

Comments on “Methodology for Computing the Escalation Factors and other Parameters for the Purpose of Bid Evaluation and Payment for Procurement of Power from Renewable Energy Projects Complemented with Firm Power from any other source through Competitive Bidding”:

Sl. No.	Category	As mentioned Staff Paper	Comments/ Proposed Modification	Rationale
1	Escalation Indices for Bid Evaluation		<p>It is proposed to consider bid evaluation based on first year tariff basis.</p> <p>Alternatively, a uniform rate of 2% or WPI – All Commodities of last 9 years for evaluation of bids for all the sources may be considered.</p>	<p>Considering the complexities for evaluation of bids based on levelized tariff, therefore to address the difficulties, the Standard Bidding Document has been changed and first year tariff for evaluation was adopted from 2013 onwards. The same is proposed to be considered under the tender process.</p>
2	Escalation Rate for Domestic Coal	<p>“Due to non-availability of the time series data on CERC coal price index (being available from April 2018 onwards), it is proposed to use Wholesale Price Index (WPI) for non-coking coal for computing the Escalation Rate for domestic coal for evaluation”</p>	<p>Power Sector primarily uses G7-G14 grade non-coking coal. Considering WPI for G7-G14 grade coal will be more prudent.</p> <p>Further, As the WPI of G7-G14 grade coal is available from 2012 onwards (with 2011-12 as Base), it is proposed to use WPI of G7-G14 grade non-coking coal from 2012 onwards (last 9 years) to arrive at escalation rate for evaluation of domestic coal.</p>	<p>This will provide more realistic escalation rates for domestic coal evaluation as the power generators mostly uses G7-G14 grade coal and thus it reflects the true price escalation for generation of power.</p> <p>It will also further eliminate any requirement for Base adjustment for WPI (2004-05 to 2011-12).</p>
3	Escalation Rate for Domestic Coal – Model Computation	<p>“The escalation rate for domestic coal has been computed based on the time series data</p>	<p>Since, WPI Non-Coking Coal (G7-G14 Grade) data is available up to 2020, it is proposed to use for the last 9 years – i.e. from 2012 to 2020.</p>	<p>As per WPI Manual issued by Ministry of Commerce & Industry, Linking (conversion) Factor from WPI (Base 2004-</p>

		<p>on WPI for non-coking coal for the period from 2008 to 2019. The data on WPI for non-coking coal for the period 2013-2019 has been taken from the website of Ministry of Commerce & Industry (2011-12 series) and the data for the period prior to that has been arrived at by using conversion factor on the previous WPI series (2004-05 series).”</p>	<p>The formula can be accordingly changed considering $n=9$.</p> <p>This will eliminate any usage of conversion factor from 2004-05 to 2011-12 series.</p> <p>Further, details are not provided to understand the methodology of calculation to arrive at the conversion factor used by CERC to convert WPI data from 2004-05 Base to 2011-12 Base.</p> <p>For example, for calendar year 2016, the WPI of non-coking coal with base as 2011-12 was 110.24 and with base as 2004-05, was 179.68. Based on this, the conversion factor for 2004-05 data to 2011-12 data is 0.61 (i.e. 110.24 divided by 179.68). However, as per CERC’s staff paper the conversion factor is arrived to be as follows:</p> <table border="1" data-bbox="879 868 1488 1325"> <thead> <tr> <th>Year</th> <th>As per CERC Staff Paper after Conversion of 2004-05 base to 1011-12 base</th> <th>WPI of Non-Coking Coal with 2004-05 base</th> <th>Conversion Factor used by CERC</th> </tr> <tr> <td></td> <td>A</td> <td>b</td> <td>$c=a/b$</td> </tr> </thead> <tbody> <tr> <td>2008</td> <td>62.57</td> <td>112.70</td> <td>0.56</td> </tr> <tr> <td>2009</td> <td>64.70</td> <td>116.53</td> <td>0.56</td> </tr> <tr> <td>2010</td> <td>72.84</td> <td>131.20</td> <td>0.56</td> </tr> <tr> <td>2011</td> <td>89.60</td> <td>161.38</td> <td>0.56</td> </tr> </tbody> </table>	Year	As per CERC Staff Paper after Conversion of 2004-05 base to 1011-12 base	WPI of Non-Coking Coal with 2004-05 base	Conversion Factor used by CERC		A	b	$c=a/b$	2008	62.57	112.70	0.56	2009	64.70	116.53	0.56	2010	72.84	131.20	0.56	2011	89.60	161.38	0.56	<p>05) for 2011-12 is mentioned as 1.69 for Fuel & Power category. Therefore, the conversion factor from 2004-05 base to 2011-12 base is 0.59 (i.e. 1 divided by 1.69)</p> <p>The WPI data used by CERC in the Staff paper for 2008 to 2012 is different even after using this conversion factor.</p>
Year	As per CERC Staff Paper after Conversion of 2004-05 base to 1011-12 base	WPI of Non-Coking Coal with 2004-05 base	Conversion Factor used by CERC																									
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4	Escalation Rate for Domestic Gas	“Description: The escalation rate for	The power sector or any industrial sector consumes either APM or Deepwater gas. Price																									

