### CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A. K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Order: 11th of October, 2017

Petition No. 304/MP/2013 Along with I.A. No. 57 of 2016

#### In the matter of

Petition under section 79 (1) (b) read with section 79 (1) (f) of the Electricity Act, 2003 for adjustment of generation tariff and other related reliefs.

## And In the matter of

M/s Godawari Green Energy Limited (GGEL) Hira Arcade, Pandari Raipur- 492001

...Petitioner

Vs.

- 1. NTPC Vidyut Vyapar Nigam Limited Core-7, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi- 110003
- 2. The Union of India Ministry of New and Renewable Energy, Block-14, CGO Complex, Lodhi Road, New Delhi- 110003
- 3. Punjab State Power Corporation Limited SLDC Building, 220 KV Grid Sub-Station, PSPCL Ablowal Patiala- 147001
- 4. Central Power Distribution Company of Andhra Pradesh Limited (APCPDCL), Mint Compound Hyderabad- 500063
- 5. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL),

Corporate Office P &T Colony, Seethammadhara, Vishakhapatnam - 530 013

- 6. Northern Power Distribution Company of Andhra Pradesh Limited(APNPDCL), Commercial & IPC, House No.1-1-478, 503 & 504, Opposite NIT Petrol Bunk, Chaitnaya Puri, Kazipet, Warrangal - 506004
- 7. Chhattisgarh State Power Distribution Company Limited Fourth Floor, Vidyut Seva Bhawan, Dangania Raipur, Chhattisgarh -492013
- 8. Maharashtra State Electricity Distribution Co. Ltd. Prakashgad, 5<sup>th</sup> Floor, Anant Knekar Marg, Station Road, Bandra (East). Mumbai-400 051
- 9. Aimer Vidvut Vitaran Ltd. Old Power House Hathi Bhata Jaipur Road. Ajmer-305001
- Jaipur Vidyut Vitaran Ltd. 10. Jaipur-302005
- 11. Jodhpur Vidyut Vitaran Ltd. New Power House Industrial Area Jodhpur-342003
- **U.P Power Corporation Limited** 12. 14<sup>th</sup> Floor, Shakti Bhawan, Extn. 14, Ashok marg Lucknow-226 001
- 13. Assam Power Distribution Company Limited Bijulee Bhawan Paltanbazar. Guwahati-781001
- 14. Bangalore Electricity Supply Company Limited Corporate Office K.R Circle, Bangalore-560001
- 15. Damodar Valley Corporation **DVC Towers, VIP Road** Kolkata - 700 054
- **GRIDCO Limited** 16. Janpath, Bhubaneshwar-751022

- 17. Tamil Nadu Generation and Distribution Company Limited, 144. Anna Salai, Chennai - 600 002
- 18. West Bengal State Electricity Distribution Company Limited, Vidyu B hawan,7<sup>th</sup> Floor, Block-DJ, Sector- II, Bidhannagar, Kolkata-700091

...Respondents

#### **Petition No. 312/MP/2013**

#### In the matter of

Petition in the matter of the Power Purchase Agreement entered between NTPC Vidyut Vyapar Nigam Limited and Rajasthan Sun Technique private limited and in the matter of compensatory tariff on account of depreciation in rupee.

## And In the matter of

Rajasthan Sun Technique Private Limited 7<sup>th</sup> Floor, Raheja Point-I, Jawahar Lal Nehru Marg, Vakola Market, Santacruz (East), Mumbai- 400055

...Petitioner

Vs.

- 1. NTPC Vidyut Vyapar Nigam Limited Core-7, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi- 110003
- 2. The Union of India Ministry of New and Renewable Energy, Block-14, CGO Complex, Lodhi Road. New Delhi- 110003

...Respondents

#### **Petition No. 313/MP/2013**

#### In the matter of

Petition in the matter of the Power Purchase Agreement entered between NTPC Vidyut Vyapar Nigam Limited and Rajasthan Sun Technique Private Limited and in the matter of compensatory tariff on account of Direct Normal Irradiance (DNI).

## And In the matter of

Rajasthan Sun Technique Private Limited 7<sup>th</sup> Floor, Raheja Point-I, Jawahar Lal Nehru Marg, Vakola Market, Santacruz (East), Mumbai- 400055

...Petitioner

Vs.

- 1. NTPC Vidyut Vyapar Nigam Limited Core-7, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi- 110003
- 2. The Union of India Ministry of New and Renewable Energy, Block-14, CGO Complex. Lodhi Road, New Delhi- 110003

...Respondents

# Petition No. 16/MP/2014 Along with I.A. No. 8 of 2017

#### In the matter of

Petition under section 79 (1) (b) read with section 79 (1) (f) of the Electricity Act, 2003 for Adjustment of capacity utilization factor, extension of time for execution of project and other consequential reliefs.

# And In the matter of

MEIL Green Power Limited S2 Technocrat Industrial Estate Balanagar. Hyderabad - 500 037 Andhra Pradesh

...Petitioner

Vs.

- 1. NTPC Vidyut Vyapar Nigam Limited Core-7, SCOPE Complex, Institutional Area, Lodhi Road. New Delhi-110003
- 2. Union of India Ministry of New and Renewable Energy, Block-14, CGO Complex,

#### Lodhi Road, New Delhi-110003

- 3. Puniab State Power Corporation Limited. SLDC Building, 220KV Grid Sub-Station, PSPCL, Ablowal, Patiala-147001
- 4. Central Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL), Mint Compound, Hyderabad-500063
- 5. Eastern Power Distribution Company of Andhra Pradesh (APEPDCL), Corporate Office, P&T Colony, Seethammadhara, Vishakhapatnam-530013
- 6. Northern Power Distribution Company of Andhra Pradesh Ltd. (APNPDCL), H.No.1-1-478, 503 &504 Opposite NIT Petrol Bunk, Chaitnaya Puri, Kazipet, Warrangal-506004
- 7. Chattisgarh State Power Distribution Company Ltd. Fourth Floor, Vidyut Seva Bhawan, Dangania, Raipur (Chattisgarh)- 492013.
- 8. Maharashtra State Electricity Distribution Company Ltd. "Prakashgad", 5th Floor, Anant Knekar Marg, Bandra (East), Mumbai-400051.
- 9. Ajmer Vidyut Vitran Nigam Ltd. AVVNL, Aimer Vidyut Vitran Nigam Ltd., Old Power, Hathi Bhata, Aimer-305001
- 10. Jaipur Vidyut Vitran Nigam Ltd. JVVNL, Jaipur Vidyut Vitran Nigam Limited, Jaipur-302005.
- 11. Jodhpur Vidyut Vitran Nigam Ltd. JDVVNL, Jodhpur Vidyut Vitran Nigam Limited, New Power House, Industrial Area, Jodhpur-342003.
- 12. U.P. Power Corporation Ltd. (UPPCL),14th Floor, Shakti Bhawan, Ext.14, Ashok Marg, Lucknow-226001.
- 13. Assam Power Distribution Company Ltd. Bijulee Bhawan, Paltanbazar, Guwahati-781001.
- 14. Bangalore Electricity Supply Corporation Power Purchase, BESCOM, Corporate Office,

- K.R. Circle, Bangalore-560001.
- 15. Damodar Valley Corporation Damodar Valley Corporation, DVC Towers, VIP Road, Kolkata-700054.
- 16. GRIDCO Ltd. Janpath, Bhuluteswar-751022.
- 17. Tamil Nadu Generation and Distribution Company Ltd., Tamil Nadu Generation & Distribution Corporation Ltd., 144, Anna Salai, Chennai-600002
- 18. West Bengal State Electricity Distribution Company Ltd., Vidyut Bhawan, 7th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.

...Respondents

## Petition No. 42/MP/2014

#### In the matter of

Petition under section 79 (1) (b) read with section 79 (1) (f) of the Electricity Act, 2003 for Adjustment of tariff, extension of time for execution of project and other consequential reliefs.

## And In the matter of

M/s Corporate Ispat Alloys Limited (CIAL) 601, Tulsiani Chambers, Nariman Point, Mumbai- 44002

...Petitioner

Vs.

- 1. NTPC Vidyut Vyapar Nigam Ltd, Core-7, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi-110003
- 2. Union of India Ministry of New and Renewable Energy, Block-14, CGO Complex, Lodhi Road, New Delhi-110003

...Respondents

**Parties Present:** Shri Buddy A. Ranganathan, Advocate, GGEL & RSTEL

> Shri Raunak Jain, Advocate, GGEL & RSTEL Ms. Malvika Prasad, Advocate, GGEL & RSTEL

Shri Surva Kant, RSTEL Shri Manoj Pongde, RSTEL

Shri Sakya Singha Chowdhury, Advocate, MEIL

Ms. Molshree Bhatnagar, Advocate, MEIL Ms. Manpreet Kaur, Advocate, MEIL

Shri N.M. Venugopal, MEIL

Shri M.G. Ramachandran, Advocate, NVVNL Ms. Anushree Bardhan, Advocate, NVVNL Shri Shubham Arya, Advocate, NVVNL

Shri Dharmendra Singh, NVVNL Shri R.Mishra, Advocate, MNRE Shri Sanjay Karndhar, MNRE Shri Chaturman Das, MNRE

Shri Anand K. Ganesan, Advocate, PSPCL Ms. Swapna Seshadri, Advocate, PSPCL Shri Soumvajit Pani, Advocate, WBSEDCL

Shri Surajit Chakraborti, WBSEDCL

#### ORDER

The Petitioners are Solar Power Developers engaged in setting up grid connected Solar Thermal Power Plants situated in various States under Jawaharlal Nehru National Solar Mission Scheme (hereinafter referred as "JNNSM Scheme").

2. Respondent No.1 is NTPC Vidyut Vyapar Nigam Limited (NVVNL) which issued a Request for Selection (RfS) document for selection of New Grid Connected Solar Thermal Projects under Phase-I of JNNSM Scheme and was also designated as the nodal agency by Ministry of New and Renewable Energy, to enter into Power Purchase Agreements (PPAs) with the successful developers. NVVNL had agreed to purchase power from the Petitioner as an intermediary and sell power to a Discom after bundling it with the unallocated power procured from the Central unallocated quota of coal based power projects of NTPC.

- 3. Respondent No. 2 is Ministry of New and Renewable Energy (MNRE) which formulated and floated the JNNSM Scheme. Phase-I.
- 4. Respondent No. 3 is Punjab State Power Corporation Limited (PSPCL), DISCOM of Punjab, a buying Utility, which submitted its reply in Petition No. 16/MP/2014.
- In the present petition, the Petitioners have sought following reliefs: 5.

# I. Petition No. 304/MP/2013 in case of M/s Godawari Green Energy Limited (GGEL)

- (a) Revise the applicable tariff under Article 9 of the PPA from Rs. 12.20/kWh to Rs. 15.00/kWh;
- (b) Pass such other and further orders which may be deemed necessary in the interest of justice.

### IA 57 of 2016

- (a) Stay the operation and recovery of the Compensation Bill for short supply of solar energy dated 12.10.2016 issued by Respondent No. 1, NVVNL to the Petitioner, pending further directions from this Learned Commission;
- (b) Direct the Respondent No. 1 NVVNL not to take any coercive steps whatsoever against the Petitioner in respect of the Compensation Bill for short supply of solar energy dated 12.10.2016, pending further directions from this Learned Commission;

(c) Pass such other order or orders which are deemed fit and proper in the facts and circumstances of the case.

