Comments - Staff Paper 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"

Sr. No.	Document / Clause Reference	Comments / Suggestions
1.	**8.1 Escalation Rate for domestic coal (for Evaluation):** **8.5 Escalation Rate for Imported Coal (For Evaluation)**	• The staff paper fairly proposes consideration of separate indices for evaluation of bids based on Domestic and Imported coal. • This is also in line with the Competitive Bidding Guidelines of the Central Government for procurement of power and accordingly the same should be retained.
2.	**9. Discount Rate for Bid Evaluation** *"Weighted Average Cost of Capital (WACC) has been considered as discount rate and computed as under:* *WACC = Cost of Debt + Cost of Equity* *Where,* *Cost of Debt = 0.70 (Market Rate of Interest) X (1-Corporate Tax Rate)* *Cost of Equity= 0.30 (Risk Free Rate + b (Equity Market Risk Premium))* *The computation of WACC can be seen in the following table.*	Hon'ble commission has proposed 'Cost of Debt' as Post-tax and 'Cost of Equity' as Pre-tax. Principle adopted for calculating Discount rate shall be based on Tax considered in Tariff calculation, 'Cost of Debt' and 'Cost of Equity' & should be same for all. Hon'ble commission may calculate WACC based on 'Cost of Debt' and 'Cost of Equity' either Post-tax OR Pre-tax. Since Tariff's are derived inclusive of Direct Taxes, Discounting rate used for Bid Evaluation shall also be inclusive of Tax i.e. Pre-Tax. In case Hon'ble commission still decides to consider Post Tax WACC following is suggested: • The Corporate tax rate should be inclusive of surcharge.

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DISCOUNT RATE TO BE USED FOR BID EVALUATION		
Weighted Values	*Cost of Debt/Equity*	*WACC (%)*
1. Cost of Debt (after tax)		
0.70(Cost of Debt)x(1-CTR)	*6.21*	
2. Cost of Equity		
0.30((RF+b (ERP))	*2.63*	
Discount Rate (1+2)		*8.84*
Assumptions used for computing the Discount Rate		
Components of Debt/Equity		*Assumptions (%)*
Debt		*70.00*
Equity		*30.00*
Corporate Tax Rate (CTR)		*22.00*
Risk Free rate (RF)		*6.99*
Beta Value (b)		*0.72*
Equity Market Risk Premium (ERP)		*2.47*
Cost of Debt		*12.67*
Cost of Equity		*8.75*

The Debt and Equity of 70:30 has been assumed based on CERC norms on Debt and Equity in its Tariff Regulations for the 2019-24 period. ***The basic corporate tax rate proposed in the Union Budget for the year 2020-21 (i.e. excluding surcharge and cess) has been assumed while computing the discount rate.***
While calculating the cost of debt, the market rate of interest is being linked to the marginal cost of funds based lending rate (MCLR) that refers to the minimum interest rate of a bank below which it cannot lend, except in some cases allowed by the RBI. The market rate of interest for the year 2019 shall be taken as the MCLR (9.17%, i.e., average of MCLR of five major banks) +</td><td>

- Similarly, the Cost of Equity (calculated based on CAPM model) should be after tax (including surcharge).

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	350 basis points. Accordingly, the market rate of interest has been taken as 12.67%. *10 year GOI securities rate for 2019 is being considered as the risk-free rate.* *For the calculation of cost of equity, the market risk premium is assumed as the difference between the expected market return and the risk free rate. Accordingly, the market risk premium in this Notification has been arrived at by subtracting the average risk-free rate for the last 10 years from the average rate of return on market portfolio over the past 10 years. Sensex values for the past eleven years have been used to arrive at rate of return on the market portfolio for the past 10 years. Historical approach has been adopted for arriving at the expected market return assuming the expected future return to be the same as past returns. The beta value has been computed based on the data on Bombay Stock Exchange (BSE) Indices for Power Sector and Sensex for the year 2019.* *The WACC computed in the above table (8.84%) shall be notified as discount rate for bid evaluation."*	