		domestic gas shall be computed based on the time series data on consumer price of gas for the latest 12 years.”	for APM gas and deep water gas is fixed by the Govt. Therefore it is ideal for CERC to move towards calculating the escalation rate based on the price arrived for industrial users / power sector.	
5	Escalation Rate for Imported Coal / Gas Transportation	<p>“Weighted Average Levelized Tariff as the Bidding Parameter: The bidding evaluation parameter shall be weighted average levelized tariff per unit supply of RTC power.....<i>The quoted tariff shall comprise of four part – Fixed component [RE power (fixed), non-RE power (fixed)] and Variable component [Non -RE power (escalable for fuel), and non-RE power (escalable for transportation)].....</i> and proportion of energy from RE sources and Non RE sources.”</p>	The variable component of Non-RE sources for transportation will include both transportation charges for imported coal/ gas (i.e. sea freight) and the inland transportation charges for imported coal/gas. In such cases, the levelized tariff shall be arrived at by using the CERC escalation indices for applicable for each of the components of transportation charges separately. SECI should be also advised to provide/ allow bidders to quote imported coal transportation charges and inland transportation charges component separately in the Bid document.	The escalation indices notified for transportation charges for imported fuel may not be suitably applicable for domestic inland transportation. Hence, both should be separately calculated and used using the respective escalation indices.
6	Discount Rate for Bid Evaluation	“The WACC computed in the above table (8.84%) shall be notified	The WACC computed by CERC is not a true reflection for bid evaluation for 25 years PPA.	As the bid is for 25 years, the average data of cost of equity

		as discount rate for bid evaluation”	<p>a. The cost of equity taken is considerably low for a reasonable period (9 to 12 years)</p> <p>b. The cost of debt should be based on the historical data for a reasonable period(9 to 12 years)</p> <p>Also, the amendment issued by SECI dated 09.12.2020 specified the discount rate to be 8.61%. “Evaluation of Bids:</p> <p>a. The tariffs components “A” and “B” (each quoted for 25 years), will be levelized based on the discounting factor of 8.61 %.”</p> <p>Request clarification on which discounting factor to be used for computation of Levelized tariff. A uniform discounting rate for Bid Evaluation Purpose is required.</p>	and cost of debt for a reasonable period should be considered.
7	Treatment of Forex variation for Imported Fuel and Transportation		Tariff to be quoted for imported coal / gas will have significant component of Forex. For evaluation purpose it should also be considered and an escalation rate for Forex should also be provided.	For bidders with imported coal / gas, the Forex component otherwise needs to be inbuilt in the price component and taking a view of the Forex component for a period of 25 years will be difficult.
8	Escalation Rate for Imported Gas	Japan JCC NLG CIF price considered	MoPNG has notified formulae for Deep Water Gas price. The same should be used as a base for Escalation rates.	All gases in India are procured from Qatar or from countries like US/Australia. Prices are fixed on long term basis either linked to Henry hub index or slope of Brent crude. Therefore, fixing price on JKM index is not appropriate

9	Escalation Rate for Inland Transportation of Gas	Only Tariff of HVJ pipeline is considered	Transportation charges of all the pipeline should be considered to arrive at the escalation rate. Weightage to be given based on the length of the respective pipeline	There are other pipelines other than HVJ which caters to the requirement of many power plants (like in state of AP) such as EWPL pipeline. Hence, transportation charges should reflect all the pipelines connected to national grid.
10	General		There should be atleast one month time period given to the bidders for submission of bid after finalization of escalation rates for bid evaluation	