

RAJASTHAN ELECTRICITY REGULATORY COMMISSION, JAIPUR
Suo-Motu

Coram: Sh. Shreemat Pandey, Chairman
Sh. S.C.Dinkar, Member
Sh. Prithvi Raj, Member

Date: 5.03.2019

In the matter of

Draft Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-Wind and Solar Energy) (Second Amendment) Regulations, 2018.

Draft Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources – Biomass, Biogas and Biomass Gasifier) (First Amendment) Regulations, 2018.

Memo on Statement of Objects & Reasons and consideration of comments/ suggestions received from various stakeholders:

1. In accordance with Section 61 of the Electricity Act, 2003, the Commission specifies the terms and conditions for determination of tariff and in doing so, the Commission, inter-alia, shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies. As per the Section 62 of the Electricity Act, 2003, the Appropriate Commission determines the tariff in accordance with provisions of this Act for supply of electricity by a generating company to a distribution licensee.
2. Commission has notified the following Regulations specifying the parameters/ norms for determination of tariff for sale of electricity from Renewable Sources of Energy to the Distribution Licensees of the State:
 - (1) The RERC (Terms and Conditions for Determination of Tariff for Renewable Energy Sources- Solar and Wind Energy) Regulations, 2014 (hereinafter the '2014 Regulations').

- (2) The RERC (Terms and Conditions for Determination of Tariff for Renewable Energy Sources- Biomass, Biogas and Biomass Gasifier Energy) Regulations, 2015 (hereinafter the '2015 Regulations').
3. Central Electricity Regulatory Commission (CERC) has notified the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 (hereinafter 'CERC RE Tariff Regulations 2017') on 17.04.2017 after end of the control period of their earlier 2012 Regulations. Keeping in view the latest market trends, CERC has made changes especially in the financial parameters such as RoE, benchmark Interest rate, Depreciation etc., which are commonly applicable to all RE technologies viz. wind, solar, biomass and biomass gasifier based power plants.
4. It is observed that bid based tariffs quoted in the recently conducted auctions for solar and wind power projects showing substantial downwards trend are much lower than the generic tariffs determined by the Commission. Therefore, continuing with tariff determination by the Commission with same set of parameters/norms may not give right market signal.
5. In view of the above developments, appropriate Amendments were required, especially in respect of the financial parameters specified under the 2014 Regulations as well as 2015 Regulations.
6. In light of the above, the following Amendments Regulations were proposed by the Commission:

Draft Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-Wind and Solar Energy) (Second Amendment) Regulations, 2018.

Draft Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources – Biomass, Biogas and Biomass Gasifier) (First Amendment) Regulations, 2018.

7. As required under the Electricity (Procedure for Previous Publication) Rules, 2005, the public notices inviting

comments/suggestions from the persons likely to be affected were published in the following newspapers on the date mentioned against each of them:

- | | |
|--------------------------------------|------------|
| 1. Dainik Bhaskar (All Rajasthan) | 29.12.2018 |
| 2. Rajasthan Patrika (All Rajasthan) | 29.12.2018 |
| 3. The DNA (Jaipur Edition) | 29.12.2018 |

The draft Regulations along with explanatory memorandum were also placed on the website of the Commission. The last date of receipt of comments/ suggestions was 21.01.2019.

8. The Commission has received Eleven (11) comments/suggestion in respect of Amendments proposed pertaining to 2014 Regulations and 2015 Regulations. Commission has considered all the suggestions/comments including those received late and oral submissions made during the hearing held on 7.02.2019. The list of the persons who have submitted their suggestions/comments is placed at **Annexure – I**.
9. In this order Commission has first considered the comments/suggestions pertaining 2014 Regulations and issues common to both the Amendment Regulations of 2014 and 2015 Regulations. Subsequently, Commission has considered the issues specific only to 2015 Regulations. Commission has also received comments in respect of norms/parameters such as rebate for prompt payment, late payment surcharge, banking, transmission charges Grid connectivity which are not the part of the proposed Draft Amendment Regulations and therefore, not accepted for being outside the ambit of the present proceedings. However, Commission will consider them in the future regulatory exercise taken up for further Amendments and/or while notifying new Regulations. The Commission's proposal, the broad issues raised in comments/suggestions and Commission's analysis and decision thereon are as follows:

ISSUES SPECIFIC TO THE 2014 REGULATIONS AND COMMON ISSUES

Regulation 5: Control period

Commission's Proposal:

10. Commission in order to align the Regulations with CERC proposed to increase the duration of control period by one more year. Further, the following proviso was also proposed to be added:

“Provided further that in case Regulations for the next control period are not notified until commencement of next control period, the tariff norms as per these Regulations shall continue to remain applicable until notification of the revised Regulations subject to adjustment as per revised Regulations.”

Comments/Suggestions received:

11. The following comments/suggestions have been received:
- (1) Sh. Shanti Prasad suggested that the words “*subject to adjustment as per revised Regulations*” in proposed new proviso will cause regulatory uncertainty that any tariff determined under existing regulation may be revised retrospectively. It is suggested that either this may be deleted or word “*prospectively*” may be added at the end.
 - (2) Sh. G.L. Sharma submitted that the proviso proposed may be dropped. If due to unavoidable circumstances the new Regulations could not be framed timely, Commission may at that time issue a notification that present notification will remain continued. The words “*subject to adjustment as per revised Regulations*,” of the proposed proviso is also against the natural justice. Any revised notification will be effective prospectively and adjustment of the past period with prospective amendment is not justified.
 - (3) Indian Wind Turbine Association (IWTMA) submitted that present amendment proposes to extend the control period to extent only by one year. However, it is worthwhile

to highlight that a longer control period give regulatory certainty and evolve investor confidence. Besides, it may be noted that wind rich State like AP, Gujarat and Maharashtra have set longer control period to the tune of 5 years. It is requested that a longer control period of at least for 5 years may be prescribed in the Tariff Regulations. Alternately, the control period may be specified as up to year 2022 to be co-terminus with capacity addition target year as to ensure sustained investor confidence to achieve the State level target and the National level targets thereof.

Analysis and Decision:

12. Commission vide the proposed draft regulation has proposed to extend the control period by one more year in order to align with the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 ('CERC RE Tariff Regulations 2017'). Thereafter, Commission will consider framing new RE Tariff Regulation once this control period gets over. Considering this position, the suggestion of considering a longer control period, at present, is, therefore, not acceptable.
13. Commission has proposed the proviso to cover eventuality of the time gap between the end of the control period and notification of new regulations in line with CERC RE Tariff Regulations 2017. The proviso is proposed as an interim arrangement during this window. The new Regulations for the next control period would come into force immediately after the present control period gets over. Any action taken during this window will be adjusted in terms of the new Regulations. In view of this the suggestion of deleting the proviso or modifying it is not accepted. Therefore, no change is required in the proviso of the draft Regulations.

Regulation 6A: Project specific Tariff:

Commission's Proposal:

14. Commission proposed the following this new regulation as enabling provision for determination of project specific tariff:

“6A. Project specific tariff

- (1) *The Commission may determine project specific tariff, on case to case basis, as and when situation arises for the following types of projects:
 - (a) Solar PV and Solar Thermal;
 - (b) Wind Energy (including on shore and off-shore);
 - (c) Other hybrid projects include renewable-renewable or renewable conventional sources; for which renewable technology is approved by MNRE;
 - (d) Any other new renewable energy technologies approved by MNRE.*
- (2) *Determination of project specific tariff for generation of electricity from such renewable energy sources shall be in accordance with such terms and conditions as stipulated under relevant Regulatory Orders of the Commission/CERC.*

Provided that the financial norms as specified under Part-III of these Regulations, except for capital cost, shall be ceiling norms while determining the project specific tariff.”

