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CE/PP/CERC/ 14051

Date: 20.05.2019

To,

Mr. Sanjay Kumar Jha,

Secretary,

Central Electrical Regulatory Commission

New Delhi

Subject: Comments on CERC Staff Paper on Methodology for Compilation of Coal Price Index applicable for Power Sector

Reference: CERC Public Paper dated 25.04.2019

Sir,

Hon'ble Commission has published Staff Paper on 25.04.2019, on above subject to carry out an exercise for revision of methodology for computation of escalation indices for the non-coking coal used in power generation.

Hon'ble Commission has requested to submit the views and suggestions on the Staff Paper latest by May 20, 2019.

In view of above please find enclosed here with MSEDCL's Comments on Methodology for Compilation of Coal Price Index applicable for Power Sector.

Thanking You.

Encl: as above

Yours faithfully,

Paresh Bhagwat

Chief Engineer (Power Purchase)

Comments on CERC Staff Paper on Methodology for Compilation of Coal Price Index applicable for Power Sector

Background:

The Hon'ble commission, in pursuance of Ministry of Power (MOP) Notification dated 19.01.2005 on Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees, has been notifying various escalation rates including the escalation rate for domestic coal, every six months, for the purpose of bid evaluation and payment (from 1.4.2014 onwards only for payment).

Keeping in view the differential increase in price of Non-coking coal applicable for power sector, the Hon'ble commission has developed its own index considering the specific needs of the power sector. "Revised Methodology for Determining the Escalation Factors and Other Parameters to be notified by CERC as per the Amendment to the Competitive Bidding Guidelines dated 27.3.2009" developed by CERC in July 2009 is being used for computing the escalation rate for domestic coal for payment. The Hon'ble Commission has been using the methodology to calculate escalation rates including the escalation rate for domestic coal, every six months, for the purpose of bid evaluation and payment (from 1.4.2014 onwards only for payment).

However, since existing methodology of computing escalation rate for domestic coal does not capture the movement in price of non-coking coal applicable for power sector notified by Coal India Limited (CIL), various stakeholders (power producers, mainly Case-1 bidders) have sought for revision in the existing methodology of computing the escalation rate for domestic coal. The paper suggest that in the notification released by CIL dated May 2016, it can be observed that there is a substantial increase in the price of Non-coking coal applicable for power sector when compared with the price of Noncoking coal applicable for other than power sector.

Considering the fact that the power sector predominantly uses grade G7-G14 coal, the Hon'ble commission has tri-furcated WPI for non-coking coal into G1-G6, G7-G14 and G15-G17. However, in the absence of customized compilation of WPI for non-coking coal for exclusive use of power sector and in view of the observed issues as mentioned above, Hon'ble Commission has proposed a methodology for compilation of Coal Price Index applicable for Power Sector.

MSEDCL's Comments

MSEDCL welcomes the approach undertaken by the Hon'ble Commission of compiling an index based on the price of Non-coking coal applicable for the power sector capturing the impact of the grade wise coal. Consideration of price of Non-coking coal

applicable for power sector would represent true variation in price which is required to be adjusted against the energy charges as bided by Generator for being revenue neutral.

Though the proposed methodology has edge over the existing methodology, MSEDCL would like to submit its observation/suggestion/concerns related to proposed methodology in order to calculate a more realistic approach for adjustment in energy charges as bided by Generator so as to restitute the same financial position of Generator due to the increase/decrease in the coal price as compares to one at the time of bid. The ultimate aim of the determination of escalation rates and related methodology for treatment to energy charges is to make sure that change in coal prices should be passed on as per concept of neutrality and in order to maintain the same financial position of the generator/licensee despite of change in coal prices. MSEDCL proposes as follows:

1. Generic Methodology instead of specific index:-

Hon'ble commission has suggested that the coal grades G7-G14 be used for calculation of price using Laspeye's formula, whereby the weightage is given to price movement as well as the value of the respective coal. As per the proposed methodology, the cumulative coal price index is arrived for the grade G7-G14 to be applicable for payment purpose, irrespective of the coal grade procured by Generator.

MSEDCL would like to bring to the notice of the Hon'ble commission that the usage of coal grade varies from generator to generator depending on various factors such as Coal linkage, Fuel Supply Agreement, Coal production, availability / allocation of coal grade, Coal Mine, boiler design heat rate, etc. Also, there are instances whereby the coal procurement varies on a month to month basis depending on production, requirement, materialization, etc.