## II. Petition No. 312/MP/2013 in case of M/s Rajasthan Sun Technique Private Limited (RSTPL)

- (a) That this Hon'ble Commission may be pleased to hold that the Petitioner is entitled to compensatory tariff on account of unprecedented, unforeseen and uncontrollable depreciation in Rupee vis a vis the US Dollar from the date on which the bid was submitted till the date of the filing of the present Petition;
- (b) Evolve a mechanism in this regard that may arise for the remainder of the term of the Power Purchase Agreement dated 8th January 2011;
- (c) Pass any such other and further reliefs as this Hon'ble Commission deems just and proper in the nature and circumstances of the present case.

## III. Petition No. 313/MP/2013 in case of M/s Rajasthan Sun Technique Private Limited (RSTPL)

- (a) That this Hon'ble Commission may be pleased to hold that the Petitioner is entitled to compensatory tariff by reason of the drop in the DNI from the assumption thereof which was on a higher side at the time of submission of the bid based on the data published by Respondent No.2;
- (b) Evolve a mechanism in this regard that may arise for the remainder of the term of the Power Purchase Agreement dated 8th January 2011;
- (c) Pass any such other and further reliefs as this Hon'ble Commission deems just and proper in the nature and circumstances of the present case.

#### IV. Petition No. 16/MP/2014 in case of Ms/ MEIL Green Power Limited (MEIL)

- (a) Re-determine the applicable Capacity Utilization Factor for the Petitioner's Project having regard to the fact of reduction of applicable DNI for the Project from 2009 kWh/m2/annum to 1637 kWh/m2/annum:
- (b) Revise the applicable tariff under Article 9 of the PPA from Rs. 11.31/kWh to Rs. 15.46/kWh;
- (c) Revise suitably the tariff on account of variation in foreign exchange rates and allow an upward revision of tariff applicable under Article 9 of the PPA:
- (d) Extend the Commissioning Date of the Project for 6 months from 9.03.2014:
- (e) Pass such further orders as the Hon'ble Commission may deem fit just and proper in the present facts and circumstances of the case.

#### IA 8 of 2017

- (a) Pass an ad interim ex-parte order directing Respondent No. 1 to keep in abeyance the letters above dated 21.08.2015, 16.12.2016 and 27.12.2016, 06.01.2017 and 16.01.2017 till this Hon'ble Commission takes a final decision based on the Ministry of Renewable Energy Report;
- (b) Direct Respondent No. 1 not to give effect to Letters as mentioned herein above at point (a).
- (c) Direct Respondent No. 1 not to take any coercive actions against or to take any steps pursuant thereto pending final adjudication of the present proceedings:

- (d) Restrain Respondent No. 1 from invoking Article 4.4.1 of the PPA or any other provision of the PPA for imposing penalties and or liquidated damages on the Applicant/Petitioner in relation to its Project;
- (e) Direct Respondent No. 1 to release pending payments/bills due for October'2016 and November'2016 for Rs. 6,51,17,716/-;
- (f) Direct Respondent No. 1 to release the amounts adjusted by way of its letters dated January 2017 and to continue to pay future bills onwards in the interest of justice.
- (g) Pass such other and further orders which may be deemed necessary in the interest of justice.

## V. Petition No. 42/MP/2014 in case of M/s Corporate Ispat Alloys Limited (CIAL)

- (a) Revise the applicable tariff under the PPA from Rs. 12.24/kWh to Rs. 15.15/kWh:
- (b) Extend the Commissioning Date of the project for clear 18 months from the date of the disposal of the present petition;
- (c) Direct NVVNL to amend the PPA in order to incorporate consequential changes;
- (d) Pass an order restraining the Respondent, its servants and agents from invoking the Performance Bank Guarantee bearing nos. : [01601PEBG-110017] amounting to Rs. 20,78,10,000, Performance Bank Guarantee bearing no [01601PEBG-110018], amounting to Rs. 20,78,10,000 &

Performance Bank Guarantee bearing no. [01601PEBG-110019] amounting to Rs. 10,39,05,000 drawn on Bank of India dated 11.01.2011 and further extended the validity up to September 09, 2014 for any delay in achieving SCoD beyond 09.03.2014;

- (e) Pass an ex-parte ad interim order in terms of Para(d) above pending the adjudication of the present petition;
- (f) Pass such further orders as the Hon'ble Commission may deem fit just and proper in the present facts and circumstances of the case.

### **Brief facts of the solar batch cases:**

- 6. On 25/07/2010, MNRE issued guidelines for selection of new grid connected solar power projects. Respondent No. 1 (NVVNL) is the Nodal Agency for facilitating purchase and sale of Solar Thermal Power under JNNSM.
- 7. On 18/08/2010, Respondent No. 1 floated 'Request for Selection' (RFS) for inviting proposals for setting up grid connected Solar Thermal Projects for purchase of power for a period of 25 years. Bidders were required to submit the 'Request for Proposal' (RFP) indicating discount on Central Electricity Regulatory Commission (hereinafter referred as "Commission") approved tariff Rs.15.31/kWh as determined by Tariff Order dated 09/11/2010 (Petition No.256 of 2010) under Regulation 8 of CERC (Terms and Conditions for Tariff determination from Renewable sources) Regulations, 2009 and CERC (Terms and Conditions for Tariff determination from Renewable sources) (First Amendment) Regulations, 2010.

- 8. Till 16.11.2010, the Petitioners were to submit their RfP which was also to be opened on the same day.
- 9. On 11.12.2010, Respondent No. 1 (NVVNL) issued a Letter of Intent (LOI) to the Petitioners.
- 10. In January 2011, Power Purchase Agreements (PPA) were executed between the Petitioners and the Respondent No.1.
- 11. In November, 2012, the Petitioners made a request to the Respondents that the date of the Scheduled Date of Commissioning (hereinafter referred as 'SCoD') may be extended on the grounds that because of lower Direct Normal Irradiance (DNI) there was a need to re-design the projects and hence delay in implementation of the project. The request of the Petitioners was accepted and the SCoD was extended by 10 Months. The amended PPA was again executed between the Petitioners and the Respondent No.1 with the revised SCoD.
- 12. Based on the ground data measurement of DNI over the period, the Petitioners found that there is a considerable drop in DNI around 15 to 25%. Due to drop in DNI there was expected shortfall in generation which would be lesser by 10 to 20%. This would result into lower revenue during the term of PPA. The Petitioners requested Respondent No. 1 for suitable tariff adjustment based on the reduction of Direct Normal Irradiance (DNI) by 15% to 25% from 2000-2200 kWh/m2/year i.e. the data given by Respondent No. 2. The Respondent No. 1 however, declined the request of the Petitioner for compensatory tariff on the ground that the same was not in accordance with the PPA.

13. Hence, the Petitioners have filed the petitions seeking relief from the Commission.

### **Submissions of the Petitioners:**

- I. Petition No. 304/MP/2013 in case of M/s Godawari Green Energy Limited (GGEL):
- The Petitioner is engaged in developing 50 MW Solar Thermal Power Plant, 14. using Parabolic Trough technology,in Village Nokh, Jaisalmer, Rajasthan (project) under Jawaharlal Nehru National Solar Mission (JNNSM).
- 15. Respondent No.1 issued RFS document along with a draft PPA on 18/08/2010. The PPA provided for a quantum equivalent of CUF 25% for Solar Thermal projects. The Respondent No.1 accepted petitioner's bid and issued Letter of Intent (LOI) on 11/12/2010. The PPA was executed on 10/01/2011 for procurement of 50 MW power for a period of 25 years from the commercial date of the project at a tariff of Rs.12.20/kWh.
- 16. The performance of solar power plant can be best defined by CUF which is directly proportionate to DNI. No DNI data was available for any project site in India at the time of bidding. Therefore, the bidders had to rely on satellite based DNI data. As such, measurement of ground data on DNI is required to be carried out for a period of at least one year. Therefore, the petitioner had proceeded on the basis of DNI data, as published by MNRE on its website, wherein, DNI level for petitioner's Project site was estimated at 2168 kWh/mt<sup>2</sup>/year.
- 17. The Petitioner quoted tariff at Rs.12.20/kWh which was based on available DNI of 2168 kWh/m2/year and further committed CUF 29.5% using 120 loops on

approximately 372 acres of land. The technology Supplier, Lauren indicated that 29.5% generation would be available at the project site and guaranteed 122.4 MUs corresponding to CUF of 28%. The scheduled commissioning date of the Petitioner's project was 09/03/2014. However, the plant was commissioned on 09.06.2013.

- 18. The PPA had been originally executed for CUF 25% which was subsequently increased to 29.5%.at the behest of the petitioner. The site of the project was also changed to Nokh village from earlier notified site Pariva village due to higher DNI at Nokh Village.
- As per Annexure 1A (d) of RFS and Annexure 1B (d) of the JNNSM 19. Guidelines, the Petitioner was required to set up necessary equipment for recording ground measurement of DNI at the project site. The Petitioner accordingly set up such equipment and conducted ground level DNI measurements from September, 2011 to August, 2012 for DNI measurements and discovered that DNI at Nokh site to be 1763 kWh/mt2/year which was lower than 2168 kWh/mt2/year as estimated at the time of bid. Similar study was also conducted subsequently by M/s Suntrace for Bodana village, Rajasthan which estimated DNI to be 1676 kWh/mt<sup>2</sup>/year. Due to lower than actual DNI, CUF of the project was reduced to about 24%. As a result, Petitioner's project is able to generate 105.12 MUs instead of 129.21 MUs. The reduced DNI measurement at Nokh site is also collaborated in the report issued by CWET who installed two other weather stations at villages Phalodi and Bodana, which are 65 km and 12 km away from the project site of the Petitioner respectively.
- 20. Petitioner has referred to the Solar Thermal Project of M/s ACME of 2.5 MW at Bikaner and submitted that due to lower DNI issue. ACME has approached High

Court of Delhi (OMP 153 of 2013) for increase in the tariff and obtained an Interim Order dated 21/02/2013 restraining Respondent from invocation of Bank Guarantee given by the ACME.

21. The Petitioner along with other developers submitted a joint representation to MNRE on 21/05/2012 highlighting the difficulties attributable to DNI variance affecting the engineering and procurement activities. In this regard, MNRE formed an Expert Committee who reviewed the progress of implementation of solar projects and prepared a report dated 31/08/2012 wherein it was recognised that the reduction of DNI at the project area was leading to re-engineering of projects and resultant delay in commissioning the project. The joint representation dated 31.08.2012 of the petitioners along with Expert Committee report dated 31/08/2012 was placed before the Review Committee. The Review Committee met on 18/10/2012 wherein the representations by solar developers and recommendations of Expert Committee were discussed. The Review Committee noted that the Expert Committee had also acknowledged that the developer at the time of selection/execution of PPA had based their bids on the best available resource data at that time which was approximately 15 to 20% higher than the actual data collected from the respective sites. Accordingly, Expert Committee had concluded that the project would require additional period at least one year beyond the respective commissioning date. The Review Committee again met on 03/04/2013 and urged all Solar Thermal Developers to be allowed general extension of 10 months beyond SCoD of date of 28 months from the date of PPA.

- 22. Vide O.M. No. 5/17/2009- P& C in July 2010, MNRE approved the extension of the SCoD for the Solar Power Thermal Projects by 10 months.
- 23. Petitioner has commissioned its project on 19.06.2013 with a delay of 40 days from the original SCoD. However, on commissioning, it is facing severe difficulty and lower generation due to reduced level of DNI. It would be in the interest of the projects that have been set up to appropriately re-work the tariff to address the discrepancy between the DNI readings.
- 24. It is a settled law that appropriate Commission has the power to notify the tariff for a concluded PPA in the larger public interest and re-work/re-open the terms of PPA to make it viable in order to protect the interests of the renewable energy projects. The Petitioner submitted that based on the current DNI of 1763 kWh/mt2/year, project tariff may be upwardly revised from Rs.12.20 per kWh to Rs.15 per kWh. If such tariff is not revised, then the Petitioner Company would have to bear a financial burden of about Rs.29.45 Crores per annum and Rs.763.19 Crores for the entire life of the PPA, i.e. 25 years.
- 25. The Commission has powers to re-open the PPA in order to make it workable if the bargain between the parties has been or exposed to be destroyed on account of factors and circumstances that were not in contemplation by the parties at the time of entering into the PPA or not attributable to the parties to contract. Petitioner also submitted that the PPA provides for, in case of dispute, the Central Commission to have jurisdiction including in the matter of determination of tariff.

