

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-404/SEL-2017/15726-15728 September 20, 2017

(Syed Safeer Hussa

Subject: Approval of National Electric Power Regulatory Authority in the matter of Application of Siddiqsons Energy Limited (SEL) for Unconditional Acceptance of Thar Coal Upfront Tariff for 330 MW Mine Mouth Coal Power Plant [Case No. NEPRA/TRF-404/SEL-2017]

Dear Sir.

Please find enclosed herewith the subject Approval of the Authority along with Annexure-I & II (12 Pages) in Case No. NEPRA/TRF-404/SEL-2017.

- 2. The Approval/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).
- 3. Order of the Authority along with Annexure-I & II will be not ned in the official Gazette.

Enclosure: As above

Secretary
Ministry of Energy
'A' Block, Pak Secretariat
Islamabad

CC:

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



APPROVAL OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF APPLICATION OF SIDDIQSONS ENERGY LIMITED FOR UNCONDITIONAL ACCEPTANCE OF THAR COAL UPFRONT TARIFF FOR 330 MW MINE MOUTH COAL POWER PLANT

- 1. Siddiqsons Energy Limited (hereinafter "SEL") submitted an application vide letter dated 11th August 2017 under NEPRA Upfront Tariff (Approval and Procedure) Regulations, 2011 (hereinafter "Upfront Tariff Regulations") for unconditional acceptance of upfront coal tariff with air cooled technology on foreign financing as determined by the National Electric Power Regulatory Authority (hereinafter "The Authority") vide its determination dated 27th July 2017 (hereinafter "Upfront Tariff Determination"), with all the terms, conditions and assumptions provided therein for its proposed 330 MW Thar coal mine mouth power project at Thar Block II, Tharparker, Sindh. SEL submitted its Generation License application vide letter dated 7th June 2017 in respect of the proposed project which is under process.
- 2. The application was processed in accordance with the relevant provisions of Upfront Tariff Regulations and Upfront Tariff Determination. SEL provided all necessary information and documents and was considered eligible for grant of Upfront Tariff. Accordingly, the Authority has decided to grant the upfront Thar coal tariff for 330 MW with air cooled technology on foreign financing to SEL. In case generation license is declined to the applicant, the granted upfront tariff shall no longer remain applicable/valid. The tariff granted through this decision shall supersede the earlier tariff granted vide decision No. NEPRA/TRF-371/SEL-2016/16212-16214 dated 1st December 2016.

3. Order

I. In supersession of the earlier upfront tariff granted through decision No. NEPRA/TRF-371/SEL-2016/16212-16214 dated 1st December 2016, the Authority hereby determines and approves the following upfront tariff with air cooled technology on foreign financing and adjustments/indexations for Siddiqsons Energy Limited for its 330 MW Thar coal mine mouth power project at Thar Block II, Tharparker, Sindh for delivery of electricity to the power purchaser:

1









Description	Rs./kW/Hour
Capacity Charge	::
1-10 Years	3.2001
11-30 Years	1.5272

Description	Variable	Fixed							
Description	Rs./kWh	Rs./kW/H							
Energy Charge:									
1st Year	1.7337	4.2204							
2nd Year	1.8775	3.2503							
3rd Year	1.7591	2.7032							
4th Year	1.7133	2.6736							
5th Year	1.6680	2.6494							
6-8 Year	1.6539	2.5891							
9-10 Year	1.6317	2.5888							
11th Year	1.5344	1.4855							
12th Year	1.5330	1.4697							
13-15 Year	1.5316	1.4538							
16-22 Year	1.5824	1.4545							
23-30 Years	1.3718	1.4516							

II. Basis of Determination

The above tariff is worked out on the following basis:

- Net capacity has been worked out after allowing auxiliary consumption of 8%.
- ii. The Reference LHV calorific value of 11,005 Btus/Kilogram of Thar coal has been assumed for the calculation of fuel cost component which shall be subject to adjustment on the basis of actual calorific value.
- iii. The tariffs have been worked out on the basis of power complex comprising single unit and two units each for wet cooling technology and air cooling technology. The sponsors shall be allowed to choose appropriate size of the power complex in accordance with the feasibility of the project, benchmark efficiency levels, benchmark capital cost levels, availability of coal, consent of the power purchaser and availability of interconnection arrangements by NTDC.







