# Appellate Tribunal for Electricity (Appellate Jurisdiction)

Dated: 20th Nov, 2014

Present:

HON'BLE MR. JUSTICE M KARPAGA VINAYAGAM, CHAIRPERSON HON'BLE MR. RAKESH NATH, TECHNICAL MEMBER

# **APPEAL NO.225 OF 2013**

### In the Matter of:

Moser Baer Clean Energy Limited., 235, Okhla Industrial Estate, Phase-III, New Delhi-110020

..... Appellant

#### **Versus**

Central Electricity Regulatory Commission 3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building 36 Janpath, New Delhi-110 001

...Respondent(s)

Counsel for the Appellant(s) : Mr. Vishal Gupta

Mr. Vishal Anand Mr. Kumar Mihir Mr. Karthik Seth

Counsel for the Respondent(s):Mr. Dhananjay Balaji

Mr. Nikhil Nayyar for R-1

# <u>JUDGMENT</u>

# PER HON'BLE MR. JUSTICE M. KARPAGA VINAYAGAM, CHAIRPERSON

- 1. Moser Baer Clean Energy Limited is the Appellant herein.
- The Appellant has filed this Appeal challenging the Impugned Order dated 27.3.2012 passed by the Central Commission in the suo-moto proceedings determining the Generic Levelised Generation Tariff under the Tariff determination and Renewable Energy Sources Regulations, 2012.
- 3. The brief facts giving rise to the present Appeal are set out hereunder:
  - (i) The Appellant is a Company starting with a strategy to undertake development of solar power projects worldwide. As on date, the Appellant is India's one of the largest solar power development companies with its presence in international markets as well.
  - (ii) The Central Commission notified Central Electricity Regulatory Commission (Terms and

Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009 dated 16.9.2009.

- (iii) Subsequently, on 6.2.2012, the Central Commission further notified the Regulations, 2012 for the control period 2012-17.
- (iv) The Central Commission in the Regulations, 2009 had provided provision for Discount Rate at pre-tax Weighted Average Cost of Capital (WACC) shall be considered.
- (v) After notifications of the Tariff Regulations, 2012, the Central Commission initiated suo-moto proceedings in the Petition No.35 of 2012 for determining the generic levelised generation tariff under Regulation 8 of the RE Tariff Regulations, 2012.
- (vi) In that petition, the Central Commission ultimately passed the Impugned Order dated 27.3.2012 wherein it computed the discount factor.
- (vii) At this stage, the Appellant filed a ReviewPetition on 11.5.2012 before the CentralCommission seeking for the Review of the Impugned

Order dated 27.3.2012 relating to the determination of generic levelised generation tariff under 2012 Regulations for the reason of incorrect computation of the discount rate and determination of levelised tariff based on such discount rates.

- (viii) On 9.5.2013, the Central Commission rejecting the prayer for Review passed the Order holding that the Review Petition in effect is seeking review of the RE Tariff Regulations.
- (ix) Aggrieved by the erroneous computation of the discount factor in the Impugned Order and also rejection of the Review Petition without valid reasons, the Appellant has filed this Appeal.
- 4. The learned Counsel for the Appellant has made the following submissions assailing the Impugned Order:
  - (i) The RE Tariff Regulations, 2012 under which the Impugned Generic Tariff Order has been passed, do not provide for any Formula for deriving the discount factor or levelise the generic tariff for Solar Energy Project.
  - (ii) The levelisation of tariff done using the Central Commission's levelisation Formula and discount

factor does not give the Return on Equity to the Solar Power Developers as guaranteed by Regulations 16(2) of the RE Tariff Regulations, 2012.

- (iii) The Appellant being the Solar Power Developer operating in various parts of the Country has the locus standi to challenge the Impugned Order by which the Central Commission has determined the generic tariff for the Solar Power Projects set-up during the control period of five years as provided in the RE Tariff Regulations, 2012.
- 5. In reply to the above submissions, the learned Counsel for the Central Commission has made the following submissions:
  - (i) The scope of RE Tariff Regulations, 2012 has been clearly defined in Regulation 3. As per this Regulation, these Regulations shall apply in all cases where tariff for a Generating Station or a unit thereof based on renewable sources of energy, is to be determined by the Commission u/s 62 read with Section 79 of the Act. Therefore, it is clear that these Regulations would not apply to the Generating Stations producing renewable energy which do not

have a composite scheme for generation and supply of electricity in more than one State.