Further, contingent to above, Commission has also proposed corresponding amendments in other provisions of the regulations.

Comments/Suggestions received:

15. The following comments/suggestions have been received:
 - (1) Ajmer Vidyut Vitran Nigam Limited (AVVNL), Ajmer submitted that Proposal of doing away with the determination of generic tariff is a welcome step. Determining project specific Feed-in-Tariffs (FITs) should also be reviewed as FITs are detrimental to competitiveness/ efficiency in equipment procurement, O&M, etc.
 - (2) Sh. Shanti Prasad suggested as under :
 - (a) The determination of tariff under Section 62(1) (a) of the Electricity Act is to be done as per Section 61 by specifying regulations. Orders of Commission or CERC cannot take place of regulations. CERC in case of determination of tariff for municipal solid waste projects have not decided the tariff on petition no. 196/MP/2015 vide order dated 2.9.15. CERC has finalized the norms etc., vide the CERC (Terms and Conditions for Tariff Determination from

Renewable Energy Sources) (Fourth Amendment) Regulations 2015 and then determined the tariff vide Statement of Reasons dated 7.10.15. Commission may also follow the same procedure, which is as per the Electricity Act. Further, reference of the "orders of Commission/ CERC" may cause disputes in case provisions of orders are different. Dispute may also arise if provisions of order cannot be incorporated in the regulations in considerations to objections / suggestions thereon while following the procedure of previous publications. It is suggested that words "under relevant Regulatory Orders of the Commission/CERC" may be replaced by "hereunder".

- (b) It is true that for a new technology or future development in existing technology, norms cannot be envisaged and specified. However, it is also true that for new /improved technology existing norms, as ceiling norms, will not be appropriate. For example, solar-wind hybrid power plants utilizing the same inverter for both will require specifying Capacity of power plant other than on machine capacity and hence higher norms of CUF (at Reg.24 and 27) and also different O&M charges /MW (at Reg. 25 & 28), Similarly, Solar or wind power plants with storage facility will require specifying higher norms of CUF and possibly higher O&M as base capacity will alter. Solar PV projects with lithium ion battery storage will require battery replacement every 3 years (as per present technology) and for batteries depreciation rates will be 30% and considering depreciation rate of 5.83% as per Reg. 14(2) (or this rate as ceiling) will not be appropriate. In view of these, the provision "*Provided that the financial norms as specified under Part-III of these Regulations, except for capital cost, shall be ceiling norms while determining the project specific tariff*" requires review.
- (c) It is proposed to provide a proviso under Reg. 22, 25, 26, 27, 28, 29, 30, 31 and 32 that the Commission can deviate from specified norms, except for Reg. 27 and 30, such deviations are specified to be based

on prevailing market trends / market information. Considering capital cost deviations also with these will covers Part IV, V and VI of the regulations. In view of these, it would be appropriate to have a single amendment to reg. 6A(2) to cover all these with proviso not restricted to market trend / information as deviations can be based on Annual Reports, Guaranteed Technical Particulars, Manufacturer's pamphlets etc.,. The proposed proviso under Regulation 6 A(2) is suggested to be amended as under :

"Provided that while determining the project specific tariff, financial and technical norms as specified under Part-III to VI of these Regulations can be deviated by the Commission by recorded reasons in the order."

- (3) Sh. G.L.Sharma submitted that when price discovered under bidding are much lower than the generic tariff determined by the Commission for solar and wind projects, the determination of any project specific tariff does not appear to be reasonable. In order to meet the situation of determination of tariff of projects with new technology other than existing duly approved by MNRE, necessary norms terms and condition will be required to be specified as per requirement. To meet such a situation, it is appropriate to have an enabling clause and accordingly, the proposed regulation '6A' may be revised as under:

" 6A. The Commission may, however, determine the tariff of projects of hybrid including renewable-renewable or renewable-conventional sources, for which renewable technology is approved by MNRE, and/or any other new renewable energy technologies approved by MNRE, on the basis of such terms and conditions as may be specified from time to time as per requirement, by the Commission."

- (4) Samta Power submitted that details of capital cost and other ceiling norms may be provided.
- (5) IWTMA suggested as under:
- (a) There should be a generic tariff determined for wind projects of capacity < 25 MW which could be

coming up in the State on a year on year basis. This is important in the context that there is huge untapped potential for wind in the State and projects of every scale (including < 25 MW) should be promoted so as to achieve the capacity addition targets the State has to achieve in the stipulated timeline. In view of the above, for Discom to off take power from such projects a generic tariff should be in place.

- (b) Generic tariff is also considered as ceiling tariff while conducting competitive bidding by many State and thus determination of the same considering the year-on-year change in tariff parameter would be necessary.
- (c) Despite introduction of competitive bidding, many RE rich States continue to issue yearly generic tariff for wind projects. States like Gujarat, Maharashtra & TN continues to determine generic tariff despite introduction of ever state-level wind competitive bidding. Beside, States like Karnataka, TN & Telangana also has been coming out with yearly generic tariff, after introduction of competitive bidding in wind sector.
- (d) In case of CERC, project specific tariff may be relevant considering that only large scale projects go for Inter-State Projects having off take in more than one State.
- (e) Project specific tariff may be limited to new relatively new technology with specific project feature such as hybrid, repowering etc. Determination of project specific charges for all wind projects would lead to situation where Commission will have to process numerous such cases on individuals basis which further would be time consuming.
- (f) In view of above, Commission to continue determination of generic tariff for wind on a yearly basis and limit the scope of project specific tariff determination to new technology projects including hybrid/repowering projects.

- (6) RVPN submitted that the Tariff is to be determined by competitive bidding.

Analysis and Decision:

16. Considering the current market conditions, CERC has discontinued to determine the generic tariff for wind and solar power project and they have adopted the practice of project specific tariff. Commission taking a conscious decision has proposed the draft Regulations for reasons elaborated in the Explanatory Memorandum. However, as elaborated under the Explanatory Memorandum, the option of determination of generic tariff has been kept open as and when need arises in future. Further, on perusal of the bidding guidelines issued by the Ministry of Power, determination of generic tariff is not a prerequisite. Therefore, the request of continuance of generic tariff for wind and solar power projects is not accepted.
17. The proposal of project specific tariff has been proposed in view of the latest technological breakthrough likely to happen for existing solar or wind power projects or hybrid power projects or any other new RE technology approved by MNRE. Commission has considered the comments as regards the project specific tariff. In one case, it has been suggested to keep the proposed amendment limited to meet the situation for determining the tariff of projects having new technology other than existing for which terms and conditions to be specified as per requirement as and when the situation arises. Accordingly, a revised provision in the proposed regulation 6A has been suggested. Another comments received suggest that for a new technology or future development in existing technology, norms cannot be envisaged and specified. It is also true that for new/improved technology existing norms as ceiling norms may not be appropriate. In view of this the proposed proviso requires review. In addition, it would be appropriate to have a single amendment to cover the amendments proposed in other regulations contingent to the project specific tariff such that proviso is not restricted to market trend/information as deviations can also be based on annual reports, guarantee technical particulars, manufacturer's details/recommendations etc. Commission considers the latter suggestion more appropriate

which effectively conveys the spirit behind the amendment. Accordingly, the draft Regulations have been appropriately modified. Further, in view of the above, the provisos proposed in the draft regulations contingent to proposal of projects specific tariff have been dropped.

