 2014-11 Dec 2015)			
1.	DSRA LC Cost	0.068	0.031
2.	Lender's Agency Fee	0.149	
3.	Lender's legal Advisor	0.002	

- 28.3. Based on the above, the Petitioner requested the Authority to allow a separate tariff component of PKR 0.0081/kW/hr and PKR 0.0086/kW/hr for the first and second agreement years respectively as Lenders' fee.
- 28.4. The Petitioner in support of its claim has submitted copies of LC on account of debt service account, bank advises related to commission on account of DSRA, WHT challans, bank statements. Likewise, in support of lender's fee claim the Petitioner has submitted lender's invoices and lender legal advisor's invoices, WHT challan and bank statements.
- 28.5. Based on the documentary evidence submitted and verified the lender's fee allowed for the 1st agreement year is as under;

S.No	Description	Amount US \$ in M	Amount Euro in M	Total US \$ in M	Rs in M
1st Year (Jan 09, 2014- Jan 08, 2015)					
1.	DSRA LC Cost	0.069	0.031	0.110	10.900
2.	Lender's Agency Fee	0.126		0.126	14.117
3.	Lender's legal Advisor	0.017		0.016	1.708
Total				0.252	26.725

- 28.6. Accordingly, the allowed lender's fee component for the 1st year works out to be Rs. 0.0080/kW/h.
- 28.7. The lender's fee for the 2nd agreement year will be allowed through separate decision against the annual/quarterly indexation/ adjustment request to be filed by the Petitioner.



[Handwritten signature]



29. **Indexation of O & M Cost:**

29.1. The O & M components were also required to be adjusted at COD. Following is the detail of indexation provided in the tariff determination for O & M Components:

Tariff Components	Levelling Tariff Component	Indexation
Fixed O&M Foreign (Rs./kW/Hr)	0.1285	US\$/PKR, US CPI and change in capacity as a result of IDC test if establishes more than 370.20 MW
Fixed O&M Local (Rs./kW/Hr)	0.0621	WPI and change in capacity as a result of IDC test if establishes more than 370.20 MW
Variable O & M Foreign (Rs./kWh)	0.1173	US\$/PKR&USCPI
Variable O & M Local (Rs./kWh)	0.0221	WPI

29.2. Based on indexation formulas allowed in the tariff determination, and in the light of earlier decisions of the Authority issued vide No. NEPRA/TRF-90/FPCDL-2007/11019-11021 dated December 20, 2012 regarding replacement of WPI (Manufactures) with CPI General, the O & M tariff components and their reference values, applicable to the units delivered, post COD, are as follows:

Description	Variable O & M		Fixed O&M	
	Foreign	Local	Foreign	Local
	Rs./kWh	Rs./kWh	Rs./kW/h	Rs./kW/h
Reference O & M component	0.1173	0.0221	0.1285	0.0621
Revised O & M component	0.1686	0.0408	0.1820	0.1130
Particulars	Index Number	Month		
Reference Values:				
Pakistani WPI (Manufacturer)	138.38	Feb-09		
US CPI	212.193	Feb-09		
Exchange rate (PKR/US\$)	80.45	Reference Ex. Rate		
Capacity	375.2	Ref Capacity		
Revised Values:				
Pakistani WPI (Manufacturer)	209.47	Jul-11		
Local CPI (General)	154.72	Jul-11		
Local CPI (General)	188.68	Dec-13		
US CPI	233.049	Dec-13		
Exchange rate (PKR/US\$)	105.3	At RCOD Jan 8, 2014		
Capacity	380.75	Revised as per IDC test		





30. **Indexation of Fuel Price:**

30-1 The reference fuel cost component of Rs. 3.0900/kWh was subject to adjustment due to change in fuel price, efficiency if declared higher 49.360% as a result of heat rate test at COD and exchange rate at COD. Below is the revised fuel cost component.