- (ii) The perusal of Regulation-9, 12 and 16 would make it clear that the guaranteed return is restricted only to the equity component and the same does not extend to the guaranteed return on Debt as is being sought to be contended by the Appellant through its suggested formula whereby pre-tax cost of debt is being sought to be incorporated into the calculation of discount factor and thereby incurring a dual benefit of return on debt and on equity.
- (iii) The tariff for procurement of power by Distribution Licensee for Solar Energy Project was determined by the Gujarat Commission. By the said order, the State Commission determined the tariff for a period of 3 years w.e.f. 29.1.2012. In that case, the State Commission had used the same methodology as adopted by the Central Commission by its Notification dated 7.5.2011. The said tariff order was challenged before this Tribunal in the judgment dated 17.4.2013 in Appeal No.75 of 2012. In the said judgment this Tribunal allowed the Appeal in part by upholding the adoption of the said discount

rate by the State Commission for procurement of the tariff for Solar Energy Projects in Gujarat.

- On these grounds it is argued by the Central Commission that no ground is made out for interfering in the Impugned Order.
- 7. In the light of the rival contentions urged by both the parties, two questions may arise for consideration:
  - (i) Whether the Appellant has got a locus standi to challenge the Impugned Order?
  - (ii) Whether determination of the discount factor and the methodology applied by the Central Commission is valid and in consonance with the Regulations 16 of the RE Tariff Regulations?
- 8. Now let us discuss these issues one by one.
- 9. The First Issue relates to the locus standi of the Appellant.
- 10. According to the Central Commission the determination of discount factor by the Impugned Order is not applicable to the Appellant since the Appellant has not placed any material on record either before the Central Commission or before this Tribunal to establish that it has a composite scheme for generation and supply of electricity to the

Distribution Companies in more than one State and therefore, the Appellant is covered only by the Tariff Order passed by the State Commission and as such the Appellant has no locus standi to approach the Central Commission.

- 11. On the contrary the Appellant submits that the objections on the locus standi of the Appellant is unsustainable on the ground that it is an after thought as it was never raised by the Central Commission either earlier or in the review proceedings or in the proceeding in the next year's tariff year dated 28.2.2012. Therefore, the Appellant cannot raise this objection now.
- 12. We have carefully considered these submissions made by the parties.
- 13. As correctly pointed out by the Appellant, this objection has not been raised by the Central Commission either in the Impugned Order or in the Review Proceedings of the next year's tariff order dated 28.2.2012.
- 14. That apart, in the Order dated 28.2.2012, the Appellant's Group Companies i.e. Moser Baer Clean Energy Limited has been mentioned as a stake holders No.17 who submitted the written submissions during the personal hearing for the said order.

- 15. Thus, it is clear that the Central Commission recognised the Appellant's Group Company as a stake holder in all its previous proceedings.
- 16. The Crux of the objections of the Central Commission is two fold:
  - (a) Central Commission's jurisdiction cannot be invoked by a Generating Company who does not have a composite scheme of generation in more than one State;
  - (b) While it has not been disputed that the Appellant is a Generating Company, the Appellant is required to show that it has a composite scheme of generation in more than one State. Only then, the Appellant will have a locus standi to file the present Appeal.
- 17. This contention in our view may not be sustainable especially when the Central Commission recognised the Appellant Company as one of the stake holders in the earlier proceedings.
- 18. In fact, the Central Commission had issued public notice for soliciting comments from stake holders along with the draft of RE Regulations, 2012, in terms of Section 178 (3) of the

Electricity Act, 2003 read with Clause 23 of the General Clause of the Act.

- 19. The perusal of the above provisions would reveal that the law requires the Central Commission to inform not only those persons who will be personally affected by the Regulations but also who are likely to be affected in future.
- 20. Even from the reading of the Impugned Order, it is clear that numerous Generating Companies submitted their suggestions and objections to the draft tariff order and participated in the hearing. The Central Commission in fact, permitted all these Generating Companies who had participated in the proceedings recognising that they are valid stake holders.
- 21. The other objections raised by the Central Commission are that the Appellant has not placed anything on record to show that it has got a composite scheme of generation.
- 22. Those objections also in our view cannot be said to be sustainable.
- 23. According to the Appellant as mentioned in the Appeal, the Appellant Company was incorporated with a strategy to undertake development of solar power projects world wide and as on date it is India's one of the largest solar power

