



National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-347/QATPL-2016/2338-2340
February 22, 2016

Subject: Decision of the Authority regarding Interim Tariff in the matter of Petition filed by Quaid-e-Azam Thermal Power (Pvt.) Ltd. (QATPL) for Determination of Generation Tariff of 1180.13 MW RLNG Based Combined Cycle Power Plant at Bhikki, Sheikhpura, Punjab

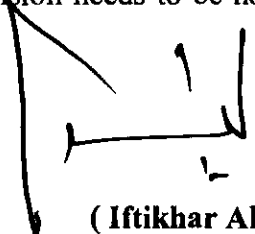
Dear Sir,

Please find enclosed herewith the subject Decision of the Authority along with Annex-I and Annex-II (05 pages) in Case No. NEPRA/TRF-347/QATPL-2016.

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

3. Order of the Authority along with Annex-I & II of the Decision needs to be notified in the official Gazette.

Enclosure: As above


22/2/16
(Iftikhar Ali Khan)

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.



**DRAFT DECISION OF THE AUTHORITY REGARDING INTERIM TARIFF IN THE MATTER OF
PETITION FILED BY QUAID-E-AZAM THERMAL POWER (PRIVATE) LIMITED (QATPL) FOR
DETERMINATION OF GENERATION TARIFF OF 1180.13 MW RLNG BASED COMBINED CYCLE
POWER PLANT AT BHIKKI, SHEIKHUPURA, PUNJAB**

1. INTRODUCTION

1.1 Quaid-e-Azam Thermal Power (Private) Limited (QATPL) is a private limited company, wholly owned by the Government of Punjab (GOPB) and incorporated under the Companies Ordinance 1984 on 25 March 2015. The Facility will be a thermal IPP using Re-gasified Liquefied Natural Gas (RLNG) as the primary fuel and High-Speed Diesel (HSD) as back-up fuel. The proposed Project is based on the combined cycle technology with an RSC gross capacity of 1,180.130 MW (net 1,156.675 MW). The Facility configuration consists of two Gas Turbines GE 9HA, two HRSGs and one Steam Turbine.

2. FILING OF TARIFF PETITION

- 2.1 QATPL vide its letter dated 15th February 2016 filed a tariff petition for it above mentioned project. The petitioner also requested that the immediate application of the reference generation tariff/ Interim tariff be allowed/ordered in terms of Rule 4 of NEPRA (Tariff Standards and Procedure) Rules, 1998 along with other enabling provisions of law.
- 2.2 QATPL submitted that power purchase agreement with CPPAG and gas supply agreement with SNGPL have been finalized and are subject to issuance of tariff. QATPL also submitted that in terms of EPC contract, irrevocable letter of credit for the amount of US\$ 233.211 million and PKR 6.446 billion in favour of the EPC contractor has been opened on 21st October 2015. Banks have signed an underwritten term sheet with QATPL committing to finance the debt portion of the project and underwriting fee of PKR 270 million have been paid to lending institutions.
- 2.3 According to QATPL, it is obligated to open LC for the remaining 55% of the EPC cost by mid April 2016 and for this purpose, financial close of the project is required to be achieved by end of March 2016. Financial close in turn is dependent on completion of CPs including signing of PPA, I.A and L.O.S. All these CPs are dependent on a viable tariff. Hence, a viable and bankable tariff is immediate requirement of the Project. If a viable tariff is not issued to the project immediately, the Company will face situation of contractual default and the timeline of the project of national importance will be compromised.

3. APPROVAL OF INTERIM TARIFF

- 3.1. The Authority admitted the tariff petition on 16th February 2016. The Authority also considered the request of the petitioner for grant of interim tariff and considering the facts, circumstances and grounds, decided to allow immediate application of tariff in terms of rule 4(7) of NEPRA Tariff (Standards & Procedure) Rules, 1998. However, the Authority has decided that following requests of the Petitioner shall be decided in the final order:





- i. To fix lesser thermal efficiency levels as against the guaranteed efficiency levels agreed by the EPC contractor.
- ii. Provision of Debt Service Reserve Account (DSRA).
- iii. To fix the construction Period of 30 months as against 27 months agreed in the EPC contract.
- iv. Financing fees and charges of 4.06% against the established benchmark of 3.5%.
- v. Insurance @ 1.35% each during construction and annual operation against the established benchmark of 1% each during construction and annual operation.
- vi. Provision of simple cycle operation on HSD.

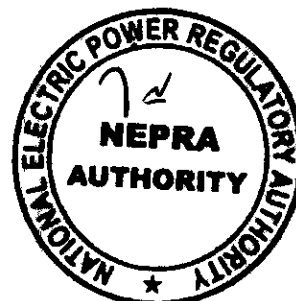
4. ORDER

- I. Quaid-e-Azam Thermal Power (Private) Limited (QATPL) is hereby allowed to charge Central Power Purchasing Agency Guarantee Limited, the following interim tariff for combined cycle operation and simple cycle operation for its proposed power plant of 1,156.675 MW:

Description	Combined Cycle	
	RLNG	HSD
Energy Charge (Rs./kWh):	Recommended	Recommended
Fuel cost component	4.5101	8.4527
Variable O&M	0.3336	0.4814
Total	4.8437	8.9341
Capacity Charge (Rs./kW/hour):		
Fixed O&M (Local)	0.1373	0.1373
Fixed O&M (Foreign)	0.1597	0.1597
Cost of working capital	0.0873	0.0873
Insurance	0.0585	0.0585
Return on Equity	0.4923	0.4923
Debt servicing (1-10 years only)	1.0194	1.0194
Total 1-10 years	1.9545	1.9545
Total 11-30 years	0.9351	0.9351

Detailed tariff tables are attached as Annex-I and Annex-II.