Description	Reference	Revised
Fuel Cost Component(Rs. kW/Hr)	3.090	4.0445
Fuel Price (Rs./MMBTU)	403.071	403.071
Efficiency	49.36%	48.33%
Exchange Rate	80.45	105.30

31. **ORDER**

Pursuant to section 31 (4) of Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with Rule 6 of the NEPRA Licensing (Generation) Rules 2000, Uch-II Power (Pvt.) Limited (Uch-II) is allowed to charge the following specified tariff for delivery of electricity to the CPPA-G for procurement on behalf of Ex-WAPDA Distribution Companies:

Tariff Components	REFERENCE SPECIFIED TARIFF			Indexation
	Year 1 to 10	Year 11 to 14	Year 15 to 25	
Capacity Charge				
PKR/kW/Hour				
O&M Foreign	0.182	0.182	0.182	US\$ /PKR & US CPI
O&M Local	0.113	0.113	0.113	CPI
Insurance	0.0891	0.0891	0.0891	Annual indexation as per actual upto 1.35% of EPC with US\$ /PKR variation
Debt Service	Annex-II & III	Annex-II & III	-	LIBOR/EURIBOR
Lender's Charges	0.008	0.008	-	Annual indexation of DSRA LC cost as per actual and Lender's fee as per actual upto US\$ 0.5 million
ROE	0.547	0.547	0.547	US\$/PKR
ROEDC	0.1577	0.1577	0.1577	US\$ /PKR
Energy Charge on				
Operation on Gas				
Rs./kWh				
Fuel Cost				
Component	4.0445	4.0445	4.0445	Fuel Price
Variable O&M				
Foreign	0.1686	0.1686	0.1686	US\$ /PKR & US CPI
Local	0.0408	0.0408	0.0408	CPI



[Handwritten signature]

Note:

- i) The levelized tariff over the life of 25 years at a notional 60% plant factor and 10% discount rate has been determined as Rs. 7.6895/kWh.
- ii) The applicable component wise tariff is indicated at **Annex-I**.
- iii) Debt Servicing Schedule is attached as **Annex-II and Annex-III**.
- iv) The Annex I, II & III are the inherent part of this Order.
- v) Debt Service component will be adjusted for exchange rate variation for currencies in which the borrowing is taken permissible GOP policy.

The following adjustments /indexations shall be applicable to reference tariff;

I. 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 Uch-II according to the following formula;

$$\text{Insurance}_{(\text{Adj})} = \text{AIC} / P_{(\text{Ref})} * P_{(\text{Act})} / 105.3 * \text{ER}_{(\text{Rev})}$$

Where;

AIC = Adjusted Insurance Component (Rs. kW/hr) as per IDC Test

$P_{(\text{Ref})}$ = Reference Insurance Premium Rs. (297.178 million) US\$ 2.822 million

$P_{(\text{Act})}$ = 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

II. Adjustment of Lender's Fee as per actual:

The Letter of Credit cost with respect to Debt Service Reserve Account (DSRA) during the term of debt shall be treated as Pass-Through Item at actual on yearly basis subject to provision of authentic documentary evidence.





In addition, the lenders' advisors' fees (including technical legal, insurance, Trustees, inter-creditor agents, administrators, supervisors etc.) paid by Uch-II shall also be treated as Pass-Through Item during the term of debt at actual, not exceeding US\$ 0.500 million per annum, on yearly basis subject to provision of authentic documentary evidence.

III. Adjustment in Return on Equity (ROE):

ROE component of tariff will be adjusted subject to exchange rate variation according to the following formula;

$$ROE_{(Rev)} = ROE_{(Ref)} * ER_{(Rev)} / ER_{(Ref)}$$

Where:

$ROE_{(Rev)}$ = The revised ROE component of the Capacity Purchase Price

$ROE_{(Ref)}$ = The reference ROE component of the Capacity Purchase Price determined at the time of COD

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

$ER_{(Ref)}$ = The reference exchanges rate of PKR 105.3 = 1 US\$.