- development company with its presence in the key international market.
- 24. Admittedly, the tariff order is operative for the control period of 5 years. The Central Commission itself admitted in the Impugned Order that the State Commissions are required to be guided by the principles and methodologies of the Central Commission. Thus, the Appellant in this way is also affected by the alleged incorrect application of the RE Tariff Regulations, 2012.
- 25. In view of the above, we are not inclined to accept the objections raised by the Central Commission with regard to the locus standi. We feel that since it is claimed that it is likely to be affected by the Impugned Order in which methodology as per the Regulations have been incorrectly applied, which are guiding factors to the State Commission, we feel that this Appeal is maintainable as it has been filed by the aggrieved person.
- 26. Therefore, the objection with regard to the locus standi raised by the Central Commission is over ruled.
- 27. The next issue would relate to the determination of Discount Factor and Methodology.

- 28. According to the Appellant if the Formula used by the Central Commission is used by the Central Commission is applied, the Appellant does not get the prescribed return on equity of 20% p.a. for the first 10 years and 24% p.a. from 11<sup>th</sup> year onwards as stipulated in Regulation 16 of the RE Tariff Regulations.
- 29. According to the learned Counsel for the Central Commission, the Appellant in effect seeks a declaration that instead of the post-tax cost of debt, the Central Commission should apply the pre-tax cost of debt for the purpose of calculation of the discount factor which is not permissible under law.
- 30. It is noticed that the normative return on equity stipulated in Regulation 16 is a pre-tax return on equity.
- 31. It is noted that an Explanatory Memorandum was issued along with draft Regulations on Terms and Conditions for determination of tariff for renewable energy sources. It is not disputed that the Appellant did not make any suggestions with regard to the proposed Draft Regulations.
- 32. Based on the RE Tariff Regulations the order dated 27.3.2012 was passed determining the generic tariff for RE Generators. This determination of the generic tariff has not

been challenged by any one of the Generators and no other Solar Energy Developer apart from the Appellant has filed the Appeal challenging the determination of generic tariff.

- 33. In this context, it is to be pointed out that the relevant Regulation of RE Tariff Regulations, 2012 has to be read with the Statement of Objects and Reasons for the order dated 6.2.2012 issued along with RE tariff Regulations, 2012.
- 34. Regulation 10 of the RE Tariff Regulations specifies that for the purpose of levellised tariff computation, the discount factor shall be equivalent to Post Tax weighted average cost of capital (WACC). The Statement of Objects and Reasons issued along the RE Tariff Regulations date d6.2.2012 were discussed and various comments were received on the Commission's proposal on discount factor as post tax weighted average cost of capital.
- 35. On this basis, the Commission has taken a decision in this regard. The relevant findings is as follows:

# "3.5 Regulation 10 (2) Tariff Design: Discount Factor

In the draft Regulations, it is specified that for the purpose of levellised tariff computation, the discount factor equivalent to Post Tax Weighted Average Cost of Capital (WACC) shall be considered.

#### 3.5.1: Comments Received on this Provision:

InWEA has submitted that the returns under RE tariff regulations are proposed to be regulated in Pre-Tax terms. Hence, the time value should also be factored in pre-tax terms of weighted average cost of capital (WACC), as was computed under earlier first control period regime. They have further suggested that in order to work out "Post Tax Cost of Debt" consideration of applicable tax as Weighted Average of MAT and Corporate Tax Rate would be the right approach.

Reliance Power Ltd. has suggested that WACC should be considered on the basis of Pre-tax and do away with the suggestion for Post tax till clarity is evolved on the DTC and applicable tax regime. They further submitted Shift from Pre-Tax to Post Tax should not hamper returns due to any change in tax regimes. The Cost of Equity is higher for CSP projects and these projects commensurately need a higher ROE.

**NTPC** Limited has submitted that Pre Tax WACC should be considered as discount factor for levellised tariff computation in line with previous control period.

Greenergy Renewables Pvt. Limited has submitted that since Return on Equity is on pre-tax basis and also income tax is not part of the tariff, for the purpose of levellised tariff computation, discount factor equivalent to Pre Tax weighted average cost of capital shall be considered.

#### 3.5.2 Commission's Decision:

While taking the investment decisions, the developer considers post tax WACC as the discount rate to post tax incremental cash flows to arrive at NPV of the project. Considering the same, the Commission has decided to retain the provisions made in the draft Regulations.