- II. Petition No. 312/MP/2013 in case of M/s Rajasthan Sun Technique Private Limited (RSTPL):
- The Petitioner (RSTPL) is engaged in developing 100 MW Solar Thermal 26. Power Plant in Village Dhusar, Tehsil Pokhran, Jaisalmer, Rajasthan (project site) under Jawaharlal Nehru National Solar Mission (JNNSM).
- 27. Petitioner submitted that the project cost inclusive of equity and debt component was envisaged to be around Rs. 2075 Crores. This was based on a computation of total cost in USD and Indian rupee and the foreign exchange exposure of the Petitioner. At the time of bid submission, the exchange rate of the USD was Rs.45 per USD. Average exchange rate during the construction period works out to approximately Rs.45.16 per USD assuming 0.36% annual depreciation of Indian Rupee v/s USD during construction period as prescribed by the Commission Notification No. ECO 1/2010-CERC dated 31/03/2010. The total debt of the project was assessed at Rs.1510 Crores.
- 28. On 14/06/2010, the Petitioner entered into a Rupee Facility Agreement with AXIS Bank for a sum of Rs.114 Crores and on 08/06/2012, Petitioner also entered into Foreign Currency Facility Agreement with ADB and EXIM Bank of US for USD 288 million.
- 29. The Petitioner was developing Solar Thermal Projects with Compact Linear Fresnel Reflective Technology (CLFR). It was a new technology and there were no suppliers in India and accordingly the Petitioner had to tie up with a supplier from USA and Europe for supply of equipment. The details of equipment imported and consequent USD denominated expenditure by the Petitioner are as under:-

- Solar Filed equipment including mirrors etc.: US Dollars 56 Million
- Turbine Generator & Associated Auxiliaries: USD 19 Million
- Moisture separator & re-heater: USD 1 Million
- 30. On the basis of exchange rate of Rs.45 per USD at the time of submission of the bid, the aggregate project cost was Rs.2075 Crores. However, the exchange rate increased steeply and increased as high as Rs 62.73 per USD, thereby depreciating the Rupee to approximately 39% from the date on which the Petitioner submitted its bid in November, 2010. This was unprecedented, unforeseen and uncontrollable. The Petitioner vide letter dated 28/10/2013 wrote to Respondent No. 1 requesting for compensatory tariff by invoking Article 16.2 (Amicable settlement and dispute resolution) of the PPA. However, the request was declined by the Respondent No.1 vide letter dated 08/11/2013 as the same was not in accordance with the PPA and hence not tenable. The depreciated Rupee resulted in an increase in capital cost of project and also resulted in increased requirement of equity component and debt service obligations of the Petitioner. The Petitioner submitted that this has resulted into an increase of Rs. 175 Crore in the capital cost of the project.

Project Cost Parameter	INR Equivalent (Rs Crs) for varied Ex. Rate		
	Rs.45/USD	Rs. 62.73/USD	
Engineering Procurement	1715	1786	
Construction (EPC) Cost including foreign &			
domestic equipment and others			
Administrative, Preliminary, Financing Cost	360	464	
and others			
Total Project Cost	2075	2250	
Difference	175		

- 31. Steep increase in exchange rate thereby depreciating rupee approximately by 39% has necessitated infusion of additional equity. Since the additional equity requirement was unforeseen at the time of submission of bid, the additional cost on account of equity has not been built into the project. Hence, as the return on additional equity amount is 'NIL'. The unprecedented, unforeseen and uncontrollable depreciation of the Indian Rupee vis-à-vis US Dollar has also resulted into additional cash outflow for debt servicing to about Rs.658 Crores over the loan period.
- 32. Rupee depreciation has considerable adverse effect on the cost of the project. In these circumstances, it is imperative that the Commission consider the unforeseen, uncontrollable depreciation in rupee vis-à-vis USD from the date on which the bid was submitted by the Petitioner and grant to the Petitioner an adjustment in the tariff so as to compensate the Petitioner to such depreciation. The Petitioner also requested the Commission to evolve a mechanism in this regard that may arise for the remainder of the term of the PPA dated 08/01/2011.

#### III. Petition No. 313/MP/2013 in case of M/s Rajasthan Sun Technique **Private Limited (RSTPL):**

33. The Ministry of New and Renewable Energy issued guidelines for selection of new grid connected solar power project on 25/07/2010. NVVNL is the Nodal Agency for facilitating purchase and sale of Solar Thermal Power under JNNSM.NVVNL floated RfS on 18/08/2010 for inviting proposals for setting up grid connected Solar Thermal Projects for purchase of power for a period of 25 years. Bidders were required to submit the RFP indicating discount on Commission approved tariff Rs.15.31/kWh as determined in Tariff Order dated 09/11/2010 (Petition No.256 of 2010).

- The petitioner submitted its bid by a letter dated 16/11/2010 and a discount of 34. 334 paise per kWh was offered on Commission applicable tariff. A LOI was issued to the Petitioner on 11/12/2010 and the PPA was signed on 08/01/2011. According to the PPA, the project was to be commissioned on 07/05/2013. On 27/11/2012, the Petitioner made a request to the Respondent No.1 for extending the SCoD, which was accepted by the Respondent and time up to 07/03/2014 was granted for commissioning the project. The revised PPA was executed on 30/10/2013 between NVVN and the petitioner for the purpose of providing the revised SCoD. The project has been commissioned on 17<sup>th</sup> November, 2014 i.e. after delay of 255 days.
- 35. The Petitioner was to develop the project using Compact Linear Fresnel Reflective Technology (CLFR) and therefore the location of the project was to be in western part of Rajasthan which had DNI in the range of 2000 to 2200 kWh/mt²/year. This range of DNI was based on the DNI information as per map dated 17/09/2010 published by MNRE through the Solar Energy Centre and as available on MNRE website at the time of the bidding. The website depicts a map which estimate average DNI at 10 km Resolution basis on hourly estimate of radiation over seven years, i.e. 2002 to 2008.
- In order to check the veracity of the data, Petitioner also compared the same 36. with Meteonorm (which is a comprehensive metrological reference incorporating a category meteorological data and calculation procedures for solar obligation and system design at any desired location in the world) whose data is basically is derived from satellite data sets.

- 37. The Petitioner submitted that the bidders had no other source of verifying the DNI data and could only base the bid on the DNI range provided by the MNRE on its website. As per PPA, the actual DNI was to be measured over full season of 12 months, by installing necessary equipment.
- 38. The Petitioner submitted that based on the above DNI data it submitted its bid offering discount of 334 paise per kWh to the CERC applicable tariff. Petitioner has set up an independent solar meteo station for actual measurement of DNI as a part of the said project and as mandated under the Article 7 of the PPA. Based on the ground data measurement over a period of 20 months i.e. from December, 2010 to July, 2012, the actual DNI is about 1830 kWh/m<sup>2</sup>/year which has resulted in a drop of about 378 kWh/m<sup>2</sup>/year from the DNI as shown in the DNI map of MNRE. The map had shown DNI in the range of 2000 to 2200 kWh/mt.<sup>2</sup>/year.
- 39. Additionally it was submitted that the DNI measured by CWET at Pokhran site (which is approximately 10 to 15 km. from the Petitioner's site) for the period of February, 2012 to January, 2013 was 1755 kWh/m<sup>2</sup>/year. The data of MNRE also shows downward DNI. The Petitioner has submitted that there is a considerable drop in DNI by around 15 to 25%. DNI is a crucial input for estimating the efficiency of Solar Thermal Project and expected generation. Tariff discount offered at the time of bid was not realistic since expected generation based on this factor would be lesser by 10 to 20%.
- 40. Petitioner has further submitted that drop in DNI would result into lower revenue of approximately Rs. 67 Crore per annum and approximately Rs.1675 Crore during the term of PPA. The Petitioner has approached the Commission under

Article 16 of the PPA for resolution of the dispute that has arisen between the Petitioner and NVVN.

41. The Commission has jurisdiction to entertain, try and dispose the present Petition under Section 79 of the Act in exercise of its Regulatory Powers. The Petitioner prays for a compensatory tariff by reason of drop in DNI from the assumption. The Petitioner also requested for evolving a mechanism in this regard which may arise for the remainder of the term of the PPA.

#### IV. Petition No. 16/MP/2014 in case of M/s MEIL Green Power Limited (MEIL):

- 42. The Petitioner is engaged in developing 50 MW Solar Thermal Power Plant in Nagalapuram near Virannapalle, Andhra Pradesh (project site) under Jawaharlal Nehru National Solar Mission (JNNSM).
- 43. The Ministry of New and Renewable Energy (MNRE) issued guidelines for selection of new grid connected solar power project on 25/07/2010. The Respondent No. 1 is the Nodal Agency for facilitating purchase and sale of Solar Thermal Power under JNNSM. NVVNL floated RFS on 18/08/2010 for inviting proposals for setting up grid connected Solar Thermal Projects for purchase of power for a period of 25 years. Bidders were required to submit the RFP indicating discount on Commission approved tariff Rs.15.31/kWh as determined by Tariff Order dated 09/11/2010 (Petition No.256 of 2010).
- 44. The Petitioner submitted its bid on 21.9.2010. NVVNL accepted the bid of the Petitioner and issued LOI dated 11.12.2010. Thereafter, a PPA was executed on 10.01.2011 which stood amended on 23.01.2012 for procurement of 50 MW Solar

Thermal Power with storage facility of 7.5 hours for a period of 25 years from the commercial operation date of the project. The SCoD was 09.05.2013 and the plant was commissioned on 04.11.2014.

- 45. The Petitioner quoted a tariff of Rs.11.31/kWh after offering a discount of Rs. 4.00/kWh on the tariff approved by the Commission for the FY 2009-10. This was based on available DNI of 2009 kWh/m<sup>2</sup>/year using 166 loops to achieve CUF of 40%i.e. to generate 175.20 MUs. Accordingly, the Petitioner envisaged that the project would achieve 40% CUF by employing 166 loops. In view of uncertainty of DNI level at project site, Petitioner decided to remove the thermal storage and revised the CUF of this project of 40% to 28% (122.64 MUs). Accordingly, the Petitioner reduced the solar field size from 166 to 112 loops for achieving 28% CUF. In addition, the Petitioner acquired 266 acres land to accommodate 112 loops.
- 46. In order to carry out assessment of DNI at the project site, the Petitioner engaged two expert Consultants namely Black & Veatch and 3 TIER. According to the report submitted by 3TIER in August, 2011, the DNI estimated at the project site was in the range of 1637- 1843 kWh/m<sup>2</sup>/year which was considerably less than the MNRE –NREL DNI of 2009 kWh/ m<sup>2</sup>/year (as relied on by the Petitioner at the time of submission of bid). The Petitioner submitted that the Consultant Black & Veatch took a conservative estimate of DNI at 1637 per kWh/m<sup>2</sup>/year and estimated the CUF of the project to be 20% with an energy output of 88 MUs.
- 47. Due to lower DNI level estimated by ground reading at project site, they came to the conclusion that thermal storage would be unviable at such low DNI level and accordingly revised the CUF estimate from 40 to 28% on 9th September, 2011.

Accordingly PPA was amended on 23.01.2012 by decreasing the CUF to 28% for generating output by 122.64 MUs.

