



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/Consultant(RE/Tech)/LAG-02/17698-17700
September 21, 2022


Subject: **Order of the Authority in the matter of Request of Jamshoro Power Company Ltd. (JPCL) for approval of Start-up Costs for Cold, Warm and Hot Start of its Units**

Dear Sir,

Enclosed please find herewith the subject Order/Decision of the Authority (06 Pages) in the matter of Request of Jamshoro Power Company Ltd. (JPCL) for approval of Start-up Costs for Cold, Warm and Hot Start of its Units.

2. The Order/Decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 days from the intimation of this Order/Decision. In the event the Federal Government fails to notify the subject Order/Decision or refer the matter to the Authority for reconsideration, within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above


21 09 22
(Syed Safeer Hussain)

Secretary
Ministry of Energy (Power Division)
'A' Block, Pak Secretariat,
Islamabad

CC:

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

Order of the Authority in the Matter of Request of JPCL for Approval of Start-up Costs for Cold, Warm and Hot Start of its Units

Background & Introduction:

Jamshoro Power Company Limited (JPCL) in its Tariff Modification Petition dated October 19, 2020 submitted that its existing Tariff determination does not cater start-up costs. JPCL stated that in a similar matter of Northern Power Generation Company Limited (NPGCL) the Authority decided that Start-up costs should be in line with IPPs and that a separate invoice should be raised based on actual cost in accordance with respective PPAs.

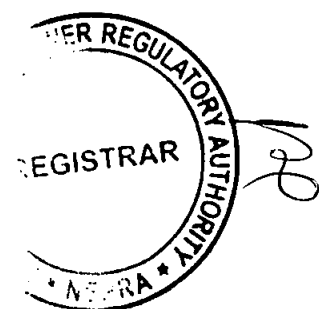
2. JPCL further stated that in matter of NPGCL, the Authority had directed NPGCL to settle matter with CPPA-G and to submit for Authority's approval. JPCL in the matter requested Start-up costs with effect from Nov 26, 2010 (JPCL's execution of PPA) in line with mechanism proposed by JPCL to CPPA-G.

Proceedings:

3. Jamshoro Power Company Limited (JPCL) in its Tariff Modification Petition dated Oct. 19, 2020 requested NEPRA to determine its start-up charges with effect from Nov. 26, 2010 in line with mechanism proposed by JPCL to CPPA-G. CPPA-G in the matter apprised that it had returned the proposed mechanism to JPCL in October 2020, since no provision existed in Tariff determination by NEPRA as well as in PPA. CPPA-G further requested the Authority to look into both cases of JPCL and NPGCL in light of earlier correspondences in the matter of NPGCL. The Authority thereafter, in decision of Tariff modification petition of JPCL directed to club cases of JPCL and NPGCL.

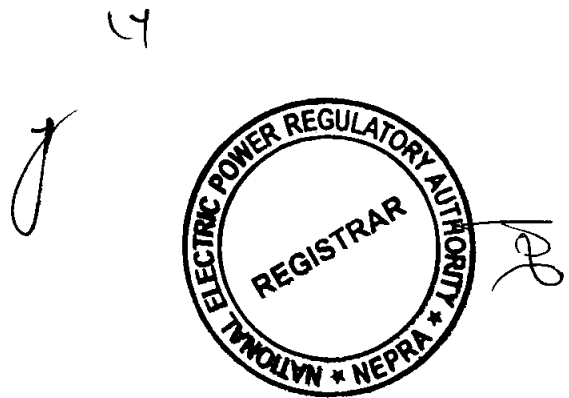
4. To proceed in the matter, a discussion meeting was also held among CPPA-G, NPGCL, JPCL, NPCC and NEPRA on August 2, 2021 at NEPRA. In the meeting, it was apprised that the provision of start-up costs existed in PPA. Further, the stakeholders agreed that CPPA-G shall review and carryout due diligence of the costs claimed by JPCL. Accordingly, CPPA-G submitted start-up costs of different units of JPCL for approval of the Authority.

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5. The Authority analysed the submissions made by CPPA-G. The Authority noted that Modification petition was filed by JPCL in Oct. 19, 2020 requesting the allowance of Start-up costs whereas in its petition JPCL was requesting the Start-up costs since 2010. The Authority also noted that CPPA-G & JPCL in their calculations had incorporated cost of HSD and auxiliary /imported energy. However, these components had already been allowed as part of variable component of Tariff of JPCL (Ref. Authority decision dated September 12, 2014). The Authority further noted that in the submissions, the cost of External Steam Source/Auxiliary Boiler has been included in all the modes of Start-up (i.e. Cold, Warm and Hot). However, the same was required only in case of Cold Start-up.

6. Accordingly, the submissions of CPPA-G/JPCL were revised. The adjusted costs in matter of start-up are as under:



Unit-1 (Block-1):

Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost HSFO (Rs.)
	Consumption of HSFO (M.T.)	Cost of HSFO (Rs.)		
Cold	66.27	4,831,029	662,093	5,493,122
Warm (400 hrs)	25.02	1,823,797	-	1,823,797
Warm (240 hrs)	26.74	1,949,096	-	1,949,096
Hot	13.37	974,548	-	974,548

Reference Rate:	HSFO=	72897	Rs/MT
Reference CV:	HSFO CV=	40486	Btu / Kg

Unit-2 (Block-1):**(i). Start-up on Indigenous Gas/RLNG**

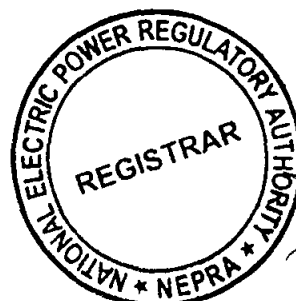
Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost I.Gas/RLNG (Rs.)
	Consumption of I.Gas/RLNG (MMBTU)	Cost of I.Gas/RLNG (Rs.)		
Cold	1938	1,140,099	535,729	1,675,828
Warm	1425	838,308	-	838,308
Hot	850	500,190	-	500,190