Considering this fact, it would not be appropriate to use the weightage of all the grade of coal used by the whole Power sector (G7-G14) while calculating the payment to be made against the energy charges quoted by a specific generator on account of change in the coal prices. The Hon'ble Commission in the "Staff Paper on the Methodology for Compilation of Coal Price Index applicable for Power Sector" has calculated Price Index for April 2018 for illustration purpose as highlighted below against which the Coal Price Index calculated is 108.73:

		Compila	ation of Elem	entary Pric	ce Index, A	pril 2018	
Grades of Coal		CIL			Elementary		
	Base Price (2017- 18)	Current Price (April 2018)	Price Relative = (current price/base price)*100	Base Price (2017- 18)	Current Price (April 2018)	Price Relative = (current price/base price)*100	Price Index, April 2018 (Geometric Mean of Price Relatives) (II)
G.7	1676	1926	114.92	2011	2311	114.91	114.92
G8	1431	1465	102.37	1714	1757	102.50	102.44
.G9	1110	1140	102.72	1332	1368	102.72	102.72
G10	991	1024	103.35	1192	1228	103.04	103.19
G11	844	955	113.15	1011	1145	113.25	113.20
G12	790	886	112.19	946	1063	112:36	112.28
G13	743	817	109.94	889	980	110.29	110.12
G14	673	748	111.11	808	897	111.05	111.08

In the above case, the cumulative coal index is 108.73 whereby the price index of G8-G10 is lower and other Grade has a higher Price Index. In the said case, Generator using G8-G10 Coal will be in advantageous position and generator using other grade coal will be in disadvantageous position.

Therefore, if a particular generator is using Coal of grade say G11 and G12, in that case, while determining compensation for the generator, it should not be derived by considering the weightage of coal grade from G7-G14. Instead the escalation rate shall be computed based on the actual grade of coal as received by the generator.

Further, the generator signs the PPA with coal companies are allocated specific grade of coal mentioned in the FSA and the period of FSA is generally 20-25 years. Thus the chances of getting coal to a generator other than FSA grade coal are very less.

In view of this, MSEDCL wants to submit that the coal price index for generators may be worked out by considering the actual grade of coal which has been used by the Generator. Hon'ble CERC is requested therefore to come up with a Generic formula instead of specific escalation index to calculate the price index of coal applicable for all the PPAs under section 63 of the Act. The same shall be used by the licensee to compute the coal price index for it's tied up generators considering the actual coal procurement by generator grade wise. As per the said methodology, the Coal Price Index shall be calculated every six months.

2. Principle of Neutrality and Restitution of Same Economical position: -

It may be noted that the PPAs between a generator and a licensee also suggest

that the financial condition of the licensee/generator shall be restored in case of any event of Change in Law. For purpose determination of the Financial impact in various matter of NCDP 2013, Hon'ble commission and other SRCs has followed the principle of Restitution of economic position and any event of change in law is adjusted so as to not provide any of the concerned stakeholder to be in a state of unprecedented financial gain/loss. Therefore, it seems more prudent that the calculation of coal price index be done on the basis of actual grade of coal received/used by the generator instead of going for a composite methodology where the CPI is calculated based on a band of grades of coal.

MSEDCL is a revenue neutral company. Also, the proposed methodology by MSEDCL promotes the same. It may prove useful in avoiding any extra gain/loss to the concerned stakeholders i.e. the generators or the licensees as is evident from the methodology proposed in the Staff Paper issued by the Hon'ble Commission.

In the methodology proposed by the Hon'ble commission, the grade band considered for determining the index band may result to increased/decreased revenue for the stakeholders and affect the financial stability of the respective stakeholder.

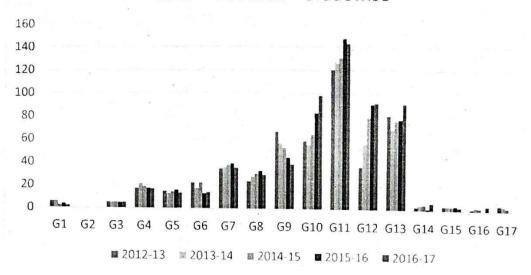
Therefore, it is requested not be compel to use the coal price index based on prices of the entire grade from (G7-G14) applicable for Power sector. Else the objective of realistic compensation on account of change in coal prices will be defeated.