- iv. Reference exchange rate of Rs. 105/US\$ has been used in calculating the reference tariff and the same shall be used for indexations/adjustments where applicable.
- v. Construction period shall be 36 months for power complex comprising single unit and 42 months for power complex comprising two units.
- vi. The upfront tariff has been determined on the basis of debt equity ratio of 75:25.
- vii. Reference LIBOR is 1.8% with a premium of 4%.
- viii. One time Sinosure fee/credit insurance fee @7% of the debt servicing amount.
 - ix. In case of project financing without Sinosure fee/credit insurance fee, the applicable premium over LIBOR shall be 4.5%.
 - x. In case of local financing, the reference KIBOR is 6.36% with a premium of 2.5%.
 - xi. Loan tenure of 10 years plus grace period equivalent to construction period has been considered.

III. One Time Adjustments at COD

i) The EPC cost shall be subject to adjustment at the time of COD for variation in US PPI Steel and US PPI Electrical Machinery Indices against the reference indices of March 2017 of 213.70 and 113.60 US PPI Steel and US PPI Electrical Machinery respectively. The applicable revised index shall be for the month falling the date of approval of upfront tariff in favour of the project company. The relevant portions of the EPC cost are as under:

Description	US\$ Million/MW
Steel Index	0.530
Electric Machinery Index	0.434
Total EPC Cost	0.964

- ii) The customs duties and cess in the project cost shall be adjusted as per actual.
- iii) IDC shall be reestablished on the basis of weighted average quarterly LIBOR/KIBOR during the construction period, indexed capital cost, actual









- custom duties & cess, actual premium over LIBOR/KIBOR subject to maximum and the impact of Sinosure fee/credit insurance fee, if any.
- iv) Upfront Sinosure fee/credit insurance fee @7% on the total debt servicing (including principal and mark-up for the entire loan tenor) has been included in the project cost. Project cost shall be adjusted at the time of COD on the basis of actual Sinosure fee/credit insurance fee subject to maximum of 7%. In case the sponsor managed better alternative Sinosure fee/credit insurance fee arrangement, the same shall be considered at the time of COD.

IV. Adjustment due to Variation in Net Capacity

The actual net capacity of the complex shall be determined on the basis of Initial Dependable Capacity (IDC) Test at the time of COD and the relevant tariff components shall be adjusted downward. Upward adjustment in tariff shall not be allowed if the IDC established lower than the benchmark net capacity. The minimum net capacity shall be gross capacity minus maximum allowed auxiliary consumption.

V. Adjustment as per Heat Rate Test

The fuel cost component shall be subject to downward revision on the basis of actual heat rates established as a result of heat rate test conducted at the time of COD in accordance with the established benchmarks in the presence of the representatives of the power purchaser. For acceptance of the test, approval of the power purchaser shall be mandatory. Upward revision in the fuel cost component shall not be allowed in case the net LHV efficiency is established lower than the minimum thermal efficiency and the financial impact, if any, of lower thermal efficiency over the term of the Agreement shall be borne by the power producer. The efficiency gains shall be shared in accordance with the following mechanism:

Туре	Efficiency net (LHV) achieved at COD	Sharing Ratio Power Purchaser: Sponsor		
Air Cooling	37% (min)	100% : 0%		
Air Cooling	37.01% - 37.50%	70% : 30%		
Air Cooling	37.51% - 38.00%	50% : 50%		
Air Cooling	38.01% - 38.50%	30% : 70%		
Air Cooling	>38.5%	0% : 100%		







VI. Adjustment in Insurance as per actual

During the term of the Agreement, insurance component of tariff shall be adjusted on the basis of actual insurance cost with maximum of 1% of EPC Cost converted into Pak Rupees on the basis of Rs.-US\$ parity prevailing on the 1st day of the start of each Agreement Year. The reference insurance component has been worked out on the basis of 1% of EPC cost and exchange rate of Rs. 105/US\$.