18. It is observed that requirement of determination of tariff may arise for projects set up/likely to be set up under a Central/State Government scheme. In such cases, the terms and conditions specific to the scheme have to be considered. In view of this appropriate modification has been done in the draft Regulations.

Regulation 7: Petition and Proceedings for determination of Tariff

Commission's Proposal:

19. Commission proposed to add the following sub-regulation (4) below the existing sub-regulation (3):

"(4) A petition for determination of project specific tariff shall be accompanied by such fee as may be determined by regulations and shall be accompanied by:

- (a) Information in forms 1.1 and 1.2 as the case may be, and as appended in these regulations;*
- (b) Detailed project report outlining technical and operational details, site specific aspects, premise for capital cost and financing plan etc.*
- (c) A statement of all applicable terms and conditions and expected expenditure for the period for which tariff is to be determined.*
- (d) A statement containing full details of calculation of any subsidy and incentive received, due or assumed to be due from the Central Government and/or State Government. This statement shall also include the proposed tariff calculated without consideration of the subsidy and incentive.*
- (e) Any other information that the Commission requires the petitioner to submit."*

Comments/Suggestions received:

20. The following comments/suggestions have been received:

- (1) Sh. Shanti Prasad suggested that in addition to details sought in the Detailed Project Report ('DPR') vide proposed Reg. 7(4)(b), DPR may also have details of installations of same technology in operation with capacity, place and year of installation, Manufacturer / suppliers' guaranteed and other technical particulars and technical pamphlets, recommended O&M practices and public safety requirements.
- (2) Sh.G.L.Sharma suggested that in view of the comments/suggestion submitted in respect of the proposed Regulation 6A, the proposed amendment may be dropped.
- (3) Samta Power requested that the details of (a), (b),(c) and (d) under sub-regulation (4) may be provided.

Analysis and Decision:

21. In light of the Commission's analysis in foregoing paras, Commission agrees to consider the suggestion that DPR may also have details of installations of same technology in operation with capacity, place and year of installation, Manufacturer / suppliers' guaranteed and other technical particulars, recommended O&M practices and public safety requirements. Accordingly, the draft regulation 7(4)(b) has been appropriately modified.

Regulation 9: Tariff Design

Commission's Proposal:

22. On account of the proposed provision for project specific tariff, the following new sub-regulation (4) has been proposed to be added below the existing sub-regulation (3):

“(4) The above principles shall also apply for project specific tariff determination.”

Comments/Suggestions received:

23. Sh. G.L.Sharma suggested that in view of his suggestions regarding proposed Regulation 6A, the proposed provision may be dropped.

Analysis and Decision:

24. In consideration of the Commission's analysis and decision given in the earlier paras to retain the project specific tariff, the suggestion is not accepted. Therefore, the provision proposed in the draft regulations is retained.

Regulation 10: Dispatch principle for electricity generation from wind and solar

Commission's Proposal:

25. In view of the requirement of scheduling by the wind and solar power plants having individual or aggregate capacity of 5 MW and above as mandated under the RERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017 ('RERC F&S Regulations 2017'), Commission proposed to substitute the existing sub-regulation (2) with the following:

"(2) The dispatch principles for electricity generated from wind and solar energy plants shall be as per the provisions of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, as amended from time to time, except where specific provisions have been made under the Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulation, 2008 and RERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017 and amendments thereto."

Comments/Suggestions received:

26. The following comments/suggestion have been received:
(1) JITF Urban Infrastructure Limited submitted that performance of Waste to Energy projects is assessed on

the basis of quantity of Municipal Solid Waste processed & disposed rather than restricting the power generation to the schedule and in turn restrict Municipal Solid Waste processing in the plant. It is quite difficult to restrict power plant output in line with scheduled forecast with this kind of fuel (Municipal Solid Waste). Apart from quality, even incoming quantity of Municipal Solid Waste may vary on daily basis up to 10-20% of Municipal Solid Waste contracted supply quantity. Depending upon collection and Transportation system efficiency. Collection and Transportation system is being managed by respective Municipal Corporations. Forecasting of next day Municipal Solid Waste receipt is also not possible. It is, therefore, requested to include following in the Draft Regulations:

- (a) To include Municipal Solid Waste based Waste to Energy plants in Renewable Energy regulations, as Waste to Energy plants are also part of Renewable Energy sources.
 - (b) Waiver for two years from COD, for scheduling of Waste to Energy plants in proposed draft Regulations.
 - (c) After two years, 15% of deviation should be allowed from scheduling as per the RERC regulations for Renewable Energy sources.
- (2) Sh. Shanti Prasad suggested that under Section 86(1) (h) of the Electricity Act 2003, the State Grid Code (i.e., REGC) has to be consistent with, i.e., IEGC and thus, REGC can supplement the provisions of IEGC but cannot override them. Further, IEGC and REGC do not specify provisions as of the Rajasthan Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017. It is suggested that words "*the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, as amended from time to time, except where specific provisions have been made under the Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulation, 2008 and*" may, therefore, be deleted.

- (3) RVPN submitted that the 'MUST-RUN' word may be deleted as 'Must Run' word added for promotion of RE generation in the State. Renewable Energy Generation (Solar and Wind) in the State is continuously increasing. As of now, it is more than 20% of the total generation. As balancing is not available in the State of Rajasthan, therefore, looking to grid stability back down of RE generators (Solar and Wind) may be required.

Analysis and Decision:

27. Commission has proposed the amendment in light of the RERC F&S Regulations 2017. The Grid Code, among other things, is a consolidated document for operation of the Grid in the integrated mode. It is observed that the State Grid Code needs to be consistent with IEGC as mandated under the Electricity Act. The regulations 2.4 of the RERC (Rajasthan Electricity Grid Code) Regulations, 2008 reads as under:

"2.4 Compatibility with Indian Electricity Grid Code

The REGC has been prepared so as to be consistent/ compatible with the IEGC. However, in the matters relating to inter-state transmission, if any provision of the REGC is inconsistent with the provisions of the IEGC, the provision of IEGC shall prevail."

Commission in view of the above position, incorporated the existing provisions in 2014 Regulations. Subsequent to above Commission has specified the RERC F&S Regulations 2017 which mandate scheduling requirement for wind and solar power projects. Commission vide the instant draft amendment intends to incorporate the reference of these regulations. Further, the must run status granted to RE projects will continue till the control period. The position being so, no change therefore is required in the draft regulations.

28. The suggestion of waiver for two years from COD, for scheduling of WtE plants has been considered. Commission has specified the REC F&S Regulations 2017 applicable to wind and solar power plants. It is further observed that Commission for the purpose of RPO fulfilment has considered WtE power projects under the category of Biomass. Further, while disposing of the petition in the matter of determination of tariff of WtE plants

exempted them from merit order dispatch principles as also allowed to Biomass power plants. The WtE plants are essential in the interest of environment and public health. The off take of power from these projects will significantly help the Swachh Bharat Mission in maintaining the cities clean while disposing of usefully the waste in generating electricity and supplying back to the general public. Considering the limitations brought out in the suggestion and a limited capacity of WtE projects likely to come up in the State, Commission considers it appropriate to relax WtE power projects from the applicability of deviation settlement mechanism (DSM) for one year from their respective COD, treating their actual generation as scheduled generation.