- The Petitioner could not further reduce CUF from 28% despite having the 48. knowledge of very low DNI level of 1637 per kWh/m<sup>2</sup>/year as revised by 3 TIER before August, 2011), in comparison to DNI at 2009 in the time of bidding. Petitioner was unable to negotiate and reduce the CUF to 20% as estimated by 3 TIER and Black & Veatch report in view of the commitment made from 9<sup>th</sup> July, 2011.
- 49. Under Article 4.41 of the amended PPA, in a contract year based on the CUF of 28%, in the event the Petitioner was not able to generate minimum energy for 91.98 MUs (21%) on account of reasons solely attributable to itself, it will be liable to compensate Respondent No.1. Under Article 4.8.3 of the PPA in the event if the CUF of the project falls below 23% or is below 25% for a consecutive period of 3 months during a contract year for reasons attributable to the Petitioner, the Petitioner will have to compensate Respondent No.1 to the extent of compensation levied by particular Distribution Licensee on Respondent No.1 for non-supply of power to the Petitioner.
- 50. The Petitioner wrote to Andhra Pradesh Industrial Infrastructure Corporation Ltd. (APIIC)on 30<sup>th</sup> July, 2011 intimating that it had procured approximately 264 acres of land and requested for allotment of additional land in view of lower DNI levels, to increase the size of the Solar field for ensuring viability of the project. A similar letter was also written to Non-Conventional Energy Development Corporation Ltd. (NEDCAP) on 4<sup>th</sup> August and 23<sup>rd</sup> August, 2011 requesting for additional land in view of lower DNI level. Accordingly, NEDCAP wrote to APIIC on 21st October, 2011

recommending allotment of additional land as requested by the Petitioner.

- As per the PPA, the Petitioner was to set up necessary equipment for 51. recording ground measurement of DNI at the project site from 16.5.2011 to 19.8.2011. However, the observations recorded by the Weather Station suffered from certain infirmities in terms of quality, i.e. positive values of DNI and GHI in excess of 50W/m<sup>2</sup> during night time hours and DNI values did not fall to nearer zero during the period of cloudy weather suggesting fall in DNI data collection. Due to inadequacy of data recorded by the first Weather Station, the Petitioner set up a second Weather Station for measuring ground data in August, 2011. The DNI value at the project site as per Weather Station 2 (Geonica) is 1481 at an average DNI of 4.06 per kWh/m<sup>2</sup>/day. The DNI value as per the average of recording of both the Weather Station WS1 & WS2 (Mobius) is 4.53 per kWh/day or 1655 kWh/m<sup>2</sup>/annum which further substantiate the further 3 TIER report dated August, 2011 which had estimated DNI level of 1637 per kWh/m2/year.
- 52. Instead of taking a litigious approach and approaching any adjudicatory forum for revision of PPA, the Petitioner acted in good faith in order to execute the project within the timeline as prescribed in the RFS, RFP & PPA and continued with its effort to execute the project with a lower level of DNI of 1637 per kWh/sq. mtr./year by diligently applying for procurement of additional land. Petitioner submitted that if DNI had not reduced substantially from the time of submission of bid, the Petitioner would not require additional time to redesign/re-engineer the project, procure additional land and proceed with timely implementation of the project.
- 53. Petitioner has referred to Solar Thermal Project of M/s ACME of 2.5 MW at

Bikaner and submitted that due to lower DNI issue, ACME has approached High Court of Delhi (OMP 153 of 2013) for increase in the tariff and obtained interim Order dated 21/2/2013 restraining the Respondent from invocation of Bank Guarantee given by the ACME.

- 54. Petitioner along with other developers submitted a joint representation to MNRE on 21/05/2012 highlighting the difficulties attributable to DNI variance affecting the engineering and procurement activities. In this regard, MNRE formed an Expert Committee who reviewed the progress implementation of solar projects and prepared a report dated 31/08/2012 wherein it was recognised that the reduction of DNI at the project area was leading to re-engineering of projects and resultant delay in commissioning the project. The joint representation dated 31.08.2012 of the petitioners along with the Expert Committee report dated 31/08/2012 was placed before the Review Committee. The Review Committed met on 18/10/2012 wherein representation by solar developer and recommendations of Expert Committee were discussed. The Review Committee noted that the Expert Committee has also acknowledged that the developer at the time of selection/execution of PPA had based their bidders at the best available resource data at that time which was approximately 15 to 20% higher than actual data collected from the respective sites. Accordingly, Expert Committee concluded that the project would require additional period of at least one year beyond the respective commissioning date.
- The Petitioner by the letters dated 17<sup>th</sup> December, 2012 and 6<sup>th</sup> March, 2013 55. notified NVVNL that as DNI estimates and frequency distribution at the project site were found significantly lower in the range of 1637 - 1843 per kWh/m2/year, it

became necessary for the Petitioner to spend at least one year for re-designing the project. The shortfall in supply of HTF was also brought to the notice of Respondent No.1. Petitioner requested Respondent No.1 to recognize lower DNI consequent impact on design engineering and shortfall in supply of HTF as Force Majeure event under Article 11 of the PPA. It also requested grant of extension of 13 months and extend the SCoD from 9<sup>th</sup> May, 2013 to 13<sup>th</sup> May, 2013. The Petitioner submitted that on 9th January, 2013, Government of Andhra Pradesh declared the area in which project was situated to be drought affected area. On 2<sup>nd</sup> February, 2013, Petitioner wrote to Respondent No.1 intimating that there has been a severe drought at the project site which was hindering the implementation of the project. These incidents should be considered as Force Majeure event under Article 11.5 of the PPA. The Petitioner again wrote to Respondent No.1 on 5<sup>th</sup> April, 2013 intimating that due to the prevailing force majeure in respect to drought, synchronizing of the project to grid system would be delayed.

- 56. Review Committee again met on 03/04/2013 and stated that all Solar Thermal Developers to be allowed general extension of 10 months beyond scheduled commissioning of date of 28 months from the date of PPA. Accordingly, the Petitioner has signed the amendment to the PPA on 30/10/2013.
- 57. During this period, there was extreme agitation at was taking place in State of Andhra Pradesh due to movements regarding formation of Telangana. This movement caused wide spread public unrest in the State and such impact was suffered by the Project as there was public unrest and difficulty in availability of labor at the site. Further, the agitations resulted in frequent declarations of curfew in the

area of the Project site due to which work frequently came to a standstill. Such political disturbance and widespread public unrest substantially affected the progress of the Project and cased delay in achieving various milestones.

58. On 06/09/2013, there was a fire accident at the project site due to which a large number of equipment were completely burnt. This was a Force Majeure event as per Article 11.3.1 (A) of the PPA. The Petitioner, on 10/09/2013 intimated the Respondent No.1 of such Force Majeure event under Article 11.5.1 of the PPA which occurred in the project site on 06/09/2013. On 1st January, 2014, the petitioner once again wrote to Respondent No.1 intimating the loss suffered by the Petitioner due to fire and subsequent steps taken to mitigate the same. However, it took 116 days for replacement of damaged equipment and accordingly NVVNL was requested to extend the SCoD of the project from 9<sup>th</sup> March, 2014 to 3<sup>rd</sup> July, 2014. However, on 21st January, 2014 Respondent No.1 refused to consider fire as a Force Majeure event under Article 11.3.1 (A) of the PPA.

59. On the issue of DNI, the Petitioner submitted that since actual DNI is quite lower than the DNI data considered at the time of bidding, tariff may be adequately upwardly revised from Rs. 11.31 to Rs. 15.46 kWh in order to compensate for the loss in CUF.

	Bidding Case		Actual at Site	
	Data	Unit	Data	Unit
DNI	2010	KWh/m2	1637	KWh/m2
Gross Electric Output	185.31	MU	98	MU
Net Electric Output	174.19	MU	88	MU
Auxiliary Power	6.00	%	10.20	%
Unit Rate	11.31	INR	15.46	INR
Equity IRR	15.1		14.79	
Project IRR	14.21		13.2	

- 60. The Petitioner submitted that without suitable adjustment in tariff. the consequential financial burden on the Petitioner Company shall be to the tune of about Rs. 38.4 Crores per annum and Rs. 961 Crores over a period of 25 years which will soon result in erosion of entire net worth of the Petitioner.
- 61. Further, due to lower DNI levels, the Petitioner was required to re-design their system for arriving at the size of the solar field, mirror surface area plus tubes and supporting systems. Accordingly, the Petitioner re-designed the solar field with 112 loops of the solar field. This caused a delay in the project. Such a delay along with the force majeure event due to drought, political disturbances and public unrest in Andhra Pradesh coupled with fire accident at the project site has not only resulted in delay in the execution of the project but also adversely affected the cost of the project including foreign exchange rate variation. Petitioner submitted that Commission may increase the tariff under Article 9 of the PPA to compensate on depreciation of the rupee against the US Dollar during the period of delay caused due to reduction in DNI and consequent problems.
- 62. Clause 4.6 in the PPA set out penalties in the form of encashment of Bank Guarantee in the event of delay in achieving the SCoD of the project. It also provides levy of liquidated damages and further delay in SCoD for 5 months. Due to this, the Petitioner will be obligated to make payment to Respondent No.1 amounting to Rs.1 Crore per day for every day of delay till actual SCoD. Petitioner requested that in view of lower CUF, it is necessary to revise the Petitioner's obligation to supply at the agreed level of generation in clause 4.1 and 4.8.3. The Petitioner cannot be held responsible for lower CUF and consequently it may not be penalized for shortfall in

supply of power as per PPA.

63. Due to incorrect DNI data given by MNRE which was relied upon by the Petitioner as well as Force Majeure event of fire and drought (which are beyond the control of the Petitioner), it is justified that the SCoD of the plant be postponed for a clear period of 6 months from the date of Order of this Commission disposing the present Petition. This will avoid penal/adverse consequence on the Petitioner under the PPA.

#### ٧. Petition No. 42/MP/2014in case of M/s Corporate Ispat Alloys Limited (CIAL)

- 64. The Petitioner is setting up a 50MW solar thermal power project based on Parabolic Trough technology (without thermal storage) in a village Nokh in Jaisalmer District of Rajasthan under Jawaharlal Nehru National Solar Mission (JNNSM). This was in response to the bids invited by Respondent No.1 NVVN under Batch1, Phase -1 of JNNSM scheme.
- 65. There was no available ground reading of DNI for the Project Site at the time of bidding. Measurement of ground data for DNI was required to be carried out for a period of one year at least so that the radiation data for a complete year can be captured to provide the annual DNI reading in any area. Solar power projects being a new concept in India, data from DNI ground measurements were not available for the project locations. Further, given the timelines for the bidding process, there was no occasion for the bidders to assess the level of DNI radiation on ground. Therefore, the bidders had relied on satellite based DNI data. The Petitioner submitted that MNRE had developed high-resolution solar resource map for the

North Western region of India for identification of potential sites for solar thermal power plant in India based on satellite data. The satellite data maintained by MNRE-NREL was the only reliable and recognized source of DNI data available at the time of bidding to evaluate the solar potential of site at the time of setting up of the project. According to the DNI map published by MNRE in 2010 and data as available on MNRE/NREL website, DNI was estimated in the range of 2167 kWh/ m2/year for location where the project was proposed to be developed.