VII. Cost of Working Capital

- a. The Working Capital requirement has been worked out in accordance with the following:
 - i. 30 days coal inventory at 100% plant load.
 - ii. Receivables equivalent to one month of fuel charges at 100% plant load.
- b. Interest on Working Capital has been calculated on the basis of quarterly-KIBOR of 6.36% plus 200 basis point, which shall be adjusted for variation in quarterly-KIBOR and weighted average cost of coal inventory.

VII. Operation and Maintenance (O&M) Cost

- i. Foreign O&M component shall be indexed with US CPI and Exchange Rate.
- ii. Local O&M component shall be indexed with local CPI (General).
- iii. The reference US CPI (All Urban Consumers) and local CPI (General) shall be of March 2017.
- iv. The following costs with respect to lime stone and ash handling have been determined, which are shown separately in the reference tariff table;

Cost of Lime

Cost of Lime Stone including Transportation	Rs.1250.00/M.Ton
Consumption	Kg.0.07/kWh
Cost of Lime Stone	Rs.0.09/kWh

Cost of Ash Disposal

Ash produced	Kg.0.22/kWh
Ash Transportation cost	Rs.1000.00/M.Ton
Ash Disposal Cost	Rs.0.22/kWh









v. The cost of ash handling and lime stone shall be subject to adjustment as per actual at the time of COD and if require, appropriate adjustment mechanism shall be provided for post COD period.

VIII. Adjustment for LIBOR/KIBOR

The interest calculated in the reference debt service schedule shall be subject to adjustment for variation in quarterly-KIBOR in the case of local loan and quarterly-LIBOR in the case of foreign loan on quarterly basis. The adjustment shall be made on 1st July, 1st October, 1st January and 1st April based on latest available TT&OD selling rate and KIBOR notified by the National Bank of Pakistan and Reuters for the purpose of LIBOR.

IX. Not used

X. Fuel Price Adjustment

i. The following two part reference coal price has been used for determining the upfront tariff for Thar Coal Projects:

Description	Variable	Fixed	Total	
	US\$/Ton	US\$/Ton	US\$/Ton	
1st Year	14.75	56.43	71.18	
2nd Year	16.39	43.46	59.85	
3rd Year	15.04	36.14	51.19	
4th Year	14.52	35.75	50.27	
5th Year	14.01	35.43	49.43	
6-8 Years	13.85	34.62	48.47	
9-10 Years	13.59	34.61	48.21	
11th Year	12.49	19.86	32.35	
12th Year	12.47	19.65	32.12	
13-15 Years	12.46	19.44	31.89	
16-22 Years	13.03	19.45	32.48	
23-30 Years	10.64	19.41	30.05	

ii. The above coal price is determined by TCEB for Bloc-II for mine size of 6.5 MTPA. Revised coal price of each block of Thar Coal shall be determined by TCEB/Competent Authority and the reference fuel cost components shall be adjusted accordingly.







- iii. The basis of coal price shall be provided in the Power Purchase Agreement.
- iv. If the plant has to operate on imported fuel due to unavailability of Thar Coal, the prescribed pricing mechanism for imported coal shall be applied to calculate fuel cost component.

XI. Monitoring Mechanism for the use of coal fuel

The Power Producer shall furnish a monthly coal usage and coal procurement statement duly verified and certified by the Central Power Purchasing Agency (CPPA) for each month, along with the monthly energy bill. The statement shall cover details such as -

- i. Quantity of fuel (tons) consumed and procured along with heating value during the month for power generation purposes,
- ii. Cumulative quantity (tons) of coal consumed and procured till the end of that month during the year,
- iii. Actual (gross and net) energy generation (denominated in units) during the month,
- iv. Cumulative actual (gross and net) energy generation (denominated in units) until the end of that month during the year,
- v. Opening fuel stock quantity (tons),
- vi. Receipt of fuel quantity (tons) at the power plant site and
- vii. Closing fuel stock quantity (tons) for available at the power plant site.