IV. Adjustment of Return on Equity during Construction (ROEDC)

ROEDC component of tariff will be adjusted subject to exchange rate variation according to the following formula;

$$ROEDC_{(Rev)} = ROEDC_{(Ref)} * ER_{(Rev)} / ER_{(Ref)}$$

Where:

$ROEDC_{(Rev)}$ = The revised ROEDC component of the Capacity Purchase Price

$ROEDC_{(Ref)}$ = The reference ROEDC component of the Capacity Purchase Price determined at the time of COD

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





$$ER_{(Ref)} = \text{The reference exchanges rate of PKR } 105.3 = 1 \text{ US\$}.$$

V. Adjustment of Withholding Tax:

Withholding tax will be adjusted on account of exchange rate variation according to the following formula:

$$WT_{(Rev)} = WT_{(Ref)} * ER_{(Rev)} / 105.3$$

Where;

$$WT_{(Rev)} = \text{Revised Withholding tax}$$

$$WT_{(Ref)} = \text{Reference Withholding tax}$$

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

VI. 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 Uch-II is obligated to pay any tax on the income purely generated from its main operation i.e. generation of electric power, the exact amount should be reimbursed by CPPA/CPPA-G on production of the original receipts. This payment may be considered as pass-through (Rs./kW/hr) payment spread over a 12 months period in addition to the capacity purchase price in the Reference Tariff. Furthermore, in such a scenario, Uch-II may also submit to the CPPA details of any tax shield savings and the CPPA will deduct the amount of these savings from its payment to Uch-II on account of taxation.

Withholding tax on dividend is a pass-through item, which is allowed in accordance with the Government Guidelines for determination of tariff for new IPPs. In a reference tariff table, withholding tax number is indicated as reference and CPPA (NTDC/CPPA-G) 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 at the time of hourly payment (Rs./kW/hour) spread over a 12 months period according to the following formula:

$$\text{Withholding Tax Payable} = [(15\% * (E_{(Ref)} - E_{(Rev)}) + ROEDC_{(Ref)}) * 7.5\% * ER_{(Rev)}] / 105.3$$





Where:

$E_{(Ref)}$	=	Adjusted Reference Equity at COD
$E_{(Red)}$	=	Equity Redeemed
$ROEDC_{(Ref)}$	=	Reference Return on Equity During Construction
$ER_{(Rev)}$	=	The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan

In case the Uch-II 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 Uch-II 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.

VII. 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 (CPI) 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 1st July, 1st October, 1st January and 1st 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 IT & 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

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

$$F O\&M_{(FREV)} = \text{Rs. } 0.1820 / \text{ kW / Hour} * US CPI_{(REV)} / 233.049 * ER_{(REV)} / 105.3$$

$$F O\&M_{(LREV)} = \text{Rs. } 0.1130 / \text{ kW / Hour} * CPI_{(REV)} / 188.68$$





Where:

- $F O\&M_{(PREV)}$ = The revised foreign Fixed O&M Foreign Component of tariff
- $F O\&M_{(LREV)}$ = The revised local Fixed O&M Local Component of tariff
- $CPI_{(REV)}$ = The revised Consumer Price Index-General
- $CPI_{(REF)}$ = The reference Consumer Price Index-General of 188.68 of December 2010
- $US CPI_{(REV)}$ = The revised US CPI (All Urban Consumers)
- $US CPI_{(REF)}$ = Reference US CPI of 233.049 for December 2010
- $ER_{(REV)}$ = 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

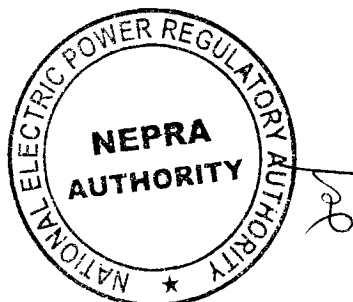
The formula for indexation of variable O&M component will be as under:

$$V O\&M_{(PREV)} = \text{Rs. } 0.1686/\text{kWh} * US CPI_{(REV)}/233.049 * ER_{(REV)}/105.3$$

$$V O\&M_{(LREV)} = \text{Rs. } 0.0408/\text{kWh} * CPI_{(REV)}/188.68$$

Where:

- $VO\&M_{(PREV)}$ = The revised foreign Variable O&M Foreign Component of tariff
- $V O\&M_{(LREV)}$ = The revised local variable O&M Local Component of tariff
- $CPI_{(REV)}$ = The revised Consumer Price Index-General





$CPI_{(Ref)}$ = Reference Consumer Price Index-General of 188.68 of December 2013

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

$US\ CPI_{(REF)}$ = Reference US CPI of 233.049 for December 2013

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

iii) Adjustment for EURIBOR and LIBOR 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 EURIBOR and LIBOR according to the following formula;

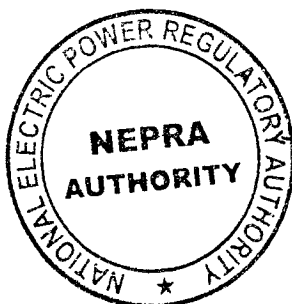
$$\begin{aligned}\Delta I \text{ (Foreign Debt-US\$)} &= P_{(FREV)} * (LIBOR_{(REV)} - 4.5\%) / 4 \\ \Delta II \text{ (Foreign Debt-Euro)} &= P_{(FREV)} * (EURIBOR_{(REV)} - 4.5\%) / 4\end{aligned}$$

Where:

ΔI (US\$ debt) = the variation in interest charges applicable corresponding to variation in quarterly LIBOR. ΔI can be positive or negative depending upon whether $LIBOR_{(REV)} >$ or $< 4.5\%$. The interest payment obligation will be enhanced or reduced to the extent of ΔII for each quarter under adjustment applicable on quarterly basis.

ΔII (Euro debt) = the variation in interest charges applicable corresponding to variation in quarterly EURIBOR. ΔII can be positive or negative depending upon whether $EURIBOR_{(REV)} >$ or $< 4.5\%$. The interest payment obligation will be enhanced or reduced to the extent of ΔIII for each quarter under adjustment applicable on quarterly basis.

$P_{(REV)}$ = 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 18 installment is due after availing the grace period.

iv) **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 agreed between OGDCL and the Petitioner and approved by the competent Authority. In this regard, the fuel cost component of tariff shall be revised according to the following formula:

$$FC_{(Rev)} = FC_{(Adj)} \text{ per kWh} * FP_{(Rev)} / FP_{(Ref)}$$

Where:

$FC_{(Rev)}$ = The revised fuel cost component of Variable Charge on low BTU gas.

$FP_{(Rev)}$ = The new price of gas as agreed between OGDCL and the Petitioner and approved by the competent Authority

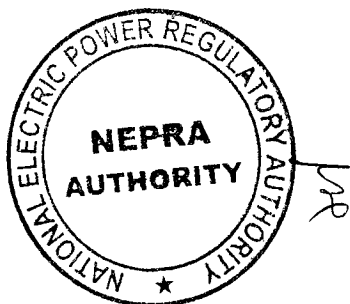
$FP_{(Ref)}$ = The reference price of gas is US\$ 5.0102 / MMBTU adjusted for HHV-LHV factor of 1.109 and exchange rate of Rs. 105.30/US\$.

$FC_{(Adj)}$ = Adjusted fuel cost component subsequent to heat rate test at COD

Adjustment on account of local inflation, foreign inflation, foreign exchange variation, , LIBOR and EURIBOR variation and fuel price variation will be approved and announced by the Authority for immediate application within seven working days after receipt of Uch-II request for adjustment in accordance with the requisite indexation mechanism stipulated herein.

VIII. **Terms and Conditions of Tariff:**

- i) Capacity Charge (Rs./kW/hour) applicable to dependable capacity at the delivery point.
- ii) The tariff is applicable for a period of 25 years commencing from the date of the Commercial Operation.
- iii) Use of Low BTU Gas is allowed as single fuel for operation of the plant.