- 66. The petitioner quoted a tariff of Rs. 12.24/kWh after offering a discount of Rs 3.07/kWh on the tariff approved by the Commission for the FY 2009-10 (tariff order dated 03.12.2009) .The Petitioner specified CUF of 30.645% in its bid by working out the CUF for its project based on the SAM model and worked out the discounted tariff accordingly. It also decided to construct 120 loops on approx. 462.4 acres of land to attain the CUF of 30.645%.
- 67. The Respondent No. 1 accepted the Petitioner's bid and issued a Letter of Intent dated 11.12.2010.
- 68. Pursuant to issue of the LOI, the Petitioner and the Respondent No. 1 entered into a PPA dated 10.01.2011 for procurement of 50MW solar power for a period of 25 years from the commercial operation date of the project. Though the ScoD of the project was 09.05.2013, the project could not be commissioned till date.
- 69. Subsequent to the extension of the PPA, the petitioner entered into a lease agreement on 09.06.2011 for taking on lease of 462.4 acres of land allotted to the project. While executing the Project, the petitioner faced several impediments that

not only delayed the execution of the project, but also made the Project financially unviable for the Petitioner.

- 70. As per the terms of the PPA, the petitioner was to set up a Weather Station at the Project site in July 2011 to continuously measure solar irradiance (including DNI), ambient air temperature, wind speed and other weather parameters. On completion of one year of measurement of DNI at the Project site, the DNI was recorded in June 2012 at 1751.55 kWh/m2/year. Thus, it was found that the DNI data notified by the NREL-MNRE at the time of the bidding was found inaccurate and the DNI was found at significantly lower levels on ground for areas around the project site in Rajasthan. The change of DNI from 2167 kWh/m2/yearto1751.55 kWh/m2/year was a substantial change which has a substantial bearing (reducing) on the CUF of the Project.
- 71. CWET also collects, monitors and does quality check of the data from these 52 stations. The reduction of DNI at the project site is corroborated by reports issued by the weather station installed by CWET on behalf of MNRE, located at Phalodi as 1698 kWh/m2/year. (This weather station is 70 KM away from the project site of the petitioner.)
- 72. It is pertinent to state that the Petitioner along with other solar power developers submitted a joint representation to the MNRE dated 21.05.2012 highlighting the difficulties faced by the project developers due to variance in DNI.MNRE has also confirmed that the data collected at various sites in Rajasthan clearly showed that the ground level irradiation recorded at various sites is significantly lower than the data earlier published by MNRE. It is now an admitted

position that the DNI notified by MNRE was incorrect. Under such circumstances, bidders should be put back in the same position as if no incorrect representations of DNI had been made. This can be ensured in two ways- by adjusting bid tariff based on re-computation of CUF as per the correct DNI (as established based on actual ground reading) Alternatively, having regard to the fact that the bench mark tariff adopted by NVVNL/MNRE for the bidding purpose was determined by the Commission based on the higher DNI published by MNRE, such benchmark tariff may be adjusted appropriately in accordance with the actual DNI levels on ground, and the corresponding discounts offered by the petitioner can be worked out such adjusted benchmark tariff.

- 73. The reduction in generation is not attributable to the Petitioner. Since, the petitioner is presently in a position to only achieve 24.76% CUF, the revenue generation will be correspondingly much lower than what was expected at the time of the submission of bid. It is important to note that the reduced level of DNI has detrimentally affected the CUF of the project. In view of reduced CUF levels and consequent reduction in generation capacity of the project, the financial requirements of the project can no longer be met at the present tariff of Rs. 12.24 kWh/unit that was originally bid by the Petitioner.
- 74. The tariff in the bid was of Rs. 12.24/kWh. Due to reduction in DNI to 1751 kWh/m<sup>2</sup>/year, the tariff for the power supplied from the Project has to be upwardly revised from Rs 12.24/kWh to Rs. 15.15/kWh in order to compensate for the loss in CUF (i.e. an increase of Rs. 2.91/kWh)to protect the viability of the project and maintain the returns earned on it.

- 75. The Review Committee noted that the Expert Committee had also acknowledged that the developers at the time of selection/execution of PPA had based their bids on the best available resources data at that time which was approximately 15-20% higher than the actual data collected by them at their respective sites. While the matter was pending consideration for the extension of SCoD, all work at the project site had virtually come to a halt due to refusal of further financing support by Petitioner's bankers on account of uncertainty of SCoD extension.
- Further, on 8.5.2013, MNRE amended Clauses 1.5 and 3.2 of the guidelines 76. by granting the solar power developers an additional extension of 10 months and allowing the commissioning date to be 38 months from the date of PPA. Therefore, the present SCoD for the Petitioner is 9.3.2014. However, this extension was finally allowed after a period of 7 months and during this period, the Project work was completely halted in view of the lack of clarity on the financial implications of delay. The extension of 10 months is not sufficient to cover the delay that has been caused to the Petitioner's project due to non-availability of funding from financial institutions on account of change in project parameters and consequent delay, etc.
- 77 It is a settled law that the appropriate Commission has powers to modify the tariff for concluded PPA in larger public interest and to rework and redesign the terms of the PPA in order to protect the interests of the renewable energy projects. The Petitioner also submitted that the Commission has wide regulatory powers under Section 79(1)(b) of the Act to re-open the PPA to make it workable and prevent the developer from suffering economic hardship.

# Submissions of Respondents:

#### I. RespondentNo.1 (NVVNL) dated 26.02.2014:

- The Respondent No.1, in its reply dated 26.2.2014, submitted that the petition 78. is not maintainable, misconceived and is liable to be rejected in limine. The Respondent is selling solar thermal power back to back under power supply agreement with Distribution Licensees. Such Distribution Licensees were to be impleaded as Respondents. Therefore, the petition is bad for non-joinder of parties. Further, Section 79 read with Section 62 of the Electricity Act, 2003 provides for the exercise of the adjudicatory powers by this Commission for sale of electricity by the generating company when ultimately such purchase is for a distribution licensee. If the generating company is simpliciter selling electricity to others, the same will not fall within the scope of section 79 of the Act for this Commission to exercise its jurisdiction. The provisions of the section 79 cannot be applied independent of section 62 of the Electricity Act.
- Adjustment of tariff is specifically excluded in the PPA and cannot be 79. generally claimed under the exercise of general regulatory power. The events relating to DNI or variation in the foreign exchange rate are neither Force Majeure nor change in law within the meaning of Article 11 and Article 12 of the PPA. The non-availability, late delivery or change in the cost of the plant, machinery equipment, material spare parts or consumables for the power project is one of the specific exclusions from Force Majeure as agreed to between the parties. Similarly, insufficiency of finances or funds or agreements becoming onerous to perform is also an exclusion in the Force Majeure Clause.

- 80. Respondent No.1 did not at any stage give any representation on the aspect of DNI, based on which SPD has submitted the bid of the project. The Bid documents - RfS & RfP (Para 1.7) do not have any clause related to admissible DNI. In addition to this, the bidding guidelines also do not have representation to DNI. In fact, the Bidding documents have the provision of disclaimer.
- 81. The tariff determined under the PPA was on the basis of the competitive bidding process and there cannot be any further revision of the applicable tariff under Article 9 of the PPA on grounds of variation in the DNI levels and foreign exchange rates. The prayer of the Petitioner that the Commission can re-open the tariff determined under the competitive bidding process under section 79(1)(b) of the Electricity Act, 2003 would tantamount to converting a tariff based competitive bidding to a determination of tariff under section 62 which is contrary to the scheme of the provisions in the Electricity Act, 2003.
- 82. After signing the PPA, SPDs approached the Ministry for seeking relief due to change in DNI. The Government only agreed to give extension from 28 months to 38 months. In addition, it was further mentioned that the tariff was allowed without any reduction in tariff (applicable on account of commissioning beyond 28 months) The Petitioners agreed to the accommodation allowed by the Government of India and agreed to execute an amendment to the PPA in respect to SCoD and liquidated damage payment under clause 4.6 of the PPA. Since Petitioner agreed for such an accommodation, it is not open for them to raise any issues at this stage.
- 83. It is submitted that no penalty is levied till the plant generates at CUF as provided in the Article 4.4.1 of the PPA. Therefore, the adjustment of minus 7% is

already allowed for the Petitioner by the Respondent No. 1 where no penalty will be payable in case of any default up to (-) 7% of the CUF decided upon.

- 84. One of the SPDs has completed their project with only 40 days of delay. Therefore, there is no reason to further extend the time limit.
- 85. Bank Guarantees are in lieu of cash deposit and are to be honored by the banks as an independent contract between the bank and beneficiaries irrespective of dispute between the parties. Restraint on encasement of Bank Guarantee is permissible only in exceptional circumstances of fraud etc. In the present case, there is no such allegation on the part of the Respondent.
- 86. With regard to the aspect of Force Majeure, the Respondent No.1has placed its reliance on following Judgments: Seaboard Lumber Company and Capital Development Company - v- United States 308 F.3d 1283; Ocean Tramp Tankers Corporation -v- V/o Soveracht [1964] 1 All E.R. 161; Continental Construction Co. Ltd. -v- State of Madhya Pradesh 1988 (3) SCC 82; Travancor Devaswom Board -v-Thanath International 2004 (13) SCC 44; Eacom's Controls (India) Ltd. -v- Bailey Controls Co. and Others AIR 1998 Delhi 365; Satyabrata Ghose -v- Mugneeram Bangur and Co. and anr. AIR 1954 SC 44; Govindbhai Gordhanbhai Patel and others -v- Gulam Abbas Mulla Allibhai and others AIR 1977 SC 1019; Mohan Lal & Anr -v- Grain Chamber Ltd. Air 1968 SC 772; The Naihati Jute Mills Ltd. -v-Khyaliram Jagannath AIR 1968 SC 522; Mugneeram Bangur& Co. -v- Sardar Gurbachan Singh (1965) 2 SCR 630; Davis Contractors –v- Fareham U.D.C. (1956) 2 All E.R. 145; Ostime –v- Duple Motor Bodies Ltd. (1961) 2 All E.R.; Suresh Narain Sinha -v- Akhauri Balbhadra Prasad and others AIR 1957 Patna 256.

- 87. Regarding the aspect of sanctity of contract, the Respondent No.1 placed its reliance on following Judgments: Continental Construction Co. Ltd. -v- State of Madhya Pradesh, (1988) 3 SCC 82; Transmission Corporation of Andhra Pradesh Ltd. & Another -v- Sai Renewable Power Private Ltd. & Others, 2010 ELR (SC) 0697; Alopi Parshad -v- Union of India, (1960) 2 SCR 793; Rajasthan State Mines & Minerals Ltd. -v- Eastern Engg. Enterprises, (1999) 9 SCC 283; Travancore Devaswom Board –v- Thanth International, (2004) 13 SCC 44; Kulasekaraperumal – v- Pathakutty AIR 1961 Mad 405.
- 88. Regarding the aspect of encashment of bank guarantee, the Respondent No.1 placed its reliance on following Judgments: Himadri Chemicals Industries Ltd. – v- Coal Tar Refining Company 2007 (8) SCC 110; U.P. State Sugar Corporation -v-Sumac International Ltd. 1997 (1) SCC 568.

#### II. Respondent No. 2 (MNRE) dated 28.06.2017:

- 89. The Respondent No.2, in its reply dated 28.06.2017, submitted that the petition is not maintainable, misconceived and is liable to be rejected in limine on account of following reasons:-
- (a) The petition is bad in non-joinder of necessary parties. The electricity to be purchased by NVVNL under the Power Purchase Agreement is intended for the Distribution licensees and the role and functions of NVVNL is to act as Nodal Agency for facilitating the purchase and sale of solar power between the Solar Power Developers and the Distribution Licensees. Section 79 read with section 62 of the Electricity Act, 2003 provides for the exercise of the adjudicatory powers by this Commission for sale of electricity by a generating company when

ultimately such purchase is for a distribution licensee and not otherwise. If the generating company is simply selling electricity to others, the same will not fall within the scope of section 79 of the Act for this Commission to exercise its jurisdiction. The provisions of section 79 cannot be applied independent of section 62 of the Electricity Act. Accordingly, the distribution licensee to whom the Solar Power is to be supplied by NVVN are to be impleaded as Respondents before any further proceedings can be undertaken in the present petition.