XII. General Conditions

- i. The guaranteed availability of the plants shall be 85%.
- ii. The upfront tariff shall be available for those projects only which use super critical technology or above and the use of subcritical technology shall not be allowed.
- iii. The upfront tariff shall be available for the brand new machinery only.
- iv. This tariff shall be applicable only for the mine mouth projects in Thar area.
- v. Sponsors shall be free to select boilers of any origin.

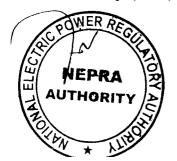








- vi. The sponsor of the project can arrange foreign financing in American Dollar (\$), British Pound Sterling (£), Euro (\in) and Japanese Yen (\in) or in any other currency as the Government of Pakistan may allow.
- vii. In case the actual premium over LIBOR/KIBOR is less than the maximum limit, the saving shall be shared in the ratio of 60:40 between power purchaser and the power producer respectively.
- viii. The debt part of the project can also be financed through mix of local and foreign financing and the IDC and debt servicing component shall be adjusted accordingly.
 - ix. In case of more than one financing plans, separate IDC shall be calculated for each plan on reference parameters.
 - x. Average debt and equity drawdown have been assumed for calculation of interest during construction and return on equity during construction period and there shall be no adjustment for actual drawdowns.
 - xi. In case there is a time lag between the construction of power complex and coal mine and the power complex becomes available earlier than the nune, the responsibility to provide coal shall be of the sponsor and the ROE component of tariff shall be adjusted accordingly depending on ROE allowed on imported/local coal usage.
- xii. The upfront tariff shall be applicable for 5,000 MW or two years from the date of notification whichever shall be earlier.
- xiii. The tariff control period from the date of COD shall be 30 years.
- xiv. Discount factor of 10% has been used for calculation of levelized tariff.
- xv. The sole criterion for dispatch of all the coal based power plants shall be the "merit order dispatch" and the variable cost shall be the basis of dispatch.
- xvi. At the time of COD, 90% of the EPC cost shall be converted into Pak Rupees using the Average of the Exchange Rates prevailing on 1st day of each month during construction period.
- xvii. In case the project approved under this upfront tariff is obligated to pay any tax on its income from generation of electricity, or any









duties and/or taxes, not being of refundable nature, are imposed on the company during the operation period, the exact amount paid by the company on these accounts shall be reimbursed on production of original receipts. This payment shall be considered as a pass-through payment spread over a period of twelve months. However, withholding tax on dividend shall not be passed through.

During operations, xviii. life of the project 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 and Japanese Yen or any other currency as the Government of Pakistan may allow) notified by the National Bank of Pakistan. The method of indexation will be as follows:

Tariff Components

Tariff Indexation & Adjustment

Fuel Cost component

Variable O&M (Foreign)

Variable O&M (Local

Fixed O&M (Foreign)

Fixed O&M (Local

Cost of Working Capital

Return on Equity
Principal Repayment
(Foreign Currency Loan)

Interest//Mark-up Payments* (Foreign Currency Loan)

Interest/Mark-up Payments* (Local Currency Loan)

Delivered Coal Price (inclusive of transportation)

at the Power Plant

US\$ to Pak Rupees & US CPI

Local CPI (General)

US\$ to Pak Rupees & US CPI

Local CPI (General)

Adjustments for relevant KIBOR variations and

average inventory cost

US\$ to Pak Rupees

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US\$/Euro/Yen/Pound to Pak Rupees (based on borrowing by the Company)

- Adjustments for relevant LIBOR or other applicable Interest Rate benchmark
- Adjustment for variation in Rs./Foreign Currency (US\$/Euro/Yen/Pound) rates as applicable

Adjustments for relevant KIBOR variations









1. NOTIFICATION

The above Order of the Authority along with 2 Annexes shall be notified in the Official Gazette in accordance with Section 31(4) of the NEPRA Act.

