

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 160/MP/2015**

**Coram:**

**Shri Gireesh B. Pradhan, Chairperson**

**Shri A. K. Singhal, Member**

**Shri A. S. Bakshi, Member**

**Date of Order: 31<sup>st</sup> March, 2017**

**In the matter of**

Petition under Section 79(1) read with Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff determination From Renewable Energy Sources) Regulations, 2012 and Regulations 111 and 119 of CERC (Conduct of Business) Regulations, 1999 for applicability Generic Tariff for 50 MW Rajgarh Solar PV Station of NTPC Ltd.

**And**

**In the matter of:**

NTPC Limited  
NTPC Bhawan, SCOPE Complex,  
7, Institutional Area, Lodhi Road,  
NewDelhi-110003

.....Petitioner

**Vs**

Madhya Pradesh Power Management Company Limited  
Shakti Bhawan, Vidyut Nagar,  
Jabalpur-482008

.....Respondent

**Parties Present:**

Shri M.G. Ramachandran, Advocate, NTPC  
Ms. Ranjitha Ramachandran, Advocate, NTPC  
Ms. Poorva Saigal, Advocate, NTPC  
Shri A.K. Brishai, NTPC  
Ms. Suchitra Maggon, NTPC  
Shri Shyam Kumar, NTPC  
Shri Sachin Jain, NTPC  
Shri G. Umopathy, Advocate, MPPMCL  
Shri Manoj Dubey, Advocate, MPPMCL  
Shri Shubham Arya, Advocate for respondent  
Ms. Anushree Saigal, Advocate for respondent

## ORDER

The petitioner, NTPC Limited, has filed the present petition under Section 79 (1) (f) of the Electricity Act, 2003 read with Regulations 111 and 119 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for adjudication of dispute in regard to matter connected with applicability of generic tariff for 50 MW Solar PV Station of NTPC Ltd. at district Rajgarh, Madhya Pradesh.

2. Brief facts of the case leading to the filing of the present petition are as under:

(a) On 28.12.2011, the petitioner entered into a Power Purchase Agreement dated 28.12.2011 with the Madhya Pradesh Power Management Company Limited (MPPMCL) for setting up a 50 MW Solar PV Power Station at Rajgarh on the terms and conditions contained in the Power Purchase Agreement (PPA). Ministry of Power, Government of India vide its letter dated 24.3.2014 allocated the entire contracted capacity of 50 MW to MPPMCL.

(b) Regulation 8 (2) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff determination From Renewable Energy Sources) Regulations, 2012 (RE Regulations, 2012) provides that the generic tariff determined for solar PV projects based on the capital cost and other norms applicable for any year of the control period shall apply for such projects during the next year.

(c) The Commission vide orders dated 27.3.2012 and 28.2.2013 in Petition Nos. 35/2012( Suo-Motu) and 243/SM/2012 respectively determined the generic tariff of the Solar Thermal Power Project for the financial years 2012-13 and 2013-14 as under:

<b>Tariff of Solar Power Projects commissioned during the period 2013-14 and the PPA signed on or before 31<sup>st</sup> March, 2013</b>			
Particular	Levellised Total Tariff	Benefit of Accelerated Depreciation (if availed )	Net Levellised Tariff (upon adjusting for Accelerated Depreciation benefit) (if availed)
	(₹/kWh)	(₹/kWh)	(₹/kWh)
Solar PV	10.39	(1.04)	9.35
Solar Thermal	12.465	(1.24)	11.22

As per the above table, if PPA is signed before 31.3.2013 and the project is commissioned during 2013-14, tariff of solar PV, if accelerated depreciation benefit availed, would be ₹9.35/ kWh.

<b>Tariff of Solar Power Projects commissioned during the period 2014-15 and the PPA signed on or before 31.3.2014</b>			
Particular	Levellised Total Tariff	Benefit of Accelerated Depreciation (if availed )	Net Levellised Tariff (upon adjusting for Accelerated Depreciation benefit) (if availed)
	(₹/kWh)	(₹/kWh)	(₹/kWh)
Solar PV	8.75	(0.88)	7.87
Solar Thermal	11.90	(1.20)	10.70

As per above table, if PPA is signed before 31.3.2014 and the project is commissioned during 2014-15, tariff of solar PV, if accelerated depreciation benefit availed, would be ₹7.87/kWh.