36. The Explanatory Memorandum issued along with the Draft Terms and Conditions for Determination of Tariff for Renewable Energy Sources in November, 2011 discussed about the calculation of Post Tax WACC and proposal to consider the same as Discount Rate. The same is reproduced as under:

# "3.4 Tariff Design

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The Commission also considered that Levellised tariff with appropriate discount rate representing weighted average cost of capital on the basis of normative debt: equity ratio specified in the Regulations or time value of money yields necessary balance between front loaded or back loaded tariff. The discount rate used for renewable energy tariff determination was the pretax Weighted Average Cost of Capital (WACC). The WACC was computed as under:

WACC=Cost of Debt+ Cost of Equity Where,

Cost of Debt=Normative Debt X (Normative Rate of Interest)

Cost of Equity= Normative Equity\*(Pre Tax Return on Equity)

Now it is proposed to use post tax WACC for the determination of levellised tariff in the next control period. This is based on the understanding that while taking the investment decisions the developer considers post tax WACC as the discount rate to post tax incremental cash flows to arrive at NPV of the project.

Post Tax WACC=Cost of Debt + Cost of Equity Where.

Cost of Debt=Normative Debt X (Normative rate of Interest) x (1-Corproate Tax Rate)

Cost of Equity =Normative Equity X (Post Return on Equity)"

- 37. From the perusal of the above reference, it is clear that it was conscious decision taken by the Commission to adopt post tax WACC as discount factor which has been incorporated in the RE Tariff Regulations, 2012. Accordingly, the Central Commission passed the suo-moto order dated 27.3.2012 under the Regulations, 2012 for the Year 2012-13 wherein the levelised tariff was determined after considering the post tax WACC as discount factor.
- 38. According to the Appellant, the RE Tariff Regulations, 2012 does not provide for any Formula for determination of levelised generic tariff.
- 39. It is pointed out by the learned Counsel for the Commission that the levelised tariff means levelised cost of generation which is the constant unit cost (per kWh) of a payment

stream that has the same present value as the total cost of commissioning and operating a generating plant over its useful life.

- 40. On this basis, it is contended that as the term 'levelised tariff' is self explanatory, there is no need to provide any separate formula for the same.
- 41. The learned Counsel for the Central Commission has also brought to our notice Regulation 10 of RE Tariff Regulations in which it was specified that whatever is essential for determination of levelised tariff. The Regulation 10 is quoted as below:

# "10. Tariff Design

(1) The generic tariff shall be determined on levellised basis for the Tariff Period.

Provided that for renewable energy technologies having single part tariff with two components, tariff shall be determined on levellised basis considering the year of commissioning of the project for fixed cost component while the fuel cost component shall be specified on year of operation basis.

- (2) For the purpose of levellised tariff computation, the discount factor equivalent to Post tax weighted average cost of capital shall be considered.
- (3) Levellisation shall be carried out for the 'useful life' of the Renewable Energy Project while Tariff

# shall be specified for the period equivalent to 'Tariff Period'.

- 42. According to the Appellant the factor of (1-Tax Rate), which is called tax shield on interest, should not be considered as this tax shield is not available in regulated environment.
- 43. The Central Commission has used the following Formula for calculation of post tax Weighted Average Capital Cost (WACC):

"Post Tax WACC =Cost of Debt +Cost of Equity Where,
Cost of Debt= Normative Debt X (Normative rate of interest) X (1-Corporate Tax Rate)
Cost of Equity= Normative Equity X (Post Tax Return on Equity)"

- 44. This Formula captures the tax benefit associated with debt. Interest on debt is a tax deductible expense for a project developer, whether it is invested in a regulated business or an unregulated business. It can act as a tax shield.
- 45. A tax shield is any deduction that the Tax Code allows for business to deal with their taxable income and consequently pay less in business taxes.
- 46. If a business takes out a loan and pays interest on it each month, the interest payments are tax-deductible.

- 47. The money a project developer saves from a tax shield is retained by it and the project developer does not need to pay tax on it. The tax shields thus increase cash flow because they keep more money in a business.
- 48. Due to such Tax Shield, effective cost of capital of project reduces to the extent of tax rate. Such tax shields will depend upon the project developer's overall tax rate and cash flows for the given tax year.
- 49. According to the Central Commission such benefits needs to be passed on to the consumers. Therefore, as per RE Tariff Regulations, the Central Commission has considered discount factor as a Post Tax Weighted Average Cost of Capital and considered the same as Post Tax Weighted Average Cost of Capital (WACC).
- 50. It is strenuously contended by the learned Counsel for the Central Commission that by seeking to introduce the concept of pre tax debt and post tax equity in calculation of post tax WACC, the Appellant is indirectly challenging the RE Tariff Regulations itself and this is impermissible in an Appeal before this Tribunal.
- 51. We find force in this contention urged by the learned Counsel for the Central Commission.