AUTHORITY

(Himayat Ullah Khan) Member (Maj (R) Haroon Rashid) Member

(Syed Masood ul-Hassan Nagy 14/9 Member

NEPRA

(SaifUllah Chattha)

Vice Chairman 14.9.2017

Brig (R) Tariq Saddozai)

Chairman

Upfront Tariff on Air Cooling for Thar Coal based Power Projects for Single Unit on Foreign Financing

Year	Var. FCC	Energ Ash	y Purchase		Wh)	ļ	Fixed	1 FCC			Capacit	v Purchase P	rice (PKR/K/	v/mour)			Capacity	Total	Total
1 2	Var. FCC	Ash									se Price (PKR/kW/Hour) Debt Interest Total				Charge@	Tariff	Tariff		
2	1		Lime	Var.	O&M Local	Total EPP	Rs./kW/hr.	at 85% PF (Rs./kWh)		Foreign	W/C	Insurance	ROE	Repayment	Charges	CPP	85%	Rs. /kWh	Cents/kWh
2		Disposal	Stone	Foreign			4.2204	4.9652	0.1572	0.1587	0.1007	0.1255	0.9850	0.9613	0.7117	3.2001	3.7649	10.4637	9.9654
	1.2980	0.2200	0.0900	0.0757	0.0500	1.7337 1.8775	3.2503	3.8239	0.1572	0.1587	0.1007	0.1255	0.9850	1.0182	0.6547	3.2001	3.7649	9.4663	9.0155
	1.4419	0.2200	0.0900	0.0757	0.0500	· · · · · · · · · · · · · · · · · · ·	2.7032	3.1803	0.1572	0.1587	0.1007	0.1255	0.9850	1.0786	0.5944	3.2001	3,7649	8.7042	8.2897
3_	1.3235	0.2200	0.0900	0.0757	0.0500	1.7591	2.6736	3.1454	0.1572	0.1587	0.1007	0.1255	0.9850	1.1425	0.5305	3.2001	3.7649	8.6236	8.2130
4	1.2777	0.2200	0.0900	0.0757	0.0500	1.7133	2.6494	3.1170	0.1572	0.1587	0.1007	0.1255	0.9850	1.2103	0.4627	3.2001	3.7649	8.5499	8.1428
5	1.2324	0.2200	0.0900	0.0757	0.0500	1.6680 1.6539	2.5891	3.0460	0.1572	0.1587	0.1007	0.1255	0.9850	1.2820	0.3910	3.2001	3.7649	8.4649	8.0618
6	1.2183	0.2200	0.0900	0.0757	0.0500	1.6539	2.5891	3.0460	0.1572	0.1587	0.1007	0.1255	0.9850	1.3580	0.3150	3.2001	3.7649	8.4649	8.0618
7	1.2183	0.2200	0.0900	0.0757	0.0500	1.6539	2.5891	3.0460	0.1572	0.1587	0.1007	0.1255	0.9850	1.4385	0.2345	3.2001	3.7649	8.4649	8.0618
8	1.2183	0.2200	0.0900	0.0757	0.0500	1.6317	2.5888	3.0456	0.1572	0.1587	0.1007	0.1255	0.9850	1.5237	0.1492	3.2001	3.7649	8.4422	8.0402
9	1.1961	0.2200	0.0900	0.0757	0.0500	1.6317	2.5888	3.0456	0.1572	0.1587	0.1007	0.1255	0.9850	1.6141	0.0589	3.2001	3.7649	8.4422	8.0402
10	1.1961	0.2200	0.0900	0.0757	0.0500 0.0500	1.5344	1.4855	1.7477	0.1572	0.1587	0.1007	0.1255	0.9850			1.5272	1.7967	5.0787	4.8369
11	1.0988	0.2200	0.0900	0.0757	0.0500	1.5330	1.4697	1.7290	0.1572	0.1587	0.1007	0.1255	0.9850		_	1.5272	1.7967	5.0587	4.8178
12	1.0974	0.2200	0.0900	0.0757	0.0500	1.5316	1,4538	1.7104	0.1572	0.1507	0.1007	0.1255	0.9850	~	-	1.5272	1.7967	5.0386	4.7987
13	1 0960	0.2200	0.0900	0.0757	0.0500	 a.£816	1,4536		0.1573	0.1527	U 1007	0.1255	0.9850	. /	·	1.5272	1.7967	5.0386	4,7037