-
- iv) All new equipment will be installed and the plant will be of standard configuration.
The plant availability shall be 90%.
- vi) Dispatch criterion will be based on the Energy Charge.
- vii) Scheduled Outage periods per annum shall be in accordance with the 2006 standardized PPA.
- viii) NTDC/CPPA will be responsible for constructing the interconnection to the grid.
- ix) All invoicing and payment terms are assumed to be in accordance with the 2006 standardized PPA.
- x) Tolerance in Dispatch shall be in accordance with the 2006 standardized PPA.
- xi) If there is any change in any assumption that may lead to change in the tariff shall be referred to NEPRA for approval.
- xii) No corporate income tax and no minimum turnover tax have been assumed.
-

AUTHORITY

(Saif Ullah Chattha)
Member/VC

3.7.2017

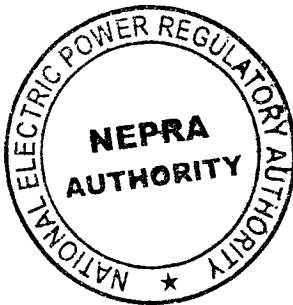
(Maj. (R) Haroon Rashid)
Member

(Himayat Ullah Khan)
Member

23.6.17

(Syed Masood ul Hassan Naqvi)
Member

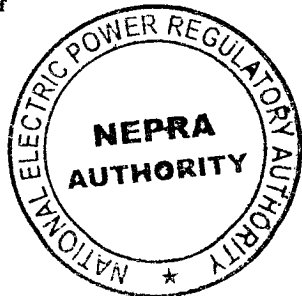
(Brig. (R) Tariq Sadozai)
Chairman


03.07.17

UCH II Power (Private) Limited
Reference Tariff Schedule

Year	Energy Charge (PKR/kWh)				Capacity Charge (PKR/kW/Hr)										CPP		Tariff
	Fuel	Variable O&M	Variable O&M	Total	Fixed O&M- Local	Fixed O&M- Foreign	Insurance	Return on Equity	ROE during construction	Withholding Tax @7.5%	Loan Repayment	Interest Charges	Lender's fee	Total	60% Plant Factor PKR/kWh		PKR per kWh
		Local	Foreign														
1	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.6331	0.5193	0.0080	2.3021	3.8368		8.0907
2	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.6886	0.4877	0.0080	2.3260	3.8767		8.1306
3	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.7490	0.4546	0.0080	2.3533	3.9222		8.1761
4	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.8147	0.4160	0.0080	2.3804	3.9673		8.2212
5	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.8862	0.3753	0.0080	2.4112	4.0187		8.2726
6	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.9640	0.3311	0.0080	2.4448	4.0747		8.3286
7	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	1.0486	0.2839	0.0080	2.4822	4.1370		8.3909
8	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	1.1406	0.2307	0.0080	2.5210	4.2017		8.4556
9	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	1.2407	0.1738	0.0080	2.5642	4.2737		8.5276
10	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	1.3496	0.1119	0.0080	2.6112	4.3520		8.6059
11	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	1.4680	0.0448	0.0080	2.6625	4.4375		8.6914
12	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
13	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
14	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
15	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
16	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
17	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
18	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
19	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
20	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
21	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
22	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
23	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
24	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
25	4.0445	0.0408	0.1686	4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	-	-	-	1.1417	1.9028		6.1567
Levelized Tariff (1-25 Years)				4.2539	0.1130	0.1820	0.0891	0.5470	0.1577	0.0529	0.6598	0.2541	0.0057	2.0614	3.4356		7.6895

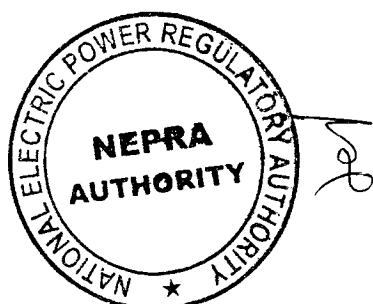
Net Capacity 380.7500 MW
Reference Exchange Rate (US\$/Rs.) 105.3000 US\$/Rs.
Reference US CPI 233.049 for Dec 2013 as notified by the US Labour Bureau of Labor Statistics
Reference CPI (Manufacturer) 188.68 for Dec 2013 as notified by the Federal Bureau of Statistics
Efficiency 49.360% (Minimum)
Levelized Tariff Levelized tariff in US Cents 7.3025 /kWh