- (b) The PPA inter alia provides for Force Majeure in Article 11 and Change in Law in Article 12 for leading to any revision in the tariff. There are specific clauses contained in the PPA where a party to PPA can claim relief including either revision in tariff or extension of time or otherwise in the performance of any obligation. Unless the parties establish to the satisfaction of this Commission that relief claimed by him is within the scope of Article 11 or Article 12, there cannot be any relief to such party. Further, such adjustment in tariff is specifically excluded under the exercise of general regulatory powers.
- (c) Events relating to DNI or variation in foreign exchange rate are neither Force Majeure nor change in law within the meaning of Articles 11 and 12 of the PPA. Article 11.4 of PPA provides for Force Majeure exclusions.
- (d) The alleged changes in DNI as against what was allegedly assumed by the Petitioner or increase in the foreign exchange rate are also not changes in law within the meaning of Article 12 of the PPA.

- (e) There is no cause of action for the Petitioner to file the present petition seeking revision in the tariff on account of reduction in DNI. MNRE did not, at any stage, give any advisory on the aspect of DNI based on which the Solar Power Developer should submit the bid for the project. MNRE had only issued Guidelines for selection of new grid connected solar power projects of PV and Thermal.
- (f) The website of MNRE contained the following disclaimers:

"This website belongs to Ministry of New and Renewable Energy, Government of India. Content displayed on this website is managed by MNRE and are for reference purpose only. All efforts have been made to make the information as accurate as possible. The MNRE will not be responsible for any loss or harm, direct or consequential or any violation of laws that may be caused by inaccuracy in the information available on this website. Any discrepancy found may be brought to the notice of Ministry. Website Designed and Developed by NIC-MNRE Computer Centre and Developed by NIC\_MNRE Computer Centre & Hosted at NIC web server."

- 90. The petitioner was expected to do his own requisite due diligence w.r.t DNI and other relevant data and submit the bid accordingly at his own risk. Further if the petitioner felt that there was insufficient data available for basing the bids, he could have refrained from participating in the bid process.
- 91. MNRE had no role in DNI estimation at the time of bidding. Hence, any loss or damage, financial or otherwise, due to differences, if any, on the DNI estimated at the time of bidding and DNI measured on site, cannot be attributed to MNRE. Thus, there cannot be any claim on the part of Petitioner for any advisory on DNI.
- 92 The tariff determined under the PPA was on the basis of the competitive bidding process and there cannot be any further revision of the applicable tariff under Article 9 of the Power Purchase Agreement on grounds of variation in the DNI levels

and foreign exchange rates. The prayer of the Petitioner that the Commission can reopen the tariff determined by the competitive bidding process under section 79(1)(b) would be to convert a tariff based competitive bidding to a determination of tariff under section 62. Thus the prayer of the Petitioner is contrary to the scheme of the provisions of the Electricity Act, 2003.

- 93. The Petitioner and other Solar Power Developers had approached MNRE seeking relief on account of the alleged variation in DNI. MNRE agreed to give extension of time from 28 months to 38 months. A meeting of the Review Committee for Solar Thermal Power Projects under phase- I of JSNM was held in April 2013. Based on the observations of the Committee, an Office Memorandum was issued. Accordingly, the time period was extended from 28 months to 38 months and the tariff was allowed to be maintained without any reduction in tariff applicable on account of commissioning beyond 28 months. The Solar Power Developers including the Petitioner duly accepted and agreed to execute an amendment to the PPA. The provisions of the Power Purchase Agreement was amended with regard to the aspects such as Schedule Commission Date (incorporating 10 months extension), Liquidated Damages for the delay under Clause 4.6 of the Power Purchase Agreement and certain other aspects. The Solar Power Developers were also fully aware of the status of foreign exchange rate variation as well as the impact of DNI on the capital cost. As the Solar Power Developers had duly accepted the amendment agreement, it is not open to them to raise any issue at this stage.
- 94. The reasons stated by the Solar Power Developers for increase in the tariff namely on account of variation in DNI levels, were known to the Petitioner even at

the time of amendment to the Power Purchase Agreement in pursuance of the Office Memorandum. Thus, it is erroneous on the part of the Petitioner to agitate such issues after having accepted the accommodation of extension by 10 months and reduced liquidated damages and executed the PPA.

- 95. The prayer of the Petitioner to adjust tariff due to foreign exchange rate variation is without any basis as these are business risks which each developer undertakes while setting up an initiative. If this contention is to be accepted, then the developers are protected from every business risk which they voluntarily undertake while participating in the competitive bidding process and the consumers will be unreasonably burdened with additional costs.
- 96. Under Article 4.4.1 of the Power Purchase Agreement and further amendment signed between the Petitioner and Respondent No. 1 (NVVN), in a contract year, based on the CUF, no penalty is levied on the Petitioner as long as it generates upto a minimum MU/year i.e.(-) 7% of CUF. Thus, an adjustment of (-)7% is already provided for the Petitioner by the Respondent No.1 where no penalty will be payable in case of any default up to (-)7% of the CUF decided upon.
- 97. In the facts and circumstances mentioned above, there is absolutely no case much less a prima facie case made out by the Petitioner for grant of any relief as prayed for or otherwise.
- 98. The Petitioner's prayer for restraint on the encashment of bank guarantee as an interim or final relief is also devoid of any merit. It is well settled that the bank guarantees are issued in lieu of cash deposit and are to be honored by the banks as

an independent contract between the bank and the beneficiary irrespective of any dispute between the parties. The restraint on encashment of bank guarantee would only be in exceptional circumstances of fraud etc. In the present case, there is and can be no allegation of any such culpable aspect on the part of the Respondents.

99. The balance of convenience also lies in favour of MNRE. Accordingly, the NVVN should be allowed to enforce its rights under the Agreement and the equity can always be adjusted for the Petitioner in case the Petitioner succeeds in the matter

#### III. Respondent No. 3 (PSPCL) in Petition No. 16/MP/2014:

- 100. The Respondent No.3 has submitted that it was directed to be impleaded in the matter by the Commission and is the purchaser of the power being generated by the petitioner as per Power Sale Agreement dated 14.01.2011.
- The Respondent has submitted that the PPA entered into by the Petitioner is pursuant to a competitive bidding conducted in terms of the Guidelines and Bidding documents issued by the MNRE. In cases where claims are sought to be raised dehors the PPA/PSA, the same cannot be entertained. The Respondent has placed its reliance on the judgment dated 07.04.2016 passed by the Full Bench of the Hon'ble APTEL and judgment dated 11.04.2017 of the Hon'ble Supreme Court of India. The Petitioner is indirectly seeking to re-open and modify a concluded contract/PPA which is impermissible.
- 102. The Respondent has submitted that the performance of the Petitioner in terms of the PPA is not dependent on any input/data given by MNRE or NVVN. The

Petitioner was required to factor all possible contingencies including actual DNI while placing its bid.

The Respondent has submitted that this Commission has no power to adjust the tariff or give additional tariff to the Petitioner.

The Respondent has submitted that the contention of the Petitioner regarding 104. adjustment in Tariff in view of variation in foreign exchange rate is also devoid of merit.

The Respondent has submitted that in view of the problems being faced by the SPDs, MNRE has already amended clause 1.5 and 3.12 of the guidelines by granting the SPDs an additional extension of 10 months and allowing the COD to be 38 months from the date of signing of PPA. The Petitioner has signed amended PPA on 30.10.2013 with new SCOD as 09.03.2014. Therefore, any further allowance of time would not be in the interest of justice.

The Respondent has submitted that the Petitioner is seeking six months 106. extension beyond the new SCoD i.e. 09.03.2014 on account of force majeure events like fire and drought. As per Clause 11.3.1(a) of the PPA, events such as fire, explosion etc. is allowed under force majeure only to the extent originating from the source external to the site. In the instant case, as per the Fire Accident Report, it was observed that the fire did not originate from the source external to the site and the same was also communicated to the Petitioners vide letter dated 21.01.2014. Hence, the Petition may be dismissed.

- 107. The Respondent has submitted that this Commission is required to adjudicate on the rights of the parties in the terms of executed PPA/PSA and not beyond. Therefore, any claim for re-writing the terms of the contracts or giving extra tariff dehors the PPA may not be entertained.
- 108. The Respondent has submitted that the Petition may be dismissed with exemplary cost.

# Rejoinders filed by the Petitioners:

### I. Rejoinder dated 14.07.2017 filed in Petition No. 304/MP/2013:

- It is submitted that the generic tariff of Rs. 15.31/- determined by this 109. Commission in the year 2009, is based on the assumption that the DNI would be in the range of 2074 Kwh/m<sup>2</sup>/year. The Statement of Objects and Reasons accompanying the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009 states as under:-
  - "57.3 The Commission notes that the NASA's Atmospheric Science Data Center maintains the Surface Meteorology and Solar Energy Data and is recognized as one of the authentic sources for collecting the Solar Irradiance parameter. However, it may be noted that the Solar Energy Center, MNRE has also been maintaining the solar irradiance incident over different cities of India.
  - 61.2 MNRE has suggested that normative capacity utilisation factor of 23% for solar thermal power plants without storage may be considered.
  - 61.3 As regards norms for Capacity Utilisation Factor for Solar Thermal Power Plant, the Commission has taken into consideration the submissions made by the developers of the prospective projects and recommendation of MNRE. Accordingly, the Commission has revised the norm for capacity utilization factor for Solar Thermal Power Projects (without storage) and the same has been incorporated in the final regulations."
- 110. The Commission vide its Order dated 21.07.2016 has allowed I.A. No. 28/2016 to be filed by the Petitioner placing additional documents on record which

clearly shows the actual DNI as per equipment required to be necessarily installed by the Petitioner in terms of Clause 7.2.1 of the PPA, Such data shows the actual DNI in the range of 1550-1600 Kwh/m2/year from the period of FY 2011-12 to FY 2015-16. This significantly reduces the CUF to effectively 16% with solar field size of 5804m<sup>2</sup>/MW (as assumed by the Commission in the year 2009).

- 111. The Minutes of Meeting of the Review Committee related to Grid Connected Solar Power Projects under phase-I of JNNSM set-up by MNRE dated 18.10.2012. inter-alia. states as follows:-
  - "... 6. The delay is attributable to the discovery of lower DNI during implementation and delay in availability of HTF due to limited suppliers worldwide (only two). The Expert Committee elaborated that the developers through representations have informed that at the time of selection/PPA they have based their bids on the best available resource data at the time (NREL 2009/MNRE) which was approx. 15-20% higher than the actual data collected by them at their respective sites. The Expert Committee opined that this situation could be considered as akin to Force Majeure event not being in the control of the SPDs and giving rise to re-engineering their designs and further leading to requirement of additional solar fields and acquisition of additional land, causing considerable delays in execution of the projects. The Deliberating various issues raised by the Experts, the Committee recommended that MNRE may take appropriate steps to approve consideration of "Force Majeure" event due to lower DNI as was applicable to the SPDs at the time of bidding for these project...."
- Therefore, MNRE recommended the treatment of low DNI as akin to "Force Majeure", but further the Review Committee of MNRE approved the effect of low DNI to be treated as Force Majeure.
- 113. The Review Committee of MNRE again met on 03.04.2013. Vide the Minutes of Meeting dated 03.04.2013, the Review Committee once again recommended on the issue of low DNI as under:

"The issue was discussed in Sub Committee meeting held on 18 Oct 2012 wherein the Committee felt that the situation of low DNI could be considered akin to Force Majeure event not being in the control of the SPDs and recommended that MNRE

may take appropriate steps to approve consideration of "Force Majeure" event due to lower DNI; also that NVVN be asked to obtain legal advice opinion on specific issue of applicability of CERC tariff in case of delayed commissioning of projects beyond permissible period. NVVN has since obtained legal opinion and forwarded the same to MNRE. From the legal opinion it is clear that the clauses regarding CERC applicable approved tariff and SCOD will have to be revisited as the existing clauses may not give authority to NVVN under their PPA provisions to provide any relief."