	1.0000	<u> </u>		0.6767	0.0560	1.5316	1.4538	7104		- 0.1687	0.1007	0.1255	0.9850			1.5272	1.7967	5.0386	4,7887
10.1	1.0930	- 0.2250	0.0900	0.0757	0.0500	1.5824	1.4545	1.7112	0.1572	0.1587	0.1007	0.1255	0.9850		-	1.5272	1.7967	5.0903	4.8479
16 17	1.1468	0.2200 0.2200	0.0900	0.0757	0.0500	1.5824	1.4545	1,7112		0.1587	0.1007	0.1255	0.9850		-	1.5272	1.7967	5.0903	4.8479
18	1.1468	0.2200	0.0900	0.0757	0.0505	1. 124	1,4546	1711		0.1657	- 0.1007	e.1255	0.9850			1.5272	1.7967	5,0903	4,5473
19	1.1468	0 2200	0.0900	0.6757	0.6500	1.6824	1.4545	1,7112	,	u. 587	0.1007	0.1255	0.9850	-	-	1.5272	1.7967	5.0903	4.8(79
20	1.1468	0.2200	0.0900	0.0757	0.0500	1.5824	1.4545	1.7112	0.1572	0.1537	0.1007	0.1255	0.9850		-	1.5272	1.7967	5.0903	4.8479
21	1.1468	0.2200	0.0900	0.0757	0.0500	1.5824	1.4545	1.7112	0.1572	0.1587	0.1007	0.1255	0,9850	-		1.5272	1.7967	5.0903	4.8479
22	1.1468	0.2200	0.0900	0.0757	0.0500	1.5824	1.4545	1.7112	0.1572	0.1587	0.1007	0.1255	0.9850		-	1.5272	1.7967	5.0903	4.8479
23	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0.1007	0.1255	0.9850	_	-	1.5272	1.7967	4.8762	4.6440
24	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0.1007	0.1255	0.9850	-	-	1.5272	1.7967	4.8762	4.6440
25	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0.1007	0.1255	0.9850		-	1.5272	1.7967	4.8762	4.6440
26	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0,1007	0.1255	0.9850			1.5272	1.7967	4.8762	4.6440
27	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0,1007	0.1255	0.9850			1.5272	1.7967	4.8762	4.6440
28	0.9362	0.2200	0.0900	0.0 7 57	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0.1007	0.1255	0.9850	-		1.5272	1.7967	4.8762	4.6440
29	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0.1007	0.1255	0.9850		-	1.5272	1.7967	4.8762	4.6440
30	0.9362	0.2200	0.0900	0.0757	0.0500	1.3718	1.4516	1.7077	0.1572	0.1587	0.1007	0.1255	0.9850	-		1.5272	1.7967	4.8762	4.6440
Avera	ge							.,		,	,				r · ·	1	T		
1-10	1.2621	0.2200	0.0900	0.0757	0.0500	1.6977	2.8442	3.3461	0.1572	0.1587	0.1007	0.1255	0.9850	1.2627	0.4103	3.2001	3.7649	8.8087	8.3892
11-30	1.0501	0.2200	0.0900	0.0757	0.0500	1.4857	1.4555	1.7124	0.1572	0.1587	0.1007	0.1255	0.9850	0.0000	0.0000	1.5272	1.7967	4.9948	4.7569
1-30	1.1207	0.2200	0.0900	0.0757	0.0500	1.5564	1.9184	2.2570	0.1572	0.1587	0.1007	0.1255	0.9850	0.4209	0.1368	2.0848	2.4527	6.2661	5.9677
Level	zed					1				т		1	0.0055	0.7000	0.0000	0.0470	2.0700	7 5020	7,2228
1-30	1.2100	0.2200	0.0900	0.0757	0.0500	1.6457	2.4299	2.8587	0.1572	0.1587	0.1007 Re /kWh	0.1255	0.9850	0.7869 Cents/k	0.3036	2.6176	3.0796	7.5839	1.2228