Uch II Power (Pvt) Limited

Debt Servicing Schedule (Euro Loan)

Period	DFI Euro Facility				Conversion PKR		Tariff Components		
	Outstanding	Principal	Interest	Debt Servicing	Principal	Interest	Principal	Interest	Debt Servicing
	Euro in million	Euro in million	Euro in million	Euro in million	Rs. in million	Rs. in million	Rs./kW/hr	Rs./kW/hr	Rs./kW/hr
1	100.42	1.40	1.20	2.61					
2	99.02	1.43	1.20	2.63					
3	97.58	1.46	1.20	2.66					
4	96.12	1.49	1.18	2.67					
Year 1	100.42	5.79	4.78	10.56	830.25	685.00	0.2489	0.2054	0.4543
5	94.63	1.52	1.13	2.66					
6	93.10	1.56	1.13	2.69					
7	91.55	1.59	1.12	2.71					
8	89.96	1.62	1.10	2.73					
Year 2	94.63	6.30	4.49	10.78	903.06	643.35	0.2708	0.1929	0.4636
9	88.33	1.66	1.07	2.73					
10	86.67	1.69	1.05	2.74					
11	84.98	1.73	1.04	2.77					
12	83.25	1.77	1.02	2.79					
Year 3	88.33	6.85	4.18	11.03	982.30	599.72	0.2945	0.1798	0.4743
13	81.49	1.80	0.98	2.78					
14	79.68	1.84	0.97	2.81					
15	77.84	1.88	0.95	2.83					
16	75.96	1.92	0.93	2.85					
Year 4	81.49	7.45	3.83	11.27	1,068.49	548.74	0.3204	0.1645	0.4849
17	74.04	1.96	0.89	2.85					
18	72.07	2.00	0.87	2.88					
19	70.07	2.05	0.86	2.90					
20	68.02	2.09	0.83	2.92					
Year 5	74.04	8.10	3.45	11.55	1,162.25	495.13	0.3485	0.1484	0.4969
21	65.93	2.13	0.79	2.92					
22	63.80	2.18	0.77	2.95					
23	61.62	2.23	0.75	2.98					
24	59.39	2.27	0.73	3.00					
Year 6	65.93	8.81	3.05	11.86	1,264.25	436.81	0.3790	0.1310	0.5100
25	57.12	2.32	0.69	3.01					
26	54.80	2.37	0.66	3.03					
27	52.43	2.42	0.64	3.06					
28	50.01	2.47	0.61	3.09					
Year 7	57.12	9.59	2.61	12.20	1,375.18	374.47	0.4123	0.1123	0.5246
29	47.53	2.53	0.57	3.10					
30	45.01	2.58	0.55	3.12					
31	42.43	2.63	0.52	3.15					
32	39.79	2.69	0.49	3.18					
Year 8	47.53	10.43	2.12	12.55	1,495.85	304.37	0.4485	0.0913	0.5397
33	37.10	2.75	0.44	3.19					
34	34.36	2.81	0.42	3.22					
35	31.55	2.87	0.39	3.25					
36	28.69	2.93	0.35	3.28					
Year 9	37.10	11.34	1.60	12.94	1,627.13	229.32	0.4878	0.0688	0.5566
37	25.76	2.99	0.31	3.30					
38	22.77	3.05	0.28	3.33					
39	19.72	3.12	0.24	3.36					
40	16.60	3.18	0.20	3.39					
Year 10	25.76	12.34	1.03	13.37	1,769.89	147.67	0.5306	0.0443	0.5749
41	13.42	3.25	0.16	3.41					
42	10.17	3.32	0.12	3.44					
43	6.85	3.39	0.08	3.47					
44	3.46	3.46	0.04	3.50					
Year 11	13.42	13.42	0.41	13.83	1,925.19	59.12	0.5772	0.0177	0.5949



