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PART II

Statutory Notifications (S. R. O.)

GOVERNMENT OF PAKISTAN
MINISTRY OF ENERGY
(Power Division)

NOTIFICATION

Islamabad, the 15th November, 2019

S. R. O. 1383(I)/2019.—In pursuance of sub-section (7) of section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), and in suppression of its Notification No. S.R.O. 942(I)/2014, dated the 5th October 2014, the Federal Government is pleased to notify as under the National Electric Power Regulatory Authority's determination whereby Port Qasim Electric Power Company (Pvt.) Ltd. stands authorized to charge the following specified tariff for delivery of electricity to the CPPA-G for procurement on behalf of *Ex-WAPDA* Distribution Companies for its 2x660 MW Power Plants on imported coal for delivery of electricity, namely:-

2547(1—9)

Price: Rs. 20.00

[1790 (2019)/Ex. Gaz.]

Reference Tariff Table (COD)		
Tariff Components	Years	
Capacity Charges (PKR/kW/Hour)	1-10	11-30
Power Plant -Fixed O&M - Local	0.1618	0.1618
Power Plant-Fixed O&M - Foreign	0.1632	0.1632
Jetty- Fixed O&M - Foreign	0.0250	0.0250
Jetty -Fixed O&M - Local	0.0230	0.0230
Working Capital	0.1535	0.1535
Insurance	0.0698	0.0698
Return on Equity	0.8896	0.8896
Sinosure Fee	0.0961	-
Debt Servicing	2.0432	-
Total Capacity Charges	3.6252	1.4859
Energy Charges Rs./kWh		
Fuel cost Component	4.6936	4.6936
Ash Disposal	-	-
Lime Stone	-	-
Power Plant-Variable O&M-Foreign	0.0778	0.0778
Power Plant- Variable O&M - Local	0.0514	0.0514
Jetty - Variable O&M - Foreign	0.0014	0.0014
Jetty -Variable O&M - Local	0.0008	0.0008
Total Energy Charges	4.8251	4.8251

- (i) The Tariff Table and Debt Service Schedule are attached as Annex-I and Annex-II.
- (ii) The tariff control period is 30 Years.
- (iii) In case of PQEPCPL power generation complex with two units of 660MW each (1320 MW), the tariff basis of 660 MW will apply with heat rate and Dependable Capacity tests will be conducted on the basis of complex as a whole and relevant tariff components will be adjusted accordingly.

I. **Basis for Determination**

The above tariff is worked out on the following basis:

i. **Plant Size**

The applicable COD tariff has been based as per the following plant size;

1320 MW (Gross) 1242.95 MW (Net)

- (1) The approved mechanism provided that the actual net capacity of the complex revised on the basis of Initial Dependable Capacity (IDC) Test at the time of COD and the relevant tariff components will be adjusted downward. However, upward adjustment in tariff will not be allowed if the IDC established lower than the benchmarks stated above.
- (2) At the time of COD, PQEPCL submitted certificate of Initial Tested Capacity (ITC) from independent engineer approved by CPPA *i.e.* SGS-CSTC Standards Technical Services Company Limited. As per the certificate the complex may dispatch up to the ITC of 1242.95 MW as per Merit Order as also endorsed by CPPA of its letter No.CPPA-G/CTO/DGMT-III/MT-VIII/PQEPC-145/9250-58 dated April 24, 2018.
- (3) Accordingly, the auxiliary power consumption factor which was allowed as 8% for 1320MW, has now been adjusted to 5.84% as per the initial tested capacity.

ii. **Exchange Rate**

Reference exchange rate of Rs. 105.730/US\$ has been used in calculating the COD reference tariff and the same shall be used for indexations/adjustments where applicable.

iii. **Summary of Project Cost**

The following project cost for 2x660MW has been approved at the time of COD upfront coal tariff in accordance with the discussion in the preceding paragraphs:

	US\$ in Million
Capital Cost Power Plant	1,459.511
Custom Duties & Taxes-Plant	60.394
EPC Cost Jetty	226.100
Custom Duties & Taxes-Jetty	1.600
Sub-Total	1,747.605
Financial Charges	
Financing Fees & Charges	47.979
Sinosure Fee	23.194
IDC — Power Plant	152.560
IDC - Jetty	11.180
Sub-Total	234.913
Grand Total	1,982.518

II. Insurance Cost During Operation

During the term of the Agreement, insurance component of tariff will be adjusted on the basis of actual insurance cost with maximum of 1% of the 70% of Capital Cost determined converted into Pak Rupees on the basis of Rs.-US\$ parity prevailing on the 1st day of the start of each Agreement Year”

III. Annual Adjustment of Sinosure Fee component

During the term of the loan agreement, sinosure fee component of tariff will be adjusted on the basis of actual annual sinosure fee with a maximum rate of 0.6% per annum based on annual outstanding principal debt amount along-with annual interest payable. Sinosure component will further be adjusted for exchange rate variation for Rs.-US\$ parity prevailing at the date of payment and based on documentary evidence.