(d) Out of the total installed capacity of 50 MW of the project, the petitioner, commissioned modules with a generation capacity of 30 MW project on 31.03.2014 i.e. in financial year 2013-14 in terms of Regulation 2(14) of the Central Electricity Authority (Technical Standards for connectivity of Grid) Regulations, 2007 (CEA Grid Connectivity Regulations). Subsequently, the balance modules with a generation capacity of 20 MW was commissioned on 30.4.2014 i.e. in financial year 2014-15 and declared the commercial operation of the project.

(e) Since Regulation 8 of the RE Regulations, 2012 allows the developer to charge the previous year notified tariff for the capacity mentioned in the next year, the petitioner has been billing the respondent @ ₹9.35 /kWh (levelized tariff upon adjusting for accelerated depreciation benefit) for 30MW commissioned in 2013-14 and @ ₹7.87/kWh (levelized tariff upon adjusting for accelerated depreciation benefit) for 20 MW commissioned in the year 2014-15. Since the metering and accounting for the generating station is done for entire 50 MW, the petitioner is charging single weighted average tariff of ₹8.76/kWh for the sale of energy generated from the generating station from the date of commercial operation.

(f) As per Article 5 of the PPA, solar modules shall be commissioned progressively over a period of time and the date of commercial operation of station shall be the date on which the entire capacity is commissioned. The

PPA further provides the terms and conditions of the tariff which shall be applicable for the commissioned modules.

(g) Each module along with the inverter can function as a separate unit. Regulation 2 (14) of the CEA Grid Connectivity Regulations which was amended on 15.10.2013, provides that “In case of Solar Photo Voltaic generating station, each inverter along with associated modules will be reckoned as a separate generating unit”.

(h) In the light of the provisions of the RE Regulations 2012, PPA, CEA Grid Connectivity Regulations and orders of the Commission, the following is emerges:

(i) The Solar PV Power station of 50 MW in aggregate can be established module-wise progressively and the modules can be commissioned. Supply of power can commence similar to the individual units of generation in respect of conventional project of thermal or hydro. In such case, the commissioning of the modules would be valid. However, the commissioning of the generating station as a whole of 50 MW would be after all the modules are commissioned. The tariff applicable shall be determined with reference to each of the modules commissioned;

(ii) In case of such commencement of supply of power from the modules commissioned during a particular financial year, the generic tariff

of year previous to the commissioned year would apply for the entire useful life of the commissioned modules;

(i) The respondent, MP Power Management Company Limited, has raised dispute on the weighted average tariff being billed by the petitioner for the entire capacity commissioned in phases. The respondent is insisting on the applicability of tariff notified by the Commission for 2014-15 on the plea that the entire capacity was commissioned in 2014-15. The interpretation of the respondent is in contravention to the RE Regulations, 2012 and the respondent is liable to pay the tariff for the 30 MW solar power modules as per the tariff applicable for the financial year 2012-13 and for the remaining 20 MW as per the tariff applicable for the financial year 2013-14. Accordingly, the petitioner has been billing the respondent @ ₹9.35/kWh (levellised tariff upon adjusting for accelerated depreciation benefit) for the 30 MW capacity commissioned in 2014-15 in terms of Regulation 8 (2) of the RE Regulations, 2012.

(j) Since metering and accounting for the project is done for entire 50 MW installed capacity, therefore the petitioner is charging a single weighted average tariff of ₹8.76/kWh for the sale of energy generated in the generating station from its date of commercial operation.

3. Against the above background, the petitioner has made the following prayers:

“(a) Adjudicate upon the dispute raised by the Respondent and declare that NTPC is entitled to and the Respondent is liable to pay the tariff for the 30 MW solar power modules established by NTPC as per the tariff applicable for the financial year 2012-13 and for the remaining 20 MW as per the tariff applicable for the financial year 2013-14.

(b) Direct the Respondent to pay NTPC at the rate of ₹9.35/kwH for 30 MW and ₹7.87/kWh for the 50 MW w.e.f. commissioning of all modules;

(c) Pass such further order or orders as this Hon'ble Commission may deem just and proper in the circumstances of the case.”

4. The matter was admitted on 18.8.2015 and notice was issued to the respondent to file its reply to the petition.

5. The respondent, in its reply dated 10.9.2015, has submitted as under:

(a) The generating station as a whole was commissioned on 30.4.2014, i.e., in the year 2014-15 only, after a period of two years and four months, approximately, from the date of signing of the PPA. Therefore, tariff for the year 2014-15 should be applied for the entire 50 MW, considering the generating station as a whole.

(b) The petitioner is misinterpreting the Regulation 8(2) of the RE Regulations, 2012 and is applying tariff of 2012-13 and 2013-14 for the 30MW and 20 MW respectively. The tariff for the years 2012-13 and 2013-14 is ₹9.35/kWh and ₹7.87/kWh respectively. On the basis of these two tariffs, the petitioner is charging a single weighted average tariff of ₹8.76/Kwh. The tariff of ₹6.95/ Kwh for 2014-15 (with AD benefit) should be applicable for the entire 50 MW capacity, when the entire contracted capacity has been commissioned.

(c) Regulation 8(2) clearly provides that the generic tariff determined for Solar PV projects based on the capital cost and other norms applicable for any year of the control period shall also apply for such projects during the next year. Second proviso of Regulation 8(2) further provides that the entire capacity covered by the

PPA's is commissioned on or before 31st March of the next year in respect of Solar PV projects. Therefore, it is clear that tariff for the entire contracted capacity shall be only one and applicability of the tariff for the next year is conditional not in general sense, i.e., it is subject to the fulfillment of the condition that entire capacity covered by the PPA is commissioned on or before 31st March of the next year.

(d) Since, the petitioner entered into PPA with the respondent on 28.12.2011 and the entire capacity was commissioned in the year 2014-15, therefore, the generic tariff determined for the year 2014-15 would be applicable to the project. If the entire capacity of 50 MW would have been commissioned by 31.3.2013, i.e., by the end of next calendar year from 28-12-2011 (signing of the PPA), then only the petitioner would have been entitled to benefit of the same tariff for the next year.

(e) Neither the provisions of the RE Regulations, 2012 nor the PPA provide for aggregating the tariffs applicable for two different years. The petitioner has unilaterally resorted to adopt to aggregation the tariffs for the years 2012-13 and 2013-14. This method is in clear violation of the provisions of the RE Regulations, 2012 and PPA, and has to be out rightly refuted.

(f) Regulations 2(14) of the CEA Grid Connectivity Regulations deals with the issues related to technical standards for connectivity to grid only and there is no commercial relevance to these Regulations.



(g) The petitioner has, itself, accepted for common metering point for the entire 50 MW contracted capacity. Therefore, its claim of weighted average tariff based on the separate tariff for 30 and 20 MW on prorated basis is arbitrary practice, and contrary to the provisions of PPA and Regulations 8(2) of the RE Regulations, 2012.

(h) Pending resolution of present dispute, the respondent is making payments to the tune of 95% of the disputed amount in accordance with clause 6.1.6 of the PPA. MPPMCL requested to direct the petitioner to bill the entire energy supplied at the tariff ₹6.95/ Kwh (with AD benefit), applicable for the year 2014-15, when the entire contracted capacity (50MW) was commissioned, and to allow adjustment of excess amount already paid along with interest.

6. The petitioner, in its rejoinder dated 13.10.2015 to the reply of the respondent, has submitted that there is no such express prohibition in the RE Regulations, 2012 that a Solar PV Project where the PPA has been entered into in a previous year and the project has been delayed beyond the subsequent year, shall not be subject to the generic tariff, as applicable for the year subsequent. The petitioner has submitted that RE Regulations, 2012 provides that the PPA must be signed before the 31st of the previous year and not that the PPA should have necessarily been signed during the previous year. Therefore, the PPA could have been signed at any time prior to the 31st of the previous year. The petitioner has further submitted that the RE Regulations, 2012 have to be applied in a harmonious and contextual manner and not in a manner to deprive the solar power developers the applicable tariff.

## **Analysis and Decision:**

7. We have considered the submissions of the petitioner and the respondent and perused documents on record. The main dispute between the petitioner and the respondent is the date of commercial operation of the Solar PV Project and therefore the applicability of generic tariff as determined by the Commission for different financial year in a control period.