Uch II Power (Pvt) Limited

Debt Servicing Schedule (US\$ Loan)

Period	DFI US\$ Facility				Conversion PKR		Tariff Components		
	Outstanding Loan	Principal	Interest	Debt Servicing	Principal	Interest	Principal	Interest	Debt Servicing
	US \$ in million	US \$ in million	US \$ in million	US \$ in million	Rs. in million	Rs. in million	Rs./kW/hr	Rs./kW/hr	Rs./kW/hr
1	211.10	2.95	2.51	5.45					
2	208.16	3.01	2.50	5.51					
3	205.15	3.07	2.49	5.56					
4	202.07	3.14	2.45	5.59					
Year 1	211.10	12.17	9.94	22.11	1,281.32	1,046.92	0.3842	0.3139	0.6980
5	198.94	3.21	2.36	5.57					
6	195.73	3.27	2.35	5.62					
7	192.46	3.34	2.33	5.68					
8	189.11	3.41	2.29	5.71					
Year 2	198.94	13.24	9.34	22.57	1,393.69	983.26	0.4179	0.2948	0.7126
9	185.70	3.49	2.23	5.71					
10	182.21	3.56	2.19	5.75					
11	178.65	3.64	2.17	5.80					
12	175.02	3.71	2.12	5.84					
Year 3	185.70	14.40	8.70	23.10	1,515.97	916.58	0.4545	0.2748	0.7293
13	171.30	3.79	2.03	5.83					
14	167.51	3.87	2.01	5.88					
15	163.64	3.96	1.98	5.94					
16	159.68	4.04	1.94	5.98					
Year 4	171.30	15.66	7.96	23.62	1,648.99	838.67	0.4944	0.2514	0.7458
17	155.64	4.13	1.85	5.97					
18	151.52	4.21	1.82	6.03					
19	147.31	4.30	1.79	6.09					
20	143.00	4.39	1.73	6.13					
Year 5	155.64	17.03	7.19	24.22	1,793.68	756.73	0.5378	0.2269	0.7647
21	138.61	4.49	1.64	6.13					
22	134.12	4.58	1.61	6.19					
23	129.54	4.68	1.57	6.25					
24	124.86	4.78	1.51	6.29					
Year 6	138.61	18.53	6.34	24.87	1,951.11	667.60	0.5850	0.2002	0.7851
25	120.08	4.88	1.44	6.32					
26	115.20	4.98	1.38	6.37					
27	110.22	5.09	1.34	6.43					
28	105.12	5.20	1.28	6.47					
Year 7	120.08	20.15	5.44	25.59	2,122.30	572.32	0.6363	0.1716	0.8079
29	99.93	5.31	1.19	6.50					
30	94.62	5.42	1.14	6.56					
31	89.19	5.54	1.08	6.62					
32	83.66	5.65	1.01	6.67					
Year 8	99.93	21.92	4.42	26.34	2,308.53	465.19	0.6921	0.1395	0.8316
33	78.00	5.78	0.93	6.70					
34	72.23	5.90	0.87	6.76					
35	66.33	6.02	0.80	6.83					
36	60.31	6.15	0.73	6.88					
Year 9	78.00	23.85	3.33	27.18	2,511.13	350.48	0.7529	0.1051	0.8580
37	54.16	6.28	0.64	6.92					
38	47.87	6.42	0.57	6.99					
39	41.46	6.55	0.50	7.05					
40	34.91	6.69	0.42	7.11					
Year 10	54.16	25.94	2.14	28.08	2,731.44	225.70	0.8189	0.0677	0.8866
41	28.22	6.83	0.34	7.17					
42	21.38	6.98	0.26	7.23					
43	14.40	7.13	0.17	7.30					
44	7.28	7.28	0.09	7.37					
Year 11	28.22	28.22	0.86	29.07	2,971.12	90.36	0.8908	0.0271	0.9179