- 114. As a result, the MNRE notified O.M. dated 08.05.2013 thereby amending the definition of "CERC Approved Tariff" and para 3.12 relating to "Commissioning" under the JNNSM. The scheduled date for commissioning of the projects was further extended from 28 to 38 months.
- Such amendment by MNRE to the JNNSM could only be possible after recognizing low DNI as "Force Majeure" event. If low DNI is not recognized as a Force Majeure event, then there was no requirement or need to amend the JNSMM by MNRE vide its O.M. Dated 08.05.2013. Now, the MNRE is estopped in law from changing its stand. MNRE now cannot plead that low DNI is not a Force Majeure event for the purpose of revisiting the CUF and consequently the tariff of Rs. 15.31/determined by Commission in the year 2009 based on CUF of 23%.
- 116. As regards the submission that the present determination of tariff of the Petitioner is that under Section 63 of the EA 2003 through competitive bidding, it is respectfully submitted, without admitting, even then the Commission would have the necessary jurisdiction and regulatory powers to intervene and grant the relief as prayed, since the Guidelines for Selection of New Grid Connected Solar Power Projects, July 2010 have not been issued by the MNRE under Section 63 of the EA 2003. The same have not been notified by MNRE under the Official Gazette and cannot be said to be issued under Section 63 of the EA 2003. In such

circumstances, the Commission would have the necessary regulatory powers under Section 79(1) (b) of the EA 2003 to re-open the tariff.

#### II. Rejoinder dated 07.08.2017 filed in Petition No. 313/MP/2017

The Petitioner has reiterated submissions as stated in the rejoinder dated 117. 14.07.2017 filed in Petition No. 304/MP/2013and as such, for the sake of brevity, the same are not being reproduced again.

#### III. Rejoinder dated 07.08.2017 filed in Petition No. 16/MP/2014

- The Petitioner has submitted that MNRE has deviated from its previous stand where it categorically affirmed to give into effect the recommendations of the technical committee. Once the Expert Committee Report has already taken a view, MNRE has failed to provide reasons why the same have not been adopted.
- The solar thermal projects are admittedly being set up for the first time in the country as laboratories. Justice, equity and good conscience demands that these contracts be re-opened in public interest to address the genuine concerns of the developers. The developers cannot be left in the lurch and asked to perform the contract in the face of the unforeseen circumstances that has altered the very basis of the bidding process.
- 120. When the Petition was filed, the Distribution Companies were not made parties. However subsequent to the Order of this Commission dated 26.02.2014, all Distribution Companies as indicated in this Commission's ROP of the same date relevant to the present subject matter were impleaded in the proceedings. Therefore, the present Petition is not bad for having non-joinder of necessary parties.

- The Commission in exercise of its regulatory jurisdiction can take appropriate steps to address unforeseen circumstances. In this regard, the Hon'ble Supreme Court of India in Energy Watchdog & Ors. v. Central Electricity Regulatory Commission & Ors. 2017 (4) SCALE 580 dated 11.04.2017, has held that the force majeure clause in a contract will apply where no alternate mode of performance is possible.
- In the present case, DNI is the only possible way of converting solar irradiation into electrical energy. There is no alternative to such technical performance under the contract. Contrary to the submission of MNRE, it is not the case of the Petitioner that variation in DNI is attributable to MNRE. Rather, variation in DNI is not attributable even to the Petitioner and is beyond its reasonable control.
- 123. A year wise observation of the annual DNI was submitted that indicates that the average DNI has been only 1398.00 (from FY 2012 to FY 2016) i.e. an effective DNI of 1279.2, which will lead to lowering the CUF for the Project, resulting in reducing the generation capacity of the Project. The Petitioner could not have estimated such variation in DNI without being provided at least one year of ground reading. The Petitioner cannot be subjected to the entire consequence of the DNI variation when it was not possible for the Petitioner at the relevant time, to examine and assess the wide variation in between satellite data and ground data.
- The extension of 10 months and execution of revised terms of PPA was initiated by MNRE not only because it considered that reduction in DNI is akin to Force Majeure eventuality but also that the MNRE wanted to promote solar thermal technology and indicated that the same will act like laboratories under Indian

conditions. Therefore, even MNRE understood that there would be possibility of change in dynamics while developing or operating such solar thermal power plants and rightly attempted to rectitude the Petitioner.

Further, Section 63 of the Electricity Act, 2003 clearly provides that this 125. Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government. Since there were no Central Government guidelines pursuant to which the bidding was carried out, it would not qualify as competitive bidding u/s 63. It is a bidding process carried out by NVVNL and subject to scrutiny and reworking under Section 62 of the Electricity Act, 2003. This Commission in exercise of its regulatory powers can address situations not covered under the PPA.

Clause Article 4.4.1 of the amended PPA provides that in a contract year, in 126. the event the Petitioner is not able to generate even minimum energy of 91.980 MU (21%) on account of reasons solely attributable to itself, it will be liable to compensate NVVNL. Under Article 4.8.3 of the PPA, in the event the CUF of the Project falls below 23% or is below 25% for a consecutive period of three months during a contract year for reasons solely attributable to the Petitioner herein, the PPA provided that the Petitioner will compensate NVVNL to the extent of the amount levied by particular distribution licensees on NVVNL for non-supply of power by the Petitioner. It is noteworthy that the reduction/ shortfall in the generation are not attributable to the Applicant and solely due to the reduction of applicable DNI as explained above. It is pertinent to note that any claim towards the Petitioner by NVVNL can only be made once NVVNL demonstrates that shortfall is for reasons

solely attributable to the SPD and that a loss has been suffered by NVVNL or a claim has been made out against by NVVNL by DISCOMs. It is settled principle that without demonstrating actual loss, liquidated damages cannot be claimed under law. Also, the grounds other than reduction in DNI, such as Fire accident, drought affecting water drawl for construction, State bifurcation agitation affecting statutory approvals like IBR etc., claimed by the Petitioner for seeking relief of force majeure and corresponding extension of SCoD by another 6 months, are events which have been recognized as force majeure events at various forums.

- 127. With regards to the issue of encashment of Bank Guarantee, it was submitted that the Petitioner has a case of special equities. NVVN cannot encash Bank Guarantees unless it demonstrates that:
  - (a) The contracted capacity under Article 4.4.1 cannot be supplied by the Petitioner due to reasons attributable to the Petitioner;
  - (b) The shortfall in supply of contracted capacity has resulted in NVVNL suffering actual loss;
  - (c) Such loss has been incurred to compensate the DISCOMs who have been penalized for not achieving their respective RPO targets.
- Since NVVNL has not demonstrated both the above, the balance of convenience lies in the favour of the Petitioner and accordingly NVVN cannot encash the Bank Guarantee.
- 129. Moreover, in view of the fact that the Solar PV tariff has reduced significantly

with the voluminous growth of solar PV projects across States in India, there is no occasion for any of the DISCOMS to suffer loss on account of lower generation by the Petitioner's project.

It is submitted that a business risk is undertaken on reasonable assumption. 130. However, in case of drastic variation in assumptions, which could not have been reasonably foreseen, predicted or estimated by a developer, the same cannot be attributed to the developer. Therefore, this Commission has the authority of law to address such concerns in exercise of its regulatory powers.

## **Interlocutory Applications filed by the Petitioners:**

- The Petitioners had filed following Interlocutory Applications: 131.
  - a) I.A. No.5/2014, I.A. No.12/2014, I.A. No. 28/2014, I.A. No.42/2014 and I.A. No.8/2015 for seeking interim relief to direct the Respondent not to encash the Performance Bank Guarantees and I.A. No. 49/2017, for seeking permission to be allowed addition grounds and place additional data on records in Petition No. 313/MP/2013;
  - b) I.A. was filed in September, 2017 for seeking permission to be allowed addition grounds and place additional data on records in Petition No. 312/MP/2013:
  - c) I.A. No.16/2015 for seeking permission to de-tag the case from the batch and to listen separately, I.A. No. 28/2016 for seeking permission to take data on record, I.A. No. 57/2016 for seeking interim relief against the compensation bill raised by the Respondent No.1 in Petition No. 304/MP/2013;

- d) I.A. No. 4/2014, I.A. No. 11/2014, I.A. No. 29/2014, I.A. No. 39/2014 and I.A. No. 5/2015 for seeking interim relief to direct the Respondent not to encash the Performance Bank Guarantees and I.A. No. 8/2017for seeking interim relief against the compensation bill in Petition No. 16/MP/2013;
- e) I.A. No. 10/2014, I.A. No. 30/2014 for seeking interim relief to direct the Respondent not to encash the Performance Bank Guarantees in Petition No. 42/MP/2014;
- The Commission vide its various orders viz. 21.03.2014, 26.11.2014, 21.07.2016 21.07.2016 stayed the encashment of the performance bank guarantee. Further, the orders were reserved in I.A. No. 57 of 2016 in Petition No. 304/MP/2013 on 07.02.2017 and in I.A. No. 8 of 2017 in Petition No. 16/MP/2014 on 05.04.2017.

### **Proceedings**

- 133. The matter was heard by the Commission on 6.2.2014, 28.2.2014, 20.3.2014, 30.6.2014, 4.9.2014, 20.11.2014, 11.4.2015, 14.7.2015, 21.07.2016, 27.9.2016, 18.5.2017, 8.8.2017, 17.8.2017, 28.8.2017 and 15.9.2017.
- 134. On 28.2.2014, the Commission directed the Petitioners to approach the MNRE within a week, under para 4.4 of the Guidelines for consideration of their request for extension of SCoD. NVVNL was directed not to encash the Performance Bank Guarantee of the petitioners until then. However, it was also stated that NVVNL shall be at liberty to encash the Performance Bank Guarantee any time after three weeks of the order if no time extension for SCoD is allowed by the concerned authorities. The Petitioners made a combined representation dated

5.3.2014 to MNRE for extension of time of SCoD. MNRE in its letter dated 14.3.2014 submitted that they have referred the matter to an Expert Committee.

On 14.7.2015, learned counsel for Respondent No.1 submitted that NVVNL 135. in its reply had taken a preliminary objection that the petitions suffer from nonjoinder of necessary parties since the distribution companies which are the ultimate purchasers of power from solar thermal power plants have not been impleaded as parties to the petitions. He further submitted that bank guarantees of the Petitioners also need to be extended. Learned counsels for the Petitioners submitted that distribution companies are not necessary parties in these petitions and therefore, they have not been impleaded as parties to the petitions.

On 21.7.2016, Ld. Counsel for Respondent No. 2 submitted that MNRE is in the process of finalizing a Cabinet Note on the issue and comments have been invited from the States. Petitioner No. 304/MP/2013 filed IA for placing on record the relevant data which was allowed. The respondents including distribution companies were directed to file their replies on affidavit, by 18.8.2016.