Regulation 11: Capital cost

Commission's Proposal:

29. In view of the proposed provision of project specific tariff, the following proviso was proposed:

“Provided that for project specific tariff determination the generating company shall submit the break-up of capital cost items along with its petitions in the manner specified under Regulation 7.”

Comments/Suggestions received:

30. Indian Wind Turbine Association (IWTMA) submitted that the RERC Regulations specify indexation mechanism for determination of capital cost. The indices for Steel and Electrical Machinery under '2004-05' series are available only till mid-year of 2017 and it was discontinued. Indices beyond this period are available as part of the '2011-12' series published by Office of Economic Advisors. Accordingly, so as to arrive at inflation rate for FY 2019-20 indices under '2011-12' series should be used. Besides, other wind rich States like Andhra Pradesh, Gujarat, Maharashtra etc., also follow similar indexation mechanism to arrive at capital cost for wind power plants as shown in the below table.

State	Year	Capital Cost
AP	2015-16 (Base year) for indexation	600 Lakh/MW
Gujarat	Bench mark for control period (upto 31.03.2019)	613 Lakh/MW
Maharashtra	MERC RE Regulations clause 26.2	600.74 Lakh/MW

31. It would be prudent to continue with the similar process for arriving at the capital cost based on indexation mechanism. Commission may provide appropriate clarification to consider appropriate index for arriving at the normative capital cost of wind projects. Besides, consideration may also be given for additional cost component towards data collection processing and exchange mandated under the RERC F&S Regulations 2017 while specifying capital cost for wind projects under generic and project specific tariff determination.

Analysis and Decision:

32. Commission has proposed the proviso to address the provision of project specific tariff proposed in the draft regulations. CERC has discontinued the indexation mechanism. The "2004-05" series that has been used so far for indexation purpose has now been discontinued by the office of the Economic Advisor. The determination of capital cost of wind power plants based on new series of "2011-12" for subsequent years of the control period would not be appropriate. Considering this, it would be appropriate to discontinue the indexation mechanism for determination of capital cost.

Regulation 12: Debt-equity ratio

Commission's Proposal:

33. In view of the proposed provision of project specific tariff, the existing provision proposed to be numbered as sub-regulation (1) and a new sub-regulation (2) proposed to added below it as under:
- “(2) For project specific tariff, the following provisions shall apply-
If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

*Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:
Provided further that the equity invested in foreign currency, if any, shall be designated in Indian rupees on the date of each investment."*

Comments/Suggestions received:

34. AVVNL submitted that nowadays, owing to the focus on developing the renewable energy domain and the recent thrust it has received from the Government, funds are comparatively easily available to the developers. As the sector has evolved considerably and the new technologies are shaping up the future of renewables, lowering the equity base would prove to be beneficial for the end consumers also. Hence, it is proposed that the debt to equity ratio may be revised to 80:20 for the determination of renewable energy tariff during the next control period. Accordingly, Regulation 12 may be amended.

Analysis and Decision:

35. It is observed that amendment is proposed in view of provision of the project specific tariff. However, the proposal for modifying debt-equity ratio to 80:20 from the existing norm of 70:30 may not be sustainable as financial institutions/banks may not be willing to finance such high proportion of the capital cost of a project. Further, any increase in leverage to the RE projects would result in increasing their exposure to the risk of excessive volatility of interest rates. Further, higher debt will increase IDC and interest cost burden and consequentially the cost of project resulting in higher cost of power. In addition, the rate of depreciation may have to be enhanced to avoid imbalance between the depreciation allowed and debt repayment obligation. Changing debt-equity ratio to 80:20 will also lead to higher dependency on loan and will increase interest cost. This debt-equity ratio is widely accepted by both investors and financial institutions. CERC and other Commissions also follows the same debt equity ratio. In view of the above, the suggestion is not accepted. No change is required in the provision proposed in the draft Regulations.

Regulation 13: Loan and Finance Charges

Commission's Proposal:

36. In view of the CERC RE Tariff Regulations 2017 it has been proposed to increase the loan tenure from existing 12 years to 13 years. Considering that for advancing loans, the State Bank of India ('SBI') has replaced the "Base rate" regime with "Marginal Cost of funds based Lending Rate (MCLR)" which is pegged on loan tenure basis and updated on monthly basis and interest rate benchmark adopted by CERC, it has been proposed that the sub-regulation (1) is to be substituted with the following:

"(1) Loan Tenure

For the purpose of determination of generic tariff, loan tenure of 13 years shall be considered."

37. It has been further proposed that sub-regulation (2)(b) is to be substituted with the following:

"(b) For the purpose of computation of tariff, normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months shall be considered."

Comments/Suggestions received:

38. The following comments/suggestions have been received:
- (1) IWTA submitted that the MCLR Rate would reflect the reality in the market, the paradigm shift from "Base Rate methodology" to "MCLR Rate" is a welcome step. Essentially the loan tenure for wind projects are approved considering certain eligibility criteria creditworthiness of companies (which differs from one lender to another) and many other factors. Generalizing the loan tenure of 13 years for all wind projects considering the maximum repayment years of REC and IREDA would not be appropriate. It is requested to retain the loan tenure at 12 years itself as was specified in the Principal Regulations.

- (2) Rays Power Experts Pvt. Ltd submitted that the loan tenure should be 15 years.

Analysis and Decision:

39. It is observed that in one suggestion it is requested to keep the loan tenure at the existing level of 12 years, whereas, in another suggestion it is requested to keep loan tenure as 15 years. The loan tenure of 13 years has been adopted by CERC after analysis of the prevailing market conditions. Commission considers to retain the provision of the draft regulations.

Regulation 14: Depreciation

Commission's Proposal:

40. In view of the proposal for project specific tariff and in line with CERC, Commission has proposed that the existing sub-Regulations (1) and (2) of Regulation 14 shall be substituted with the following:

- “(1) The value base for the purpose of depreciation shall be the capital cost determined by the Commission (for generic tariff) or the capital cost admitted by the Commission (for project specific tariff), as the case may be. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.*
- (2) Depreciation rate of 5.28% per annum for the first 13 years and remaining depreciation to spread during the remaining useful life of the project considering the salvage value of the project as 10% of project cost shall be considered.”*

Comments/Suggestions received:

41. The following comments/suggestions have been received:
- (1) Sh. Shanti Prasad suggested that depreciation is provided in the tariff regulations to cover loan repayment. Accordingly, rate of depreciation used to be “loan as % of capital cost)/ loan repayment period”. Accordingly,

repayment instalment will be $(100\%-30\%)/13=5.385\%$. Depreciation rate of 5.28% will result in reducing the Return on Equity by 0.105%.

- (2) Sh. G.L. Sharma submitted that the words “or the capital cost admitted by the commission (For project specific tariff) as the case may be” may be deleted on account of his suggestion for regulation ‘6A’.
- (3) IWTMA submitted that the existing norm for depreciation and determine the same at 5.83% for first 12 years and remaining depreciation spread equally over balance twelve years of the useful life should be continued.

Analysis and Decision:

42. Commission has proposed the depreciation rates in line with CERC. It is observed that with a depreciation rate of 5.28% the repayment may slightly spill over to 14th year, which will have a miniscule impact on interest charges. In consideration of this, no change is required in the draft regulations.

Regulation 15: Return on Equity

Commission's Proposal:

43. In order to rationalise the RoE in context of decreasing expectation for returns on equity shown by results of latest auctions and norm adopted by CERC, considering a normative RoE of 14% as reasonable, sub-Regulations (2) & (3) have been proposed to be substituted with the following:

“(2) The normative Return on Equity shall be 14 % to be grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year for the entire useful life of the project.”

Comments/Suggestions received:

44. The following comments/suggestions have been received:
 - (1) AVVNL submitted that considering present market realities wherein competitively bid tariffs in solar, MSW or wind

projects over the last couple of years have consistently been below the corresponding RERC tariff and it can be inferred that market expectation of RoE has come down. Proposed RoE of 14% is a welcome step.

- (2) IWTMA submitted that MAT is only extended up to a period of 10 year and while a developer has to bear the corporate tax of 34.608% (corporate tax- 30% plus surcharge - 12% plus educational cess- 3%), which is applicable for the remaining period of the useful life. Further the pre-tax RoE arrived at for the first 10 year period of the useful life as proposed is significantly lower than the normative pre-tax return for RE in the cost plus regime allowed under the principal Regulations. In addition, States like AP, TN, Telangana and Maharashtra have kept a RoE of 16% in their respective Regulation/order for wind projects. Commission should retain the RoE in same line with the principal RERC regulations.

Analysis and Decision:

45. The RoE of 14% is adopted by CERC after taking a holistic view of the returns available in the market. Commission is of the view that RE technologies have almost reached to the maturity level and RoE of 14% is adequate for them. Further, considering MAT/corporate taxes are expected to be lowered and effective tax rate is lower than corporate tax rate, CERC has specified that RoE is to be grossed by MAT rate prevailing on 1st April of the previous FY for grossing up. Commission has proposed the same in the draft regulations. Therefore, no change is required in the draft regulations.

Regulation 33: Tariff for existing Plants set up as per Government of Rajasthan and Government of India Policies

Commission's Proposal:

46. The State Government has notified policies in the year 1999 and 2000. The existing regulation 33(1) of the 2014 Regulations specifies tariff for wind and solar plants set up under GoR Policies 1999 and 2000 and commissioned before 31.03.2007 upto FY

2018-19. However, on account of proposal of extension of control period for one more year in the earlier paras, the tariff for such plants set up under above State Govt. Policies is to be specified for FY 2019-20 also. Till now Commission which specifying the tariff for such plants covered under GoR Policies 1999 and 2000 has continued the tariff allowed to them under respective GoR Policy. In order to address the Solar and wind power projects set up under the GoR Policies the following new row proposed to be added below the existing table appearing at sub-regulation (1):

6	2019-20	5.7171	5.7135
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Comments/Suggestions received:

47. Samata Power submitted that the details with reasons of inserting Rs 5.7171 and Rs 5.7135 may be provided.

Analysis and Decision:

48. Commission in the explanatory memorandum had explained the proposed rates. Therefore, no change is required on this account.

Regulation 35: Tariff for Plants under the REC mechanism

Commission's Proposal:

49. In view of the Amendments contemplated in Regulation 12(2) of the RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations 2010, the following Amendment has been proposed:

“35. Tariff for Plants under the REC mechanism

The tariff of projects set up under REC Mechanism shall be governed by Regulation 12(2) of the RERC (Renewable Energy Obligation Compliance Framework) Regulation, 2010 and amendments thereto.”

Comments/Suggestions received:

50. The following comments/suggestions have been received:
- (1) Sh. Shanti Prasad in his written comments stated that it has been proposed that the tariff of projects set up under REC Mechanism shall be governed by Regulation 12(2) of the RERC (Renewable Energy Obligation Compliance Framework) Regulation, 2010 and amendments thereto. The said Regulations do not specify norms etc., for tariff determinations as required under Sec 61 of the Act. Therefore, mechanism of their tariff determination will have to be specified in this regulation. It is suggested that same may be provided after considering views expressed by stakeholders on the staff paper on "Renewable Energy Projects registered under REC mechanism in Rajasthan State" issued in Oct., 18 and then following the procedure as adopted by CERC for MSW projects and till then PPAs may be extended on existing terms and conditions for a period to be specified by the Commission.
 - (2) Ray Power Experts Pvt. Ltd submitted that the Regulation should not be substituted.

Analysis and Decision:

51. Commission is contemplating a mechanism to address the projects commissioned under the REC mechanism. Therefore, the proposed provision is appropriately revised.
52. It has also been noted that there are provisions of rebate and Late payment surcharge both in the 2014 and 2015 Regulations which are analogous to provision for these in RERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 meant for conventional generation. Now the Commission has proposed changes in these two clauses vide RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 on which a decision is yet to be taken. To maintain similarity for the purpose of operation by Discoms the Commission has decided to suitably amend the clauses of rebate and LPS which have been suitably incorporated in the final amendments.
53. Commission has provided similar provisions of banking in 2014 and 2015 Regulations. Discoms have requested to either remove the banking provision or may rationalise the provision for simple operation and avoid undue benefit to any generator. Other

stakeholders have also commented on banking provision and sought changes. Therefore, Commission consider to suitably amend the regulations keeping in view the basic spirit of regulation of providing monthly banking. Accordingly the suitable amendments have incorporated in the final amendments.

ISSUES SPECIFIC TO THE 2015 REGULATIONS

Regulation 1: Short title, Extent and Commencement

Commission's Proposal:

54. In order to extend the control period for one more year, Commission has proposed the following Amendments:
The words and figures appearing in sub-regulation (2), "*upto FY 2018-19, i.e., March 31, 2019*" shall be substituted with words and figures "*up to FY 2019-20, i.e., March 31, 2020*". The existing sub-regulation (3) shall be amended as the words and figure "*four (4)*" appearing in sub-regulation (3) shall be substituted with words and figure "*five (5)*".

Comments/Suggestions received:

55. The comments/suggestions received are as under:
- (1) Sh. G.L. Sharma submitted that in view of the proposed amendments, the words and figures "*till 31.03.2019*" appearing at the end of sub-regulation 4(1) is required to be replaced as "*till 31.03.2020.*"
 - (2) AVVNL has also submitted that amendment in usage of fossil fuel to the extent of 15% allowed till 31.03.2020 in regulation 29 of the principal regulations may also be extended to regulation 4(1) of the principal regulations for sake of uniformity.

Analysis and Decision:

56. Commission agrees with the suggestion and sub-Regulation 4 (1) of the regulations has been appropriately modified.

Regulation 5: Control Period

Commission's Proposal:

57. In order to extend the control period of the Regulations, the words and figure "*four (4)*" appearing in main provision of Regulation 5, were proposed to be substituted with words and

figure "five (5)". Similar to CERC, in order to address the gap period till new regulations are notified the following new proviso was also proposed:

"Provided further that the tariff norms as per these Regulations shall continue to remain applicable until notification of the revised Regulations subject to adjustment as per revised Regulations."

Comments/Suggestions received:

58. Sh. G.L.Sharma suggested that the words "until notification of the revised Regulations subject to adjustment as per revised Regulations" in the proposed proviso may be reworded as "until the same are revised" only. Any adjustment as per revision should not be made at any stage for the reason that (a) as far as the past is concerned their tariff has been in force for a period of 20 years as per sub-Regulations(6) existing and (b) as regards new comers are concerned they will automatically be regulated as per revised norms.

Analysis and Decision:

59. In light of analysis and decision mentioned at earlier paras, no change is required in the draft regulations.

Regulation 29: Use of fossil fuel.

Commission's Proposal:

60. As the control period of the Regulations was proposed to be extended by one more year, contingent to it the words and figures "till 31.03.2019" appearing at regulation 29, was proposed to be substituted with words and figures "till 31.03.2020". In order to promote solar generation, the following proviso was also proposed to be added:

"Provided that the Biomass power generator in addition to fossil fuel may also use the solar power within the above limit of 15%"

Comments/Suggestions received:

61. The utility of proposed Proviso does not appear to be correct as the present Regulations are to be kept in force upto 31-3-2020 which is very short period. Any such Amendment may be considered when the revised regulations are framed and if it is found that Biomass power generators are combined with solar generators. In such circumstances various other norms will also be required to be framed.

Analysis and Decision:

62. As a promotional measure Commission has allowed usage of solar to the extent of 15%. Therefore, no change is required in the draft regulations.

Regulation 46: Tariff for existing Plants set up as per Government of Rajasthan and Government of India Policies

Commission's Proposal:

63. In order to allow tariff to the Biomass power plants set up under the GoR Policy 1999/2000 following new row shall be added below the table appearing at this Regulation :

22		2019-20	7.6614
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Comments/Suggestions received:

64. The GOR Policy envisaged that the rate of increase after 10 operational years shall be mutually settled. The wording of the clause shows that the rate of increase was to be decided for the entire period after 10 operational years and it was not envisaged that the same will be decided every year. The PPAs are valid for 20 years from COD. Earlier for the control period FY 2014-15 to FY 2018-19 also the tariff for each year was arrived at by applying 5% increase on the tariff applicable to the earlier financial year. As per the Draft Notification the same rate is adopted for FY 2019-20. It is logical that the same rate of 5% per year should be continued for the balance period of PPAs in terms of clause 5.1(ii) of the GoR Policy, 1999 quoted above. The

concept of “control period” is not applicable to these plants since there is no variable element in tariff. Instead of determination of tariff for a particular year, the rate of increase of 5% per year may be approved for the remaining period of Power Purchase Agreements signed under GoR 1999, Policy.

Analysis and Decision:

65. The present proposal is limited the extension of the control period by one year. In accordance to this, a new row has been added for FY 2019-20. Therefore, no change is required in the draft regulations.
66. In addition to above some general comments/suggestions have been received which have been appropriately incorporated in the finalised regulations.
67. With above considerations, Commission finalizes the following Regulations:

Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-Wind and Solar Energy) (Second Amendment) Regulations, 2019.

Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources – Biomass, Biogas and Biomass Gasifier) (First Amendment) Regulations, 2019.

The above Regulations are placed below for issue and publication in the official Gazette.

68. Copy of the finalized regulations may also be sent to the State Government, concerned utilities and persons who have offered the suggestions/comments.

(Prithvi Raj)
Member

(Suresh Chandra Dinkar)
Member

(Shreemat Pandey)
Chairman

Annexure-I**List of persons offering written or oral comments/suggestions:**

S.No.	Company/Individual
1	JITF (JITF Urban Infrastructure Ltd.)
2	AVVNL
3	Sh. Shanti Prasad
4	JVVNL
5	Sh. G.L.Sharma
6	JdVVNL
7	Sh. Y.K.Bolia
8	IWTMA
9	M/s Rays Power Experts Pvt. Ltd.
10	InWEA
11	RVPN
12	Surya Chamball Power Ltd.

RAJASTHAN ELECTRICITY REGULATORY COMMISSION

NOTIFICATION

JAIPUR, March , 2019

No.RERC/Secy./Regulation -

In exercise of the powers conferred under Section 61 and 62 read with Sections 86 and 181 of the Electricity Act, 2003 and all provisions enabling it in this behalf, the Rajasthan Electricity Regulatory Commission and after previous publication makes the following Regulations to amend Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-Wind and Solar Energy) Regulations, 2014 (hereinafter referred to as the 'Principal Regulations'), namely:

1. **Short title and commencement:**

- (1) These Regulations shall be called the "Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-Wind and Solar Energy) (Second Amendment) Regulations, 2019."
- (2) These Regulations shall come into force from the date of their notification in the Official Gazette.

2. **Amendment in Regulation 1 of the Principal Regulations:**

- (A) The existing sub-regulation (2) shall be amended as under:
The words and figures appearing in sub-regulation (2), "*upto FY 2018-19, i.e., March 31, 2019*" shall be substituted with words and figures "*up to FY 2019-20, i.e., March 31, 2020*".
- (B) The existing sub-regulation (3) shall be substituted with the following:
The figure "5" appearing at sub-regulation (3) shall be substituted with figure "6".

3. **Amendment in Regulation 5 of the Principal Regulations:**

- (A) The words and figure "*five (5)*" appearing in main provision of Regulation 5, shall be substituted with words and figure "*six (6)*".
- (B) A new proviso shall be added below the existing second proviso to Regulation 5 as under:

“Provided also that in case Regulations for the next control period are not notified until commencement of next control period, the tariff norms as per these Regulations shall continue to remain applicable until notification of the revised Regulations subject to adjustment as per revised Regulations.”

4. Insertion of a new Regulation 6A in the principal Regulations:

A new Regulation 6 A shall be inserted as follows:

“6A. Project specific tariff

(1) *The Commission may determine project specific tariff, on case to case basis, as and when situation arises for the following types of projects:*

- (a) *Solar PV and Solar Thermal;*
- (b) *Wind Energy (including on shore and off-shore);*
- (c) *Other hybrid projects include renewable-renewable or renewable conventional sources; for which renewable technology is approved by MNRE;*
- (d) *Any other new renewable energy technologies approved by MNRE.*
- (e) *Projects covered under Central/State Government schemes.*

(2) *Determination of project specific tariff for generation of electricity from such renewable energy sources shall be in accordance with such terms and conditions as stipulated hereunder:*

Provided that while determining the project specific tariff, financial and technical norms as specified under Part-III to VI of these Regulations can be deviated by the Commission by recorded reasons in the order.”

5. Amendment in Regulation 7 of the Principal Regulations:

A new sub-regulation (4) shall be added below the existing sub-regulation (3) of Regulation 7 as under:

“(4) A petition for determination of project specific tariff shall be accompanied by such fee as may be determined by regulations and shall be accompanied by:

- (a) *Information in forms 1.1 and 1.2 as the case may be, and as appended in these regulations;*
- (b) *Detailed project report outlining technical and operational details, site specific aspects, premise for capital cost and financing plan, details of installation*

of same technology in operation with capacity, place and year of installation, manufacturer's/supplier's guaranteed and other technical particulars, recommended O&M practices and public safety requirements, etc.

- (c) A statement of all applicable terms and conditions and expected expenditure for the period for which tariff is to be determined.*
- (d) A statement containing full details of calculation of any subsidy and incentive received, due or assumed to be due from the Central Government and/or State Government. This statement shall also include the proposed tariff calculated without consideration of the subsidy and incentive.*
- (e) Any other information that the Commission requires the petitioner to submit."*

6. Amendment in the Regulation 9 of the Principal Regulations:

A new sub-regulation (4) shall be added below the existing sub-regulation (3) as under:

"(4) The above principles shall also apply for project specific tariff determination."

7. Amendment in the Regulation 10 of the Principal Regulations:

Existing sub-regulation (2) shall be substituted as under:

"(2) The dispatch principles for electricity generated from wind and solar energy plants shall be as per the provisions of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, as amended from time to time, except where specific provisions have been made under the Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulation, 2008 and RERC(Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017 and amendments thereto."

8. Amendment in the Regulation 11 of the Principal Regulations:

A new proviso to Regulation 11 shall be added as under:

"Provided that for project specific tariff determination the generating company shall submit the break-up of capital cost items along with its petitions in the manner specified under Regulation 7."

9. **Amendment in the Regulation 12 of the Principal Regulations:**

The existing provision shall be numbered as sub-regulation (1) and a new sub-regulation (2) shall be added below it as under:

“(2) For project specific tariff, the following provisions shall apply-

If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency, if any, shall be designated in Indian rupees on the date of each investment.”

10. **Amendment in the Regulation 13 of the Principal Regulations:**

(A) The sub-regulation (1) shall be substituted with the following:

“(1) Loan Tenure

For the purpose of determination of generic tariff, loan tenure of 13 years shall be considered.”

(B) The sub-regulation (2)(b) shall be substituted with the following:

“(b) For the purpose of computation of tariff, normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months shall be considered.”

11. **Amendment in Regulation 14 of the principal Regulations:**

Sub-regulations (1) and (2) of Regulation 14 shall be substituted with the following:

“(1) The value base for the purpose of depreciation shall be the capital cost determined by the Commission (for generic tariff) or the capital cost admitted by the Commission (for project specific tariff), as the case may be. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

(2) Depreciation rate of 5.28% per annum for the first 13 years and remaining depreciation to spread during the remaining useful life of the project considering the salvage value of the project as 10% of project cost shall be considered."

12. **Amendment in Regulation 15 of the Principal Regulations:**

(A) Sub-regulation (2) of Regulation 15 shall be substituted with the following:

"(2) The normative Return on Equity shall be 14 % to be grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year for the entire useful life of the project."

(B) Sub-regulation (3) of Regulation 15 of the Principal Regulations shall be deleted.

13. **Amendment in Regulation 16 of the Principal Regulations:**

Sub-regulation (2) of regulation 16 shall be substituted with the following:

"(2) Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (one year tenor) prevalent during the last available six months for the determination of tariff."

14. **Amendment in Regulation 18 of the Principal Regulations:**

The following proviso shall be added below the regulation 18:

"Provided that the rebate w.e.f. 1.4.2019 for payment of bills shall be as per provisions of rebate specified In RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 as amended from time to time."

15. **Amendment in Regulation 19 of the Principal Regulations:**

The following proviso shall be added below the regulation 19:

"Provided that the Late Payment Surcharge w.e.f. 1.4.2019 shall be as per provisions of Late payment Surcharge specified In RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 as amended from time to time."

16. **Amendment in Regulation 33 of the Principal Regulations:**

Following new row shall be added below the existing table appearing at sub-regulation (1) of Regulation 33:

6	2019-20	5.7171	5.7135
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17. **Amendment in Regulation 35 of the Principal Regulations:**

The existing provision of Regulation 35 shall be substituted as under:

“35. Tariff for Plants under the REC mechanism

The tariff of projects set up under REC Mechanism shall be governed by the RERC (Renewable Energy Obligation Compliance Framework) Regulation, 2010 and amendments thereto.”

18. **Amendment in Regulation 39 of the Principal Regulations:**

The existing sub-regulation (3) of Regulation 39 shall be substituted as under:

“(3) Energy Accounting:

Notwithstanding anything contrary contained in any other Regulations time being in force the Energy Accounting Shall be as under.

(a) If in any block injected energy is more than the energy drawn, the excess energy shall be computed. The excess energy of each time block shall be cumulated till the end of the month and shall be set off against the cumulative drawl of Discom energy in the same month.

(b) For remaining excess injected energy, if any at the end of the month, the RE Power Generator/Developer would be entitled to get payment @60% of energy charges applicable for large industrial power tariff, excluding fuel surcharge, if any, in respect of 10% of unutilized banked energy after the end of the same month. Unutilized banked energy, in excess of 10% shall lapse. “

By Order of the Commission

Secretary

Note:

1. The Principal Regulations were published in Rajasthan Gazette Extraordinary Part-7 on 27.03.2014.
2. The Principal Regulations were amended vide Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-Wind and Solar Energy) (First Amendment) Regulations, 2015 notified in Rajasthan Gazette Extraordinary Part-7 notified on 26.03.2015.

RAJASTHAN ELECTRICITY REGULATORY COMMISSION

NOTIFICATION

JAIPUR, March, 2019

No.RERC/Secy./Regulation -

In exercise of the powers conferred under Section 61 and Section 62 read with Sections 86 and 181 of the Electricity Act, 2003 and all provisions enabling it in this behalf, the Rajasthan Electricity Regulatory Commission makes the following Regulations to amend Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources-(Biomass, Biogas and Biomass Gasifier based Power Plants) Regulations, 2015 (hereinafter referred to as the 'Principal Regulations'), namely:

1. **Short title and commencement:**

- (1) These Regulations shall be called the "Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Renewable Energy Sources- Biomass, Biogas and Biomass Gasifier Energy) (First Amendment) Regulations, 2019."
- (2) These Regulations shall come into force from the date of their notification in the Official Gazette.

2. **Amendment in the Regulation 1 of the Principal Regulations:**

- (A) The existing sub-regulation (2) shall be amended as under:
The words and figures appearing in sub-regulation (2), "*upto FY 2018-19, i.e., March 31, 2019*" shall be substituted with words and figures "*up to FY 2019-20, i.e., March 31, 2020*".
- (B) The existing sub-regulation (3) shall be amended as under:
The words and figure "*four (4)*" appearing in sub-regulation (3) shall be substituted with words and figure "*five (5)*".

3. **Amendment in Regulation 4 of the Principal Regulations:**

The words and figures "till 31.03.2019" appearing in sub-regulation (1) of the Regulation 4 shall be substituted with words and figures "till 31.03.2020".

4. **Amendment in Regulation 5 of the Principal Regulations:**

- (A) The words and figure "*four (4)*" appearing in main provision of Regulation 5, shall be substituted with words and figure "*five (5)*".

(B) The following new proviso shall be added below the existing proviso to Regulation 5 of the Principal Regulations:

“Provided further that the tariff norms as per these Regulations shall continue to remain applicable until notification of the revised Regulations subject to adjustment as per revised Regulations.”

5. Insertion of a new Regulation 6A in the Principal Regulations:

The following new Regulation 6 A shall be inserted:

“6A. Project specific tariff

(A) *The Commission may determine project specific tariff, on case to case basis, as and when situation arises for the following types of projects:*

- (a) *Biomass Gasifier based projects, if a project developer opts for project specific tariff;*
- (b) *Biogas based projects, if a project developer opts for project specific tariff;*
- (c) *Municipal Solid Waste and Refuse Derived Fuel based projects with Rankine cycle technology;*
- (d) *Other hybrid projects include renewable-renewable or renewable conventional sources; for which renewable technology is approved by MNRE;*
- (e) *Any other new renewable energy technologies approved by MNRE.*
- (f) *Projects covered under Central/State Government schemes.*

(B) *Determination of project specific tariff for generation of electricity from such renewable energy sources shall be in accordance with such terms and conditions as stipulated hereunder:*

Provided that while determining the project specific tariff, financial and technical norms as specified under Part-III to VI of these Regulations can be deviated by the Commission by recorded reasons in the order.”