8. The petitioner has set up a 50 MW Solar PV Power Station in district Rajgarh, Madhya Pradesh. According to the petitioner, since 30 MW was commissioned on 31.3.2014 i.e. in financial year 2013-14 and balance 20 MW was commissioned by 30.4.2014 i.e. in financial year 2014-15 therefore, the generic tariff applicable for the 50 MW power project shall be at ₹9.35/KWh and ₹7.87/KWh determined by the Commission for financial years 2012-13 and 2013-14 for 30 MW and 20 MW respectively. According to the respondent, the petitioner had commissioned the project in a phased manner i.e. 30 MW in the year 2013-14 and 20 MW in the year 2014-15, and the project, as a whole was commissioned in the year 2014-15 only. Therefore, the tariff shall be applicable @ 6.95/kwh as determined by the Commission for financial year 2014-15.

9. The following issues need consideration of the Commission:

- (a) Whether the date of commercial operation of the project shall be reckoned with reference to the commissioning of the modules or with reference to the entire project?

(b) Whether the tariff of the years 2012-13 and 2013-14 shall be applicable as prayed by the petitioner?

**Issue No. 1:- Whether the date of commercial operation of the project shall be recommended with reference to the commissioning of the modules or with reference to the entire project?**

10. It is an admitted fact that 30 MW was commissioned on 31.3.2014 and remaining 20 MW was commissioned on 30.4.2014. The Petitioner is relying on the provisions of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and the definition of commercial operation in the PPA between the Petitioner and MPPCL to contend that since the modules are allowed to be commissioned independently and are considered as separate units, the tariff of the year 2012-13 shall be applicable for 30 MW and tariff the year 2013-14 shall be applicable for 20 MW.

11. Regulation 2 (14) of the CEA (Technical Standards for Connectivity to Grid) Regulations, 2007 as amended from time to time provides as under:

“2 (14) In case of solar photo voltaic generating station, each inverter along with associated modules will be reckoned as a separate generating unit.”

From the provisions of the CEA Regulations, it is clear that in case of solar photo voltaic generating station, each inverter along with associated modules would be reckoned as a separate generating unit. These regulations are meant for enforcing Technical Standards for Connectivity to the grid and cannot be taken as the basis for

the determination of tariff/applicability of generic tariff on the basis of the commissioning of the modules.

12. Clause 1.2 (ix) of the PPA defines Commercial Operation Date as under:

*“(ix) Commercial operation Date-Solar power modules shall be commissioned progressively over a period of time and ‘Date of Commercial Operation’ or ‘COD’ of the station means the date on which the entire Station capacity is commissioned.”*

Therefore, as per the PPA, the modules can be declared under commercial operation progressively over a period of time and the COD of the generating station shall be considered on the date when entire station capacity is commissioned.

13. As per the provisions of the Clause 5.1 of the PPA, the tariff of the electricity supplied from the station/module would be directed as under:-

*“5.1 The tariff for the electricity supplied from the Station/module would be applicable rate in ₹/kWh for the relevant year of Commissioning as notified by CERC from time to time based on the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy sources) Regulations, 2009 as amended from time to time.”*

As per the PPA, the tariff for the electricity supplied shall be the applicable rate for the relevant year as per the RE Tariff Regulations as issued from time to time.

14. Regulation 8 of RE Regulations, 2012 effective from 1.4.2012 to 31.3.2017 provides as under:

**“8. Petition and proceedings for determination of tariff**

(1) The Commission shall determine the generic tariff on the basis of suo- motu petition at least six months in advance at the beginning of each year of the Control period for renewable energy technologies for which norms have been specified under the Regulations.

(2) Notwithstanding anything contained in these regulations,

(a) the generic tariff determined for Solar PV projects based on the capital cost and other norms applicable for any year of the control period shall also apply for such projects during the next year; and

(b) the generic tariff determined for Solar thermal projects based on the capital cost and other norms for the any year of the control period shall also apply for such projects during the next two years:

provided that

(i) the Power Purchase Agreements in respect of the Solar PV projects and Solar thermal projects as mentioned in this clause are signed on or before last day of the year for which generic tariff is determined and

(ii) the entire capacity covered by the Power Purchase Agreements is commissioned on or before 31st March of the next year in respect of Solar PV projects and on or before 31st March of subsequent two years in respect of Solar thermal projects.”