Levelized Tariff =

7.5839 Rs./kWh

7.2228 Cents/kWh





Siddiqsons Energy Limited Upfront Tariff - Debt Servicing on Foreign Financing

Single Unit on Air Cooling Technology

Single Unit on Air Cooling Technology												
Period	Principal Million \$/MW	Principal Repayment Million \$/MW	Interest Million \$/MW	Balaance Million \$/MW	Debt Service Million \$/MW	Principal Repayment Rs./kW/hour	Interest Rs./kW/ Hour	Debt Servicing Rs./kW/h				
1	0.97	0.02	0.01	0.95	0.03							
2	0.95	0.02	0.01	0.93	0.03							
3	0.93	0.02	0.01	0.91	0.03							
4	0.91	0.02	0.01	0.90	0.03	0.9613	0.7117	1.6730				
1st Year		0.07	0.05		0.13							
5	0.90	0.02	0.01	88.0	0.03							
6	0.88	0.02	0.01	0.86	0.03							
7	0.86	0.02	0.01	0.84	0.03							
8	0.84	0.02	0.01	0.82	0.03	1.0182	0.6547	1.6730				
2nd Year		0.08	0.05		0.13							
9	0.82	0.02	0.01	0.80	0.03							
10	0.80	0.02	0.01	0.78	0.03							
11	0.78	0.02	0.01	0.76	0.03							
12	0.76	0.02	0.01	0.73	0.03	1.0786	0.5944	1.6730				
3rd Year		0.08	0.05		0.13							
13	0.73	0.02	0.01	0. 7 1	0.03							
14	0.71	0.02	0.01	0.69	0.03							
15	0.69	0.02	0.01	0.67	0.03							
16	0.67	0.02	0.01	0.65	0.03	1.1425	0.5305	1.6730				
4th Year	<u> </u>	0.09	0.04	L	0.13			-h				
17	0.65	0.02	0.01	0.62	0.03	T	T T	T T				
18	0.62	0.02	0.01	0.60	0.03		<u> </u>	· · · · · · · · · · · · · · · · · · ·				
19	0.60	0.02	0.01	0.58	0.03		† - · · · ·	1				
20	0.58	0.02	0.01	0.55	0.03	1.2103	0.4627	1.6730				
5th Year	1	0.09	0.04		0.13	<u> </u>	1	<u> </u>				
21	0.55	0.02	0.01	0.53	0.03	ĭ	1	1				
22	0.53	0.02	0.01	0.51	0.03			1				
23	0.51	0.02	0.01	0.48	0.03			·				
24	0.48	0.03	0.01	0.46	0.03	1.2820	0.3910	1.673				
6th Year	0.40	0.10	0.03	1	0.13	L						
25	0.46	0.03	0.01	0.43	0.03	r	T	T				
26	0.43	0.03	0.01	0.40	0.03	 		 				
27	0.40	0.03	0.01	0.38	0.03		-	 				
28	0.40	0.03	0.01	0.35	0.03	1.3580	0.3150	1.673				
7th Year	0.50	0.10	0.02	1	0.13	1	1	1				
29	0.25		0.01	0.32	0.03		Υ	T				
30	0.35 0.32	0.03				-	1	 				
31				0.27	0.03							
32	0.30	0.03	0.00		0.03	1.4385	0.2345	1.673				
8th Year	0.27	0.03	0.02	0.24	0.03	1.1000	0.2010	1 ,,,,,				
	1 0.04			0.04		1	т	T				
33	0.24		0.00	0.21	0.03	· }		 				
34	0.21	0.03	0.00		0.03	 		- 				
35 36	0.18				0.03		0.1492	1.673				
9th Year	0.15	0.03 0.12	0.00	0.12	0.03	1.0201	0.1432	1.070				
						T		T				
37	0.12			0.00	0.03			 				
38	0.09		0.00		0.03							
39	0.06			0.03	0.03		1	1.673				
40	0.03	0.03	0.00	0.00	0.03		0.0589	1 67				