IV. Tariff Structure

The tariff for coal based generation technologies shall be two-part consisting of the following:

A. Energy Purchase Price

- (a) Fuel Cost Component;
- (b) Variable O&M Local- Plant
- (c) Variable O&M Foreign-Plant
- (d) Variable O&M Local – Jetty
- (e) Variable O&M Foreign – Jetty
- (f) Cost of Lime Stone; (subject to provision of pending information)
- (g) Cost of Ash Disposal (subject to provision of pending information)

B. Capacity Purchase Price

- (a) Fixed O&M (Local)-Plant
- (b) Fixed O&M (Foreign)-Plant
- (c) Fixed O&M (Local)-Jetty
- (d) Fixed O&M (Foreign)-Jetty
- (e) Sinosure Fee
- (f) Insurance Cost
- (g) Cost of Working Capital;
- (h) Return on equity; and
- (i) Debt Service (Principal Repayment and Interest Charges);

V. Dispatch Criteria:

- (1) The sole criterion for dispatch of all the coal based power plants shall be the “merit order dispatch”.
- (2) The coal based generation facility shall be subjected to scheduling and dispatch code as specified under NEPRA Grid Code.

VI. Plant Availability

The guaranteed availability of the plants will be 85%.

VII. Authority’s Direction – Working Capital

- i. Petitioner to strictly adhere to the requirements for the imported coal inventory level to be maintained as per the working capital component allowed in this tariff.
- ii. The Petitioner should ensure that reliable supply chain mechanism exists for fuel for the power generation complex (1320 MW) to ensure consistent power supply to national grid and required inventory level exists.
- iii. To avoid any adverse impact, CPPA (G) Limited to strictly ensure compliance to legal covenants, particularly Article IX and section 5.14 of PPA dated April 18, 2015, as mutually agreed by CPPA and Petitioner.

VIII. General Conditions

- (1) In case of use of mix coal the ROE will be adjusted according to the formula provided in the approval granted by the Authority dated 13-2-2015.
- (2) In case of discovery of any further evidence or misinformation or concealment of any fact, NEPRA reserves the right to amend, modify and rescind its determination accordingly.
- (3) During life of the project operations, Quarterly adjustments/ indexations for local inflation, foreign inflation, exchange rate variations and interest rate variations will be made on 1st July, 1st October, 1st January and 1st April each year based on latest

available date with respect to CPI notified by the Federal Board of Statistics (FBS), USCPI issued by US Bureau of Labor Statistics and revised TT&OD selling rate of foreign currencies (US Dollar, British Pound Sterling, Euro, Japanese Yen and Chinese Yuan or any other currency as the Government of Pakistan may allow) notified by the National Bank of Pakistan. The method of indexations will be as follow:

Tariff Components	Tariff Indexation & Adjustment
Fuel Cost component	Delivered Fuel Price (inclusive of transportation) at the Power Plant
Variable O&M (Foreign)-Plant	US\$ to Pak Rupees & US CPI
Variable O&M (Local)-Plant	Pakistan CPI
Fixed O&M (Foreign) -Plant	US\$ to Pak Rupees & US CPI
Fixed O&M (Local)-Plant	Pakistan CPI
Variable O&M (Foreign)-Jetty	US\$ to Pak Rupees
Fixed O&M (Foreign) -Jetty	US\$ to Pak Rupees
Cost of Working Capital	Adjustments for relevant KIBOR variations
Return on Equity	US\$ to Pak Rupees
Principal Repayment (Foreign Currency)	US\$/Euro/Yen/Pound to Pak Rupees (based on borrowing by the Company)
Sinosure Fee	US\$ to Pak Rupees along-with relevant LIBOR Variation
Interest//Mark-up Payments (Foreign Currency Loan)	- Adjustments for relevant LIBOR or other applicable Interest Rate benchmark - Adjustment for variation in Rs./Foreign Currency (US\$/Euro/Yen/Pound) rates as applicable
Interest/Mark-up Payments (Local Currency Loan)	Adjustments for relevant KIBOR variations

IX. Definitions and Interpretations

- (a) “Auxiliary energy consumption” means the quantum of energy consumed by auxiliary equipment of the generating facility, and transformer losses within the generating facility, expressed in Megawatts as well as in percentage of the sum of gross output at the generator terminals of all the units of the generating plant;
- (b) “Capital cost” means the cost of all capital work including plant and machinery, civil work, erection and commissioning and evacuation infrastructure up to interconnection point;
- (c) “Control Period” means the period required to achieve the financial close and complete the construction of generation facility. The

Control Period shall be of six years starting from the date of unconditional opting of the upfront tariff.

- (d) “Design Coal” means the ideal type of coal or fuel that is selected to be used during performance testing of steam generators in power plant engineering;
- (e) “Grace Period” means a period equivalent to the construction period of the coal project.
- (f) “Installed capacity” means the summation of the name plate capacities of all the units of the generating facility or the capacity of the generating facility (reckoned at the generator terminals), approved by the Authority from time to time as indicated in the generation license;
- (g) “Inter-connection Point” shall mean interface point of energy generating facility with the transmission system or distribution system, as the case may be;
- (h) “Operation and maintenance expenses” or ‘O&M expenses’ means the expenditure incurred on operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, spares, consumables and overheads;
- (i) “Project” means a generating facility or the evacuation system up to interconnection point;
- (j) “Tariff period” means the period for which the upfront tariff has been determined by the Authority on the basis of reference parameters which in the instant case is 30 years. The tariff period shall commence from the date of commercial operation.
- (k) “Useful Life” in relation to a unit of a generating facility including evacuation system shall mean the period during which the generating facility including evacuation system is expected to be usable for the purpose of generating electricity from the date of commercial operation (COD) of such generation facility, namely coal based power project is 30 years;
- (l) “Year” means a period of 12 months.

Annex-II

Upfront Tariff - Debt Servicing on Foreign Financing at COD

Gross Capacity	1320.00	MW	US\$/PKR Parity	105.73
Net Capacity	1242.85	MW	Equity	21.56%
3 Months	2.362%	3.90%	Debt	78.44%
		6.262%	Debt in Pak Rupees	164,415.10 PKR Million
				45,193.71 PKR Million
				1,555.00 US\$ Million

Interest Rate after 40% Sponsor Sharing									
Period	Principal Million \$	Principal Repayment Million \$	Interest Million \$	Balance Million \$	Debt Service Million \$	Principal Repayment Rs./kW/h	Interest Rs./kW/h	Debt Servicing Rs./kW/h	Sinosure Rs./kW/h
1	1,555.00	28.28	24.34	1,526.74	52.60				
2	1,526.74	28.70	23.90	1,498.04	52.60				
3	1,498.04	29.15	23.45	1,468.88	52.60				
4	1,468.88	29.61	22.99	1,439.28	52.60	1.1237	0.9195	2.0432	0.0961
1st Year		115.72	94.69		210.41				
5	1,439.28	30.07	22.53	1,409.21	52.60				
6	1,409.21	30.54	22.08	1,378.66	52.60				
7	1,378.66	31.02	21.58	1,347.64	52.60				
8	1,347.64	31.51	21.10	1,316.14	52.60	1.1958	0.8474	2.0432	0.0889
2nd Year		123.14	87.27		210.41				
9	1,316.14	32.00	20.60	1,284.14	52.60				
10	1,284.14	32.50	20.10	1,251.64	52.60				
11	1,251.64	33.01	19.59	1,218.63	52.60				
12	1,218.63	33.53	19.08	1,185.11	52.60	1.2724	0.7708	2.0432	0.0813
3rd Year		131.03	79.38		210.41				
13	1,185.11	34.05	18.55	1,151.06	52.60				
14	1,151.06	34.58	18.02	1,116.47	52.60				
15	1,116.47	35.12	17.48	1,081.35	52.60				
16	1,081.35	35.67	16.93	1,045.67	52.60	1.3540	0.6892	2.0432	0.0732
4th Year		139.43	70.98		210.41				
17	1,045.67	36.23	16.37	1,009.44	52.60				
18	1,009.44	36.80	15.80	972.64	52.60				
19	972.64	37.38	15.23	935.27	52.60				
20	935.27	37.96	14.64	897.31	52.60	1.4408	0.6024	2.0432	0.0645
5th Year		148.37	62.04		210.41				
21	897.31	38.56	14.05	858.75	52.60				
22	858.75	39.16	13.44	819.59	52.60				
23	819.59	39.77	12.83	779.82	52.60				
24	779.82	40.39	12.21	739.42	52.60	1.5331	0.5101	2.0432	0.0553
6th Year		157.88	52.53		210.41				
25	739.42	41.03	11.58	698.40	52.60				
26	698.40	41.67	10.93	656.73	52.60				
27	656.73	42.32	10.28	614.41	52.60				
28	614.41	42.98	9.62	571.42	52.60	1.6314	0.4118	2.0432	0.0456
7th Year		168.00	42.41		210.41				
29	571.42	43.66	8.95	527.77	52.60				
30	527.77	44.34	8.26	483.43	52.60				
31	483.43	45.03	7.57	438.39	52.60				
32	438.39	45.74	6.86	392.65	52.60	1.7360	0.3072	2.0432	0.0351
8th Year		178.77	31.54		210.41				
33	392.65	46.46	6.15	346.20	52.60				
34	346.20	47.18	5.42	299.02	52.60				
35	299.02	47.92	4.68	251.10	52.60				
36	251.10	48.67	3.93	202.42	52.60	1.8473	0.1959	2.0432	0.0241
9th Year		190.23	20.18		210.41				
37	202.42	49.43	3.17	152.99	52.60				
38	152.99	50.21	2.39	102.78	52.60				
39	102.78	50.99	1.61	51.79	52.60				
40	51.79	51.79	0.81	(0.00)	52.60	1.9657	0.0775	2.0432	0.0123
10th Year		202.42	7.98		210.41				

[No. Tariff/PQEP-2014].

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