Reference Rate:	Indigenous Gas/RLNG=	588.23	Rs/MMBTU
Reference CV:	Indigenous Gas/RLNG CV=	950.091	BTU/CFT

(ii). Start-up on HSFO

Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost HSFO (Rs.)
	Consumption of HSFO (M.T.)	Cost of HSFO (Rs.)		
Cold	48	3,499,056	535,729	4,034,785
Warm	35	2,551,395	-	2,551,395
Hot	21	1,530,837	-	1,530,837

Reference Rate:	HSFO=	72897	Rs/MT
Reference CV:	HSFO CV=	40485.69	Btu / Kg



Unit-3 (Block-1):**(i). Start-up on Indigenous Gas/RLNG**

Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost I.Gas/RLNG (Rs.)
	Consumption of I.Gas/RLNG (MMBTU)	Cost of I.Gas/RLNG (Rs.)		
Cold	1938	1,140,099	535,729	1,675,828
Warm	1425	838,308	-	838,308
Hot	850	500,190	-	500,190

Reference Rate:	Indigenous Gas/RLNG=	588.23	Rs/MMBTU
Reference CV:	Indigenous Gas/RLNG CV=	950.091	BTU/CFT

(ii). Start-up on HSFO

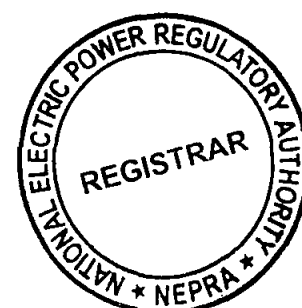
Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost HSFO (Rs.)
	Consumption of HSFO (M.T.)	Cost of HSFO (Rs.)		
Cold	48	3,499,056	535,729	4,034,785
Warm	35	2,551,395	-	2,551,395
Hot	21	1,530,837	-	1,530,837

Reference Rate:	HSFO=	72897	Rs/MT
Reference CV:	HSFO CV=	40485.69	Btu / Kg

Unit-4 (Block-1):**(i). Start-up on Indigenous Gas/RLNG**

Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost I.Gas/RLNG (Rs.)
	Consumption of I.Gas/RLNG (MMBTU)	Cost of I.Gas/RLNG (Rs.)		
Cold	1938	1,140,099	535,729	1,675,828
Warm	1425	838,308	-	838,308
Hot	850	500,190	-	500,190

Reference Rate:	Indigenous Gas/RLNG=	588.23	Rs/MMBTU
Reference CV:	Indigenous Gas/RLNG CV=	950.091	BTU/CFT



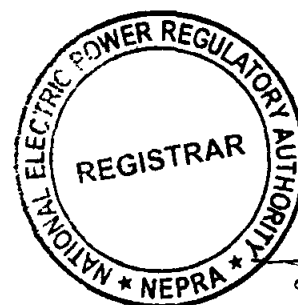
(ii). Start-up on HSFO

Mode of Start-up	Fuel Consumption		Cost of Steam Source (Rs.)	Total Startup Cost HSFO (Rs.)
	Consumption of HSFO (M.T.)	Cost of HSFO (Rs.)		
Cold	48	3,499,056	535,729	4,034,785
Warm	35	2,551,395	-	2,551,395
Hot	21	1,530,837	-	1,530,837

Reference Rate:

Reference CV:

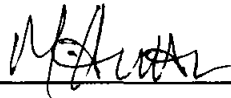
HSFO=	72897	Rs/MT
HSFO CV=	40485.69	Btu / Kg



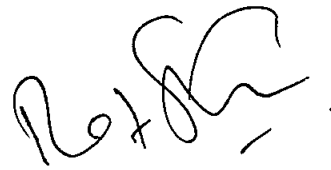
Analysis and Decision of the Authority:

7. The Authority in the matter approved Start-up Cost of different units of Jamshoro Power Company Limited (JPCL) as given in paragraph 6 of this decision with effect from October 19, 2020. The Authority further decided that all the reference values used for calculation of Start-up Charges i.e. (i). Rates of fuel; and (ii) CV of fuel will be applicable/adjusted as per actual.

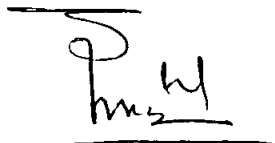
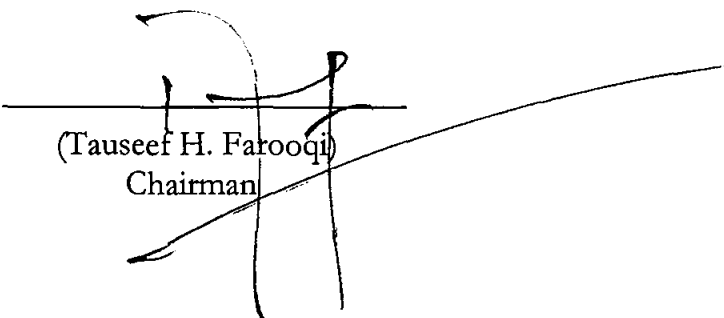
Authority



(Engr. Maqsood Anwar Khan)
Member



(Rafique Ahmed Shaikh)
Member


21 09 22
(Tauseef H. Farooqi)
Chairman