As per Regulation 8 (2), the generic tariff determined for solar PV projects for any year of the Control Period shall also apply for such Solar PV projects during the next year if the PPAs in respect of such Solar PV projects are signed on or before the last date of the year for which generic tariff is determined and the entire capacity covered under the PPA should be commissioned on or before 31st March of the next year. Therefore, for the purpose of applicability of generic tariff under Regulation 8 (2), the COD of the Solar PV project should take place during the year in which the entire capacity covered under the PPA is commissioned. The Petitioner has submitted that though the commissioning of the generating station as a whole of 50 MW will be after all the modules are commissioned, the tariff applicable shall be determined with reform to each of the modules commissioned.

15. We are not in agreement with the submission of the Petitioner that tariff of the Solar PV project should be determined module wise on account of the provisions of the CEA Connectivity Regulations permitting treatment of the module with the invertors as a

separate unit. As already mentioned, the CEA Technical Standard is meant for enforcing the technical standards for connectivity and cannot be considered for grant of tariff which has to be governed as per the RE Tariff Regulations of the Commission. On a plain reading of Regulation 8, it emerges that for grant of tariff, the entire capacity needs to be commissioned. We are of the view that the COD of the generating station shall be reckoned from 30.4.2014 as the entire capacity was declared under commercial operation on that date.

**Issue No. 2:- Whether the generic tariff of the year 2012-13 and 2013-14 shall be applicable as prayed by the petitioner?**

16. The Petitioner has sought a direction to the respondent to pay the tariff @ ₹9.35/KWh for 30 MW applicable for the year 2012-13 and tariff @ ₹7.87/KWh for 20 MW applicable for the year 2013-14 and ₹8.76/KWh for 50 MW w.e.f. commissioning of all modules. The Petitioner has submitted that it is not necessary that entire 50 MW solar station is to be commissioned before the commencement of supply of power from any of the modules. In case of commencement of supply of power from the modules during the particular financial year, the generic tariff of year previous to the commissioned year would apply to the entire useful life of commissioned module.

17. MPPMCL has submitted that PPA was executed on 28.12.2011 and the entire capacity covered under the PPA was commissioned in the year 2014-15 and therefore, the generic tariff determined for the year 2014-15 will only be applicable.

18. We have considered the submission of the petitioner and the respondent. The PPA was signed on 28.12.2011. As per Regulation 8.2.A of the RE Tariff Regulations, the generic tariff determined for solar PV project applicable for any year of the controlled period shall also supply for such project during next year. The proviso to the said regulation says that the PPA in respect to the solar PV project should be signed on or before the last date of the year for which generic tariff is determined and the entire capacity covered by the PPA should be commissioned on or before 31<sup>st</sup> March of the next year. As per the said provision, the petitioner was required to commission the entire 50 MW contracted capacity of the project on or before the 31.3.2013. However, the entire capacity of the project was commissioned on 30.4.2014 which falls in the financial year 2014-15. Therefore, the tariff for the year 2011-12 shall not be applicable to the project of the petitioner. As per the Regulation 8 of the RE tariff regulation, the generic tariff determined for a particular year is applicable for the project commissioned during the same year or during the next year. However, the regulations are silent about the treatment which is required to be given to the projects which are not commissioned in the same year or next year but in the subsequent years. According to MPPMCL, the tariff of the year in which entire capacity of the solar PV project was commissioned should be applicable. In our view, such an interpretation does not flow from Regulation 8 of the RE Tariff Regulations. In fact, the Regulations is silent about the treatment that is required to be given in cases where the project developers are unable to commission their projects either in the same year when the PPA was executed or in the next year. In our view, in the absence of any provision to the contrary in the regulations, the tariff in such cases should be applicable for the

tariff year proceeding the year in which the project was commissioned. This will be in keeping with the spirit of Regulation 8 of the RE Tariff Regulation.

19. In the present case, 60% of the project was commissioned during the year 2013-14 and balance 40% of the project was commissioned during the first month of the year 2014-15. In our view, granting the tariff of the year 2014-15 to the Petitioner will result in undue hardship as the Petitioner has made efforts to execute the project during the year 2013-14 which spilled over to the first month of the year 2014-15. In order to balance the interest of the Petitioner as well as the beneficiary, we direct that the generic tariff for the year 2013-14 i.e. @ ₹7.87 (less the benefit of accelerated depreciation) shall be applicable.

20. The petition is disposed of in terms of the above.

-Sd-  
**(A.S. Bakshi)**  
Member

-Sd-  
**(A.K. Singhal)**  
Member

-Sd-  
**(Gireesh B. Pradhan)**  
Chairperson