137. On 27.9.2016, the Commission directed the petitioners to file revised memo of parties and serve copies of the petitions, if already not served on the distribution companies on or before 13.10.2016. The Commission further directed issue of notice to the distribution companies. The Commission observed that in the light of the full bench judgment dated 7.4.2016 of the Hon'ble Appellate Tribunal for Electricity in Appeal No. 100 of 2013 case titled Uttar Haryana BijliVitran Nigam Limited. Vs. Central Electricity Regulatory Commission & Anr., the issue regarding the exercise of regulatory powers by the Commission has been settled and directed the learned counsel of the petitioners to make submission in the light of the said judgment. Learned counsel appearing in Petition No.16/MP/2014 submitted that the cases of the petitioners are distinguishable from the Full Bench Judgment. Learned Counsel further submitted that the Hon'ble Supreme Court in its judgment dated 5.7.2016 in Civil Appeal No. 5875/2012 case titled GUVNL Vs. Tarini Infrastructure, has held that the PPA in case of bid out projects can be reopened. Learned Counsel further submitted that as in case of the Civil Appeal No. 5875/2012, the projects covered in the petitions under consideration are bid projects, but not under Section 63 of the Act. Therefore, the Full Bench judgment is not applicable in these cases. MNRE vide its letter dated 17.8.2016 had informed the Commission that as the consultation mechanism adopted by MNRE is taking some time, it would be in fitment of things if the Commission takes decision on the issue of time extension in SCoD. The Commission expressed the view that if the Commission hears and decides the matters during the pendency of the representations of the petitioners, then there is possibility of conflict between the decision taken by the Commission and the outcome of the consultative process being undertaken by MNRE and directed the learned counsel to seek clarification from MNRE regarding implementability of the direction of the Commission in case of conflict. The Commission directed MNRE to file their reply on or before 28.10.2016 for disposal of the representations submitted by the petitioners.

On 18.5.2017, learned counsel for Respondent No. 1 NVVNL submitted that the one of the petitioners, namely Rajasthan Sun Technique has approached the Hon'ble High Court of Delhi against the NVVNL decision imposing liquidated damages. The Hon'ble High Court of Delhi vide its interim order dated 30.3.2017 in

Case No. O.M.P. (1) (Comm.) 124/2017 has restrained NVVNL from deducting payment from the petitioner's invoices and is listed for arguments. Learned counsel for WBSEDCL submitted that the petitioners have not served the copies of the petitions on WBSEDCL and requested to direct the petitioners to serve the same immediately.

139. On 8.8.2017, learned counsel for Petition No. 304/MP/2013 and 313/MP/2013 argued that the events relating to DNI are covered under Force Majeure events under the PPA. Since, the DNI and intensity of sun is beyond the control of the petitioner, any such event affecting the DNI ought to be appropriately covered under the definition of Force Majeure. Also, the Commission determined the generic tariff of Rs. 15.31/- in 2009 on the assumption that DNI would be in the range of 2074 kWh/m2/year. The Commission had specified a CUF of 23% under the CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2009 (2009 RE Regulations). It was further submitted that at the time of bidding, the DNI data worked out by MNRE and published on its website was the most reliable source of data for the bidders to work out their bid competition. Therefore, the petitioners had proceeded on the basis of DNI data published by MNRE and on the basis of MNRE data, the DNI levels for the petitioner's project site was estimated at 2168 Kwh/m2/year. The PPA required the petitioner to set up necessary equipment for recording of ground measurement of DNI at the project site. Accordingly, the petitioner set up the necessary equipment and conducted ground measurements from September 2011 to August 2012 for DNI measurements and discovered the DNI to be 1763 Kwh/m2/year which is substantially less than 2168 Kwh/m2/year as estimated at the time of submission of

bid. The significantly lower ground measurements in Nokh site despite high DNI (indicated on the basis of satellite based DNI readings) is further confirmed by DNI measurement subsequently conducted by Suntrace and certified by MNRE for Bodana village. DNI was estimated to be 1676 Kwh/m2/year (Bodana Village is just 12 kms away from the project site of the petitioner.) The DNI data at the time of the bidding was not ground data and had to be revised downwards for areas near the project site in Rajasthan. The variation in DNI readings may be caused due to atmospheric conditions at the site. At that time, there was no other reliable data for estimation of DNI besides the Surface Meteorology and Solar Energy Data maintained by NASA and data maintained by Solar Energy Centre and MNRE for some cities. There was no possibility of further due diligence by the solar power generators on their own. It was further submitted that subsequently, the Petitioner along with other Solar Power Developers submitted a joint representation to the MNRE dated 21.5.2012 highlighting the difficulties attributable to DNI variance affecting the engineering and procurement activities. Accordingly, the Solar Power Developers requested the MNRE for extending the respective commissioning dates for the projects. The MNRE vide its order dated 28.5.2012 constituted an Expert Committee to review the progress of implementation of solar thermal projects. The Expert Committee submitted its report to the MNRE on 31.8.2012 highlighting the issue of low DNI at the project sites. The Review Committee of MNRE approved the effect of low DNI to be treated as Force Majeure. Subsequently, the MNRE amended the definition of "CERC Approved Tariff" and para 3.12 relating to "Commissioning" under the Jawaharlal Nehru National Solar Mission (JNNSM). The scheduled date for commissioning of the projects was further extended from 28 months to 38 months. Such amendment by MNRE to the JNNSM could only be possible after recognizing low DNI as "Force Majeure" event. It was argued that having recognized low DNI as a Force Majeure event in the past and having given accommodation to the Solar Developers in extension for commissioning on this account, MNRE now cannot plead that low DNI is not a Force Majeure event for the purpose of revisiting the CUF and consequently the tariff of Rs. 15.31 determined by the Commission in the year 2009 based on CUF of 23%. It was alleged that the MNRE is estopped in law from changing its stand. Also, since, the guidelines for Selection of New Grid Connected Solar Power Projects of July, 2010 have not been issued by the MNRE under Section 63 of the Electricity Act, 2003, the Commission has the necessary regulatory powers under Section 79(1)(b) of the Act to re-open the tariff. It was also submitted that Article 11.3.1 of the PPA has the provision of force majeure. The case of the petitioner does not fall under Article 11.3.1 of the PPA as the change in DNI at the project site was within the control of the petitioner nor could the petitioner have foreseen it after adopting prudent utility practices.

140. On 17.8.2017, Learned Counsel for Petition No. 16/MP/2014 argued that MNRE has failed in achieving objectives set out in the mission document. It was further submitted that Solar thermal technology depends upon DNI, where the radiations from the sun have to be perpendicular to the panel, unlike SPV which depends upon global irradiance where total radiation is important for power generation. When the scheme was envisaged, there was no prior experience in India with regard to solar thermal technology. The developers totally relied upon the Satellite data as there was no other data source and no other alternate methodology to verify the DNI data was available. However, there was only 3 months gap between issuance of RFS and signing of PPA. Therefore, the Petitioner had no time to record the DNI for a period of one year which is required. The suspended particles in India, especially in Rajasthan have resulted in the gap between the stated DNI and the actual recorded data. The mission document quoted that the guidelines would be reviewed after one year. Therefore, the Guidelines itself envisaged the flexibility. On the issue of applicability and jurisdiction, it was argued that Section 63 of the Electricity Act, 2003 is not applicable in the present case as there were no guidelines for bidding from the Central Government. As far as procurers are concerned, they are free to find the best market rate that they can get. Section 62 of the Electricity Act, 2003 does not prohibit supplying at price lower than that calculated as per Section 62. However, Proviso (i) of Section 62 of Electricity Act, 2003 provides the concept of ceiling tariff which is generic tariff in the present petition. Below this ceiling tariff, there is no restriction on procuring power. The Petitioner placed its reliance on Hon'ble Supreme Court judgment in AIP Engineer Federation V. Sasan Power Limited to place an emphasis on the vast regulatory powers of the Commission to intervene in the matter. Learned counsel requested to extend the SCoD as the plant was commissioned in November, 2014 i.e. after delay of about eight months from the agreed SCoD i.e. March, 2014. The commissioning of plant got delayed on two accounts, firstly there was a declared drought in the State of Andhra Pradesh in the month of January, 1993 and secondly, there was a fire in the month of September. 2013 at the project site which was notified to NVVNL. With regard to non-supply of contracted generation, NVVNL has not submitted that it actually suffered during this period. Therefore, the present case is covered under Article 11 of the PPA. CUF for

the commissioned plant is currently 9-11%. Learned counsel for NVVNL submitted that all the SPDs sought two reliefs from the MNRE i.e. change the DNI on account of CUF, and extension of time from 28 to 38 months from the date of signing the PPA. However, the MNRE rejected the change in DNI but granted the time extension. Subsequently, on 19.9.2013, a supplementary agreement, which was an integral part of the PPA, was signed between NVVNL and all the SPDs. In competitive bidding, all the information which is provided was collected from various sources and all these information does not become a contractual term agreed between the parties. The Hon'ble Appellate Tribunal for Electricity in Nabha Power Ltd. V. PSPCL & Others in Appeal No. 207 of 2012 has held that once there is a provision of disclaimer, the burden shifts to the developer to verify the accuracy of the project and to do prudence check. As per the draft PPA, NVVN had no obligation to purchase power beyond units of 21.5% of CUF and the Commission had arrived at tariff, based on CUF and not DNI. The maximum parameters of CUF given in the bid documents was 25% for all the SPDs whereas the revised CUF, as per the decision of the bidders in terms of bidding documents, is 29.5% and minimum parameter was 16% which was increased by every developer except AREL. If they achieved 29.5% of CUF then NVVNL has the right to take it from the developers. However, if the CUF is more than 29.5% then NVVNL does not have obligation to claim it. Therefore, the SPDs wanted to maximize their profit from 25% to 29.5% i.e. 4% of CUF. SPDs voluntarily opted for increasing the minimum parameter from 16% to 22.5% and are now purposely raising the complaint of not being able to achieve 22.5% of CUF. Similarly, RSTECL increased it to 35%. The developers have increased the CUF to 25% at the time of financial closure as per

the right given to them under the PPA which is to be achieved within 180 days. Therefore, it was a conscious decision by the developers and they were fully aware of the consequences. Hence, the situation cannot be considered as *Force Majeure*. The issue of DNI for Solar PV and Solar thermal is same. However, the conversion is a different issue as solar thermal will have a higher conversion ratio than a Solar PV. Article 4.4.1 of the PPA provide that in case of solar projects using advanced technologies, the value of CUF shall be the average CUF committed by the SPDs at the time of signing the PPA. Therefore, SPDs are allowed to get into advanced technology without any variation in capital cost and discounting of tariff. Article 11.3 of the PPA talks about Force Majeure events and all the cases on which the developers have relied upon conclusively stated that the issue of DNI is not a Force Majeure event. Therefore, the prayers of the Petitioners that it is a Force Majeure event is not maintainable because if the SPDs are able to generate the solar power at any amount and it is achievable, then it is not a Force Majeure.

On 18.8.2017, the Respondent No. 1 filed a compilation of judgments which it 141. relied upon: Appellate Tribunal - Appeal No. 97 of 2016 & IA Nos. 241 of 2016, 242 of 2016 & 270 of 2016 in the matter of Talwandi Sabo Power Limited (TSPL), Punjab State Power Corporation Limited (PSPCL), Punjab State Load Despatch Centre, Punjab State Electricity Regulatory Commission; Appeal no. 207 of 2012 Nabha Power Limited & L&T Power Development Ltd. Vs Punjab State Power Corporation Ltd. & Punjab State Electricity Regulatory.

On 28.8.2017, the Respondent No. 1 filed a compilation of 39 judgments on which the entire proceedings were relied upon: Energy Watchdog v Central Electricity Regulatory Commission (2017) 4 SCALE 580; Ocean Tramp Tankers Corporation v V/o Soveracht [1964] 1 All E.R 161; Continental Construction Co.Ltd v State of Madhya Pradesh (1988) 3 SCC 82; Travancor Devaswom Board v Thanath International (2004) 13 SCC 44; Eacom's Controls (India) Ltd. v Bailey Controls Co. and Others AIR 1998 Delhi 365; Satyabrata Ghose -v- Mugneeram Bangur and Co. and Anr. AIR 1954 SC 44; Govindbhai Gordhanbhai Patel and others v Gulam Abbas Mulla Alli bhai and Ors AIR 1977 SC 1019; Mohan Lal & