

Rajasthan Urja Vikas Nigam Limited

CIN-U40104RJ2015SGC048738

Regd. Office: Vidyut Bhawan, Jyoti Nagar, Jaipur-302005

Office of the Superintending Engineer (RA),

132 KV GSS Premises, CalgiriRoad, Jaipur

No./SE(RA)/RUVNL//F. / D.

36

Dated

30.04.2021

To,

The Registry

Central Electricity Regulatory Commission

Chanderlok Building, 36, Janpath,

New Delhi- 110001

Sub: - Submission of Comments on draft order (Suo-motu) in Petition No. 04/SM/2021 of Hon'ble CERC.

Ref: - No. L-1/259/2021/CERC Date: 12th April 2021 of CERC, New Delhi.

In reference to above cited subject and reference, the comments/suggestions on draft order (Suo-motu) in Petition No. 04/SM/2021 of Hon'ble CERC, submitted by Rajasthan Urja Vikas Nigam Limited for kind consideration.

Enclosed: - Comments as above (Page no. 1 to 6)

Yours Faithfully

B.S. Jaiswal

B.S. Jaiswal

Superintending Engineer

Regulatory Affairs

RUVNL, Jaipur

Comments on Draft order by Hon'ble CERC on Compensation Mechanism for Competitively Bid Thermal Generating Stations for Change in Law on account of compliance of the Revised Emission Standards of the MoEF&CC

Comments/suggestions Para wise on the draft order in Petition No. 04/SM/2021 of Hon'ble CERC.

Para 1 to 30 – No comments

| Para | Description | Remarks |
|----------|---|--|
| 31 to 35 | <p>Useful life of FGD system and depreciation allowed</p> <p><i>"We are of the view that the useful life of the generating station is to be considered 40 years in line with the Companies Act, 2013. The Commission has considered the useful life of the generating station based on life cycle of major equipment of thermal generating station. The life of emission control system has been considered as 25 years in line with the other major equipment of generating station...."</i></p> <p><i>"Accordingly, in all cases irrespective of balance useful life of the generating plant, 90% of additional capital expenditure on account of installation of ECS (considering salvage value of 10%) shall be recovered by the generating company in 25 years as depreciation (straight line method @3.6% per year)...."</i></p> | <ul style="list-style-type: none"> • For plants that have been commissioned in the last 15 years and having useful life of 40 years, the consideration of 25 years as useful life of FGD systems is logical. • However, in cases where the period of PPAs may be less than 40 years, there should not any burden of "change in law" on the procurer post expiry of the period of PPA. • Also, in cases where plants are not contracted fully or PPA is for a shorter period (3 or 5 years), installing FGD shall further increase the FC & VC. Also, the recovery shall be for the entire life of the plant. Considering the current scenario wherein there is excess surplus capacity available, once a PPA contracted for short/medium term is over, the Generator with high FCs (ECS added) shall find it more difficult to contract further leading to difficulty in recovery of costs. |

B.S. Jaiswal

B. S. Jaiswal
SE (RA), RUVNL



| Para | Description | Remarks |
|----------|---|---|
| 36 to 40 | <p>Cost of Additional Capital Expenditure (COCe)</p> <p><i>The cost of capital employed during the year shall be worked out as follows:</i></p> $COCe(n) = NFA(n) \times WAROI(n) / 100$ <p>Where,</p> $NFA(n) = ACEe - [(n-1)X (DEPe)]$ <p>COCe: Servicing cost of Additional Capital Expenditure in Rupees per annum;</p> <p>NFA(n) is the net fixed asset of the of the year "n";</p> <p>WAROI(n) is the weighted average rate of interest (in %) worked out based on weighted average rate of interest on loans of the generating station including ECS or at the rate of Marginal Cost of Funds based Lending Rate (MCLR) of State Bank of India (for one year tenor) as on 1st April of the year plus 350 basis points, whichever is lower.</p> | <ul style="list-style-type: none"> • It is welcome step by the Hon'ble CERC to not allow cost of equity to be included in the COCe computation. The recovery should not be a profit making venture and should be just enough to recover costs of installation of ECS. • In the component of WAROI(n), the rate of interested should be reduced from MCLR + 350 basis points to MCLR + 250 basis points • Further, the Commission before approving the same is requested to review and undertake prudence check before approving the same. • Also, since principle of restitution shall be applicable i.e. carrying cost from the date of change of law till it is approved by Regulatory Commission, the Commission is requested to review that there is no delay on the part of the generator in filing or completion of the installation. In case, there is a delay in installation on the part of the generator, there shall be delay in filing of petition based on actual costs and subsequent delay in approving of the legitimate expenses. In such a scenario, the carrying cost should not be passed on to the procurer. |

RR/04

B. S. Jaiswal
SE (RA), RUVNL



| Para | Description | Remarks |
|----------|--|--|
| 41 to 44 | <p>Additional Operation & Maintenance expenses (O&Me)</p> <p><i>"we propose that the additional revenue expenses for operation and maintenance (O&Me) for the first two years of operation (including part financial year), shall be based on 2% of the additional capital expenditure (ACEe) for installation of ECS (excluding IDC and FERV) as admitted by the Commission, to be escalated at the rate of 3.5% per annum for the second year. The O&M expenses from the third year onward shall be as per norms and escalation rate determined separately by the Commission."</i></p> | <ul style="list-style-type: none"> • It is requested that the O&Me should be the minimum of 2% of ACEe or the actual O&M incurred, whichever is lower. • The escalation should be based on a composite % of WPI/ CPI or 3.5% whichever is lower. |
| 45 to 48 | <p>Additional Interest on Working Capital (IWCe)</p> <p><i>"The Working Capital (WCe) shall include following components:</i></p> <p><i>(i) Cost of lime stone or reagent for stock of 20 days corresponding to the normative annual plant availability factor;</i></p> <p><i>(ii) Advance payment for 30 days towards cost of lime stone or reagent for generation corresponding to the normative annual plant availability factor;</i></p> <p><i>(iii) Operation and maintenance expenses in respect of emission control system for one month;</i></p> <p><i>(iv) Maintenance spares @20% of operation and maintenance expenses in respect of emission control system; and</i></p> <p><i>(v) Receivables equivalent to 45 days of supplementary capacity charge and supplementary energy charge for sale of electricity calculated on the normative annual plant availability factor</i></p> <p><i>Accordingly, the Additional Interest on Working Capital (IWCe)</i></p> | <ul style="list-style-type: none"> • For computation of receivables in the working capital component (WCe), normative annual plant availability factor or the actual availability of the plant in the previous year, whichever is lower should be considered. • For computation of interest on working capital (WCIR(n)), rate of interest should be considered as MCLR + 250 basis points or the actual rate of interest of short term loans available in the market, whichever is lower. |

| Para | Description | Remarks |
|----------|---|--|
| | <p>shall be worked out as under: $IWCe(n) = WCe(n) \times WCIR(n)/100$.</p> <p>Where, WCe(n) is the Working Capital of the year for which compensation is to be determined (Refer Paragraph 47 above)</p> <p>WCIR(n) is Working Capital Interest rate (in %) which is Marginal Cost of Lending Rate of State Bank of India (for one year tenor) plus 350 basis points as on 1st April of the year for which compensation is to be determined.”</p> | |
| 49 to 57 | <p>Additional Capacity Charges due to additional Auxiliary Energy Consumption (ACCe)</p> <p>Accordingly, it is proposed that the additional capacity charges due to emission control system (ACCe) shall be arrived at based on Quoted Capacity Charges by applying the following formulae:</p> <p>Additional Capacity Charges due to increase in auxiliary Consumption (ACCe) (in Rs/KWh) = Quoted Capacity Charge X (1-AUXo) (1-AUXt))-1</p> <p>Where, Quoted Capacity Charge is sum of Quoted Escalable and Non-Escalable Capacity Charges in the contract year in accordance with the PPA;</p> <p>AUXt is the Total Auxiliary energy consumption and is equal to (AUXo + AUXe)</p> <p>AUXo is the original Auxiliary energy consumption as agreed under the definition of Power Station's Net Capacity or otherwise; and</p> | <ul style="list-style-type: none"> • It is suggested that CEA or any other body directed by the CEA/CERC should come up with a technical study to assess the actual auxiliary consumption due to ECS based on the type of technology used and the capacity of installation in order to fairly assess the impact of the same. • Further, the norms should be revised periodically based on actual available data in a regular manner. |



| Para | Description | Remarks |
|----------|--|---|
| | <p>AUXe is the Additional energy consumption due to emission control System as specified by the Central Electricity Authority and admitted by the Commission from time to time.</p> | |
| 58 to 61 | <p>Expenses towards consumption of reagents (CRe) <i>"..the cost of reagent per unit of electricity generated for the month shall be calculated based on the specific reagent consumption (grams/KWh) and landed price (in Rs.) of the reagent at the generating station as follows:</i></p> <p>CRe (Rs/KWh) = ((SRCe)x(LPRe) (1000))</p> <p>Where, CRe is expenses towards consumption of reagents in Rs/KWh SRCe is the specific reagent consumption on account of emission control system (in grams/KWh) for a unit generated at generator terminal. This shall be normative number recommended by CEA for different variants of the ECS; LPRe is the weighted average landed price of reagents for ECS (in Rs/Kg) during the month.</p> | <ul style="list-style-type: none"> The computation of SRCe should be based on rigorous technical studies and data analysis. In this regard, CEA should float a white paper for comments/suggestions of various stakeholders. It is a welcome step by Hon'ble CERC to consider the reagent expenses on actual landed price basis. In this case, the actual costs may be lower than normative values and shall lead to prudent cost burden on the procurers. It is also requested that rigorous prudence check should be done (including checks for third party audit reports and documents confirming procurement of materials on competitive bidding basis to ensure best possible prices in the market). |
| 62 to 64 | <p>Additional Energy Charges due to additional Auxiliary Energy Consumption (AECe) <i>"...additional energy charges (AECe), due to additional auxiliary energy consumption of emission control system, shall be arrived at based on Quoted Energy Charges by applying the following formulae:</i></p> <p>Additional Energy Charges (AECe) = Quoted Energy Charges x ((1-AUXo) (1-AUXt)) -1</p> | <ul style="list-style-type: none"> No comments |

B. S. Jaiswal

B. S. Jaiswal
SE (RA), RUVNL

R. S. Jaiswal

| Para | Description | Remarks |
|------|--|---------|
| | <i>Where, Quoted Energy Charges is sum of Escalable and non-Escalable Energy Charges in Rs/KWh."</i> | |

Para 65 to 76 – No comments

[Handwritten signature]

B. S. Jaiswal

B. S. Jaiswal
SE (RA), RUVNL