- II The simple cycle tariff on unit delivered basis during the availability of the gas turbines for simple cycle operation for 8-9 months before the COD of the complex on combined cycle operation shall be as under:





Description	Simple Cycle
	RLNG
	Rs./kWh
Fuel cost component	7.0377
Variable O&M	0.3336
Fixed O&M (Local)	0.1373
Fixed O&M (Foreign)	0.1597
Cost of working capital	0.0873
Total	7.7556

- III Appropriate indexation mechanisms shall be provided at the time of final tariff.
- IV The final tariff shall supersede the interim tariff.
5. The above Order of the Authority along with Annex-I and Annex-II shall be notified in the Official Gazette in terms of Section 31(4) of the Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

(Khawaja Muhammad Naeem)
Member

(Himayat Ullah Khan)
Member

(Syed Masood Ali Hassan Naqvi) 19/2
Member

(Maj (R) Haroon Rashid) 19/2/16
Vice Chairman

(Brig. (R) Tariq Saddozai)
Chairman

19/2/16



22-2-2016

Quaid-e-Azam Thermal Power (Pvt) Limited
Interim Tariff Table RLNG

1	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.4186	0.6009	1.9545	2.1245	6.9682	6.6364
2	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.4591	0.5603	1.9545	2.1245	6.9682	6.6364
3	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.5036	0.5158	1.9545	2.1245	6.9682	6.6364
4	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.5525	0.4670	1.9545	2.1245	6.9682	6.6364
5	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.6060	0.4134	1.9545	2.1245	6.9682	6.6364
6	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.6648	0.3547	1.9545	2.1245	6.9682	6.6364
7	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.7292	0.2902	1.9545	2.1245	6.9682	6.6364
8	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.7999	0.2195	1.9545	2.1245	6.9682	6.6364
9	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.8774	0.1420	1.9545	2.1245	6.9682	6.6364
10	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.9625	0.0570	1.9545	2.1245	6.9682	6.6364
11	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
12	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
13	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
14	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
15	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
16	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
17	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
18	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
19	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
20	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
21	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
22	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
23	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
24	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
25	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
26	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
27	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
28	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
29	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811
30	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	5.8601	5.5811

Average

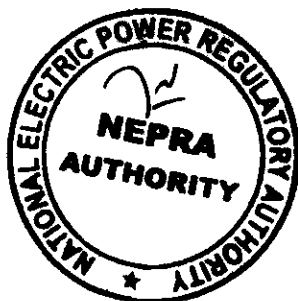
1-10	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.6573	0.3621	1.9545	2.1245	6.9682	6.6364
11-30	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.0000	0.0000	0.9351	1.0164	5.8601	5.5811
1-30	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.2191	0.1207	1.2749	1.3858	6.2295	5.9328

Levelised

1-30	4.5101	0.3336	4.8437	0.1373	0.1597	0.0873	0.0585	0.4923	0.3986	0.2659	1.5996	1.7387	6.5824	6.2689
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6.5824 Rs./kWh

6.2689 US Cents/kWh



Quaid-e-Azam Thermal Power (Pvt) Limited
Interim Tariff Table HSD

Sl. No.	Category	Sub-Category	Capacity (MW)	Distance (km)	Transmission Voltage (kV)	Transmission Loss (%)	Generation Cost (Rs./kWh)	Transmission Cost (Rs./kWh)	Generation Cost (US Cents/kWh)	Transmission Cost (US Cents/kWh)	Generation Cost (Rs./kWh)	Transmission Cost (Rs./kWh)	Generation Cost (US Cents/kWh)	Transmission Cost (US Cents/kWh)
1	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.4186	0.6009	1.9545	2.1245	11.0586	10.5320
2	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.4591	0.5603	1.9545	2.1245	11.0586	10.5320
3	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.5036	0.5158	1.9545	2.1245	11.0586	10.5320
4	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.5525	0.4670	1.9545	2.1245	11.0586	10.5320
5	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.6060	0.4134	1.9545	2.1245	11.0586	10.5320
6	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.6648	0.3547	1.9545	2.1245	11.0586	10.5320
7	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.7292	0.2902	1.9545	2.1245	11.0586	10.5320
8	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.7999	0.2195	1.9545	2.1245	11.0586	10.5320
9	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.8774	0.1420	1.9545	2.1245	11.0586	10.5320
10	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.9625	0.0570	1.9545	2.1245	11.0586	10.5320
11	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
12	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
13	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
14	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
15	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
16	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
17	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
18	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
19	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
20	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
21	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
22	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
23	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
24	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
25	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
26	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
27	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
28	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
29	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767
30	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	-	-	0.9351	1.0164	9.9505	9.4767

Average

1-10	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.6573	0.3621	1.9545	2.1245	11.0586	10.5320
11-30	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.0000	0.0000	0.9351	1.0164	9.9505	9.4767
1-30	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.2191	0.1207	1.2749	1.3858	10.3199	9.8284

Levelized

1-30	8.4527	0.4814	8.9341	0.1373	0.1597	0.0873	0.0585	0.4923	0.3986	0.2659	1.5996	1.7387	10.6728	10.1645
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Levelized Tariff = 10.6728 Rs./kWh 10.1645 US Cents/kWh