3. Grade Limitation: -

As per the present practices of the coal companies, the invoices are raised on the basis of the coal grade allocated as per FSA and any difference in grade is address by way of debit/credit note. Therefore, having a grade band of G7-G14 for identifying composite coal price index may not be rewarding for generator or licensee and therefore, it is necessary to have a grade specific coal price index as proposed by MSEDCL.

Also, as per Coal Directory of India, 2016-17 (Coal Statistics), Gradewise Production of Non Coking Coal in India during Last Ten Years highlights that the major production of coal from FY 2012-13 to FY 2016-17, is in between grade G9 to G13 and therefore, consideration of G7-G14 Grade may not be appropriate.

Coal Production - Gradewise



Grade 201		2-13	2013-14		2014-15		2015-16		2016-17	
	MT	%	MT	%	MT	%	MT	%	MT	%
G1	5.90	1%	6.13	1%	2.74	0%	3.83	1%	2.42	0%
G2	0.48	0%	0.42	0%	0.57	0%	0.34	0%	. 0.31	0%
G3	5.62	1%	5.37	1%	5.47	1%	5.19	1%	5.28	1%
G4	17.62	3%	21.53	4%	19.03	3%	17.67	3%	17.32	3%
G5	15.16	3%	13.24	3%	14.79	3%	16.30	3%	13.60	2%
G6	22.71	4%	17.71	3%	22.68	4%	13.11	2%	14.14	2%
G7	34.84	7%	35.84	7%	37.84	7%	39.04	7%	35.57	6%
G8	24.19	5%	28.27	6%	30.52	6%	33.15	6%	29.57	5%
G9	66.82	13%	57.00	11%	52.70	10%	44.58	8%	38.92	7%
G10	59.12	12%	55.41	11%	64.41	12%	82.86	14%	98.18	16%
G11	120.37	24%	126.33	25%	130.70	24%	147.46	25%	143.23	24%
G12	36.93	7%	56.37	11%	79.17	14%	90.58	16%	91.79	15%
G13	81.09	16%	68.98	14%	76.35	14%	77.62	13%	90.94	15%
G14	3.17	1%	4.56	1%	5.05	1%	1.44	0%	6.42	1%
G15	3.97	1%	3.86	1%	3.81	1%	4.07	1%	3.26	1%
G16	1.63	0%	3.09	1%	2.63	0%	0.42	0%	4.51	1%
G17	5.21	1%	4.79	1%	3.26	1%	0.67	0%	0.46	0%
Total	504.82	100%	508.89	100%	551.71	100%	578.32	100%	595.91	100%

Also, MSEDCL maintains the detail of coal procurement undertaken by Generator who has participated under competitive bidding process and analysis of the same highlights that major coal allotment to the Generator in FY 2017-18 and FY 2018-19 is under Grade 11 and therefore, it will be appropriate to determine the Coal Price Index on a respective grade wise rather than arriving at the composite Price Index considering the Grade band of G7-G14:

Detail of coal procured by Generator U/s. 63 against FSA.

Grade	Quantity	Percentage		
G4	0	0.00%		
G5	43790.88	0.32%		
G6	16060.52	0.12%		
G7	67419.34	0.49%		
G8	6583.03	0.05%		
G9	3574.8	0.03%		
G10	105326.2	0.76%		
G11	13382232	96.76%		
G12	0	0.00%		
G13	177341.2	1.28%		
G14	12590.98	0.09%		
G15	3325.15	0.02%		
G16	12043.89	0.09%		

4. Grade Slippage: -

Grade slippage is common in generation business as the coal production and allocation is a Run of mine process. However, the composite methodology for calculation of coal price index and escalation rate as proposed by CERC does not take into consideration the grade slippage and subsequently the credit/debit notes, as the methodology is based on a band of grades which generally nullifies the effect of grade slippage as both the stated and received grades are covered under the range of bands (G7 to G14). This may lead to increased/decreased revenue for the generator and the licensee as the escalation rate on composite basis.

Also, in the proposed methodology of MSEDCL, the Coal Price Index of respective grade is applied in line with the invoices of CIL/WCL/SCCL and not on the coal grade that has been calculated based on the third party sampling. However, the debit/credit note are issued by CIL post one month to 3 month, due to this, the credit/debit note released post the sampling results are not adjusted with the licensee leading to a gain/loss in revenue for the generator as well as the licensee. Therefore, MSEDCL requests, that the impact of any debit/credit note as provided by CIL needs to be pass on to the Licensee to retain the principle of neutrality and on the ground that the generator are retain at the similar financial position.