- 52. The Appellant has contended that the explanatory memorandum cannot be relied upon by the Central Commission while passing the Impugned Tariff Order.
- 53. This contention is misplaced and against the settled principles.
- 54. The Hon'ble Supreme Court in the case of Ajoy Kumar Bannerjee V/s Union of India (1984) 3 SCC 126 relied upon the explanatory memorandum to the General Insurance Business (Nationalisation) Act, 1972 while construing Section 16 of the said Act.
- 55. Therefore, it was appropriate for the Central Commission to rely on its own Explanatory Memorandum while passing the Impugned Tariff Order.
- 56. Nextly, it was contended by the Appellant that discount factor stipulated by the Central Commission does not give the normative return on equity of 20% p.a. for the first 10 years and 24% p.a. from 11<sup>th</sup> year as specified in Regulation 16 is not an acceptable submission.
- 57. There is nothing in the RE Tariff Regulations that warrants the construction to allow pre-tax cost of debt in the calculation of post tax WACC as suggested by the Appellant. If the interpretation projected by the Appellant is

- accepted, it will result in increasing the burden on consumers.
- 58. One another contention urged by the Appellant is that even if the tax shield is to be considered as per the interpretation of the Commission, the WACC should be calculated considering the MAT for first 10 years and corporate tax rate for remaining 15 years as the tax shield cannot be more than applicable tax rate.
- 59. It is to be pointed out in this context that under the levelised tariff design, the renewable energy project is not able to recover the cost of generation during the initial years of project. Moreover, under Section 10IA of the Income Tax Act, 1961, renewable energy projects are also entitled for Tax exemption for 10 consecutive years out of the initial 15 years. However, the minimum alternate tax (MAT) is applicable during the initial years even though taxable income is negative.
- 60. In the case of Solar Project claiming accelerated depreciation the initially due to 100% depreciation in the first year itself, the taxable income will result in negative figures namely losses. Hence, after the absorption of losses, the reduction will be claimed for 6<sup>th</sup> year to 15<sup>th</sup> year.

- 61. The Appellant has attempted to use calculations using the IRR methodology to somehow prove that the Tariff Order is contravening the Return on Equity as guaranteed under Regulation 16 of the RE Tariff Regulations.
- 62. The Appellant in fact, concedes that the IRR is not equivalent to return on equity but only a methodology. However, the Appellant seeks to put the onous on the Central Commission to provide a methodology to suit the interpretation of the Appellant.
- 63. The Central Commission issued generic tariff order which only guarantees a return on post equity. But the Appellant is attempting to read in the discount factor to include a tax shield on the pre-tax debt.
- 64. As pointed out by the learned Counsel for the Central Commission, the Commission cannot go into the academic exercise to determine the tariff for a unit outside its jurisdiction merely on speculative allegations.
- 65. Thus, it is clear that the relief actually sought for by the Appellant would amount to seeking for a review or amendment of the very RE Tariff Regulations itself which cannot be undertaken in this Appeal u/s 111 of the Electricity Act, 2003.

- 66. The Central Commission has determined the generic tariff for solar PV for FY 2014-15 at Rs.7.72/kWh considering the discount factor as Post Tax WACC i.e. 10.67%.
- 67. In this process adopted by the Central Commission by using the methodology for determination of discount factor, we do not find any infirmity.
- 68. Therefore, this point is decided against the Appellant.

# 69. Summary of Our Findings

- (a) The Appeal is maintainable as it has been filed by the aggrieved person.
- (b) The relief actually sought by the Appellant regarding discount factor would amount to seeking for a review or amendment of the RE tariff Regualtions which cannot be undertaken in this Appeal filed u/s 111 of the Electricity Act, 2003.
- 70. In view of the above, the Appeal is dismissed as devoid of any merit.

- 71. No order as to costs.
- 72. Pronounced in Open Court on this 20<sup>th</sup> day of November, 2014.

(Rakesh Nath)
Technical Member
Dated:20<sup>th</sup> Nov, 2014

(Justice M. Karpaga Vinayagam) Chairperson

√REPORTABLE/<del>NON-REPORTABALE</del>