6. Amendment in Regulation 7 of the Principal Regulations:

The following new sub-regulation (3) shall be added below existing sub-regulation (2) of Regulation 7:

“(3) A petition for determination of project specific tariff shall be accompanied by such fee as may be determined by regulations and shall be accompanied by:

- (a) *Information in forms 1.1 and 1.2 as the case may be, and as appended in these regulations;*

- (b) Detailed project report outlining technical and operational details, site specific aspects, premise for capital cost and financing plan, details of installation, manufacturer's/supplier's guaranteed and other technical particulars, recommended O&M practices and public safety requirements, etc.
- (c) A statement of all applicable terms and conditions and expected expenditure for the period for which tariff is to be determined.
- (d) A statement containing full details of calculation of any subsidy and incentive received, due or assumed to be due from the Central Government and/or State Government. This statement shall also include the proposed tariff calculated without consideration of the subsidy and incentive.
- (e) Any other information that the Commission requires the petitioner to submit."

7. **Amendment in the Regulation 9 of the Principal Regulations:**

The following new sub-regulation (4) shall be added below the existing sub-regulation (3) of Regulation 9:

"(4) The above principles shall also apply for project specific tariff determination."

8. **Amendment in the Regulation 11 of the Principal Regulations:**

The following new proviso to Regulation 11 of the Principal Regulations shall be added:

"Provided that for project specific tariff determination the generating company shall submit the break-up of capital cost items along with its petitions in the manner specified under Regulation 7."

9. **Amendment in the Regulation 12 of the Principal Regulations:**

The existing provision shall be numbered as sub-regulation (1) and the following new sub-regulation (2) to Regulation 12 shall be added below it:

"(2) For project specific tariff, the following provisions shall apply- If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency, if any, shall be designated in Indian rupees on the date of each investment."

10. Amendment in the Regulation 13 of the Principal Regulations:

(A) The sub-regulation (1) shall be substituted with the following:

"(1) Loan Tenure

For the purpose of determination of generic tariff, loan tenure of 13 years shall be considered."

(B) The sub-regulation (2) (b) shall be substituted with the following:

"(b) For the purpose of computation of tariff, normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds Lending Rate (MCLR) (one year tenor) prevalent during the last available six months shall be considered."

11. Amendment in Regulation 14 of the Principal Regulations:

Sub-regulations (1) and (2) of Regulation 14 shall be substituted with the following:

"(1) The value base for the purpose of depreciation shall be the capital cost determined by the Commission (for generic tariff) or the capital cost admitted by the Commission (for project specific tariff), as the case may be. The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

(2) Depreciation rate of 5.28% per annum for the first 13 years and remaining depreciation shall be spread over the remaining useful life of the project considering the salvage value of the project as 10% of project cost shall be considered."

12. Amendment in Regulation 15 of the Principal Regulations:

(A) Sub-regulation (2) of Regulation 15 shall be substituted with the following:

"(2) The normative Return on Equity shall be 14 %, to be grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year for the entire useful life of the project."

(B) Sub-regulation (3) of Regulation 15 of the Principal Regulations may be deleted.

13. **Amendment in Regulation 16 of the Principal Regulations:**

Sub-regulation (2) of Regulation 16 shall be substituted with the following:

“(2) Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months for the determination of tariff:

14. **Amendment in Regulation 18 of the Principal Regulations:**

The following proviso shall be added below the regulation 18:

“Provided that the rebate w.e.f. 1.4.2019 for payment of bills shall be as per provisions of rebate specified In RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 as amended from time to time.”

15. **Amendment in Regulation 19 of the Principal Regulations:**

The following proviso shall be added below the regulation 19:

“Provided that the Late Payment Surcharge w.e.f. 1.4.2019 shall be as per provisions of Late payment Surcharge specified In RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 as amended from time to time.”

16. **Amendment in Regulation 22 of the Principal Regulations:**

The following proviso shall be added below the sub-regulation (3) of Regulation 22:

“Provided that the capital cost as specified for FY 2017-18 of the control period will remain valid for the entire remaining duration of control period unless reviewed earlier by the Commission.”

17. **Amendment in Regulation 28 of the Principal Regulations:**

The words “till FY 2017-18” shall be inserted between the words “control period” and “in case” appearing in the last sentence of the main provision of Regulation 28.

18. **Amendment in Regulation 29 of the Principal Regulations:**

The words and figures “till 31.03.2019” appearing at regulation 29, shall be substituted with words and figures “till 31.03.2020” and the following proviso shall be added:

“Provided that the Biomass power generator in addition to fossil fuel may also use the solar power within the above limit of 15%”

19. **Amendment in Regulation 32 of the Principal Regulations:**
The following new proviso shall be added below the sub-regulation (3) of Regulation 32 :

“Provided that the capital cost as specified for FY 2017-18 of the control period will remain valid for the entire remaining control period unless reviewed by the Commission.”

20. **Amendment in Regulation 37 of the Principal Regulations:**
The following new proviso shall be inserted below the Regulation 37:

“Provided for the years beyond 2017-18 of the control period, the biogas price for FY 2017-18 will change in the same proportion of change in Biomass fuel price determined based on the recommendations of the State Level Committee constituted under Regulation 28 of these Regulations unless specifically reviewed by the Commission.”

21. **Amendment in Regulation 39 of the Principal Regulations:**
The following proviso shall be added below the sub-regulation (3) of Regulation 39:

“Provided that the capital cost as specified for FY 2017-18 shall be the same for subsequent years of the control period unless reviewed earlier by the Commission.”

22. **Amendment in Regulation 46 of the Principal Regulations:**
Following new row shall be added below the table appearing at Regulation 46:

22	2019-20	7.6614
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23. **Amendment in Regulation 47 of the Principal Regulations:**
The existing provision of Regulation 47 shall be substituted with the following:

“47. **Tariff for Plants under the REC mechanism:**
The tariff of projects set up under REC Mechanism shall be governed by the RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010 and amendments thereto.”

24. **Amendment in Regulation 51 of the Principal Regulations:**

The existing sub-regulation (3) of Regulation 51 shall be substituted as under:

“(3) Energy Accounting:

Notwithstanding anything contrary contained in any other Regulations time being in force the Energy Accounting Shall be as under.

(a) If in any block injected energy is more than the energy drawn, the excess energy shall be computed. The excess energy of each time block shall be cumulated till the end of the month and shall be set off against the cumulative drawl of Discom energy in the same month.

(b) For remaining excess injected energy, if any at the end of the month, the RE Power Generator/Developer would be entitled to get payment @60% of energy charges applicable for large industrial power tariff, excluding fuel surcharge, if any, in respect of 10% of unutilized banked energy after the end of the same month. Unutilized banked energy, in excess of 10% shall lapse. “

By Order of the Commission

Secretary

Note:

The Principal Regulations were published in Rajasthan Gazette Extraordinary Part-7 on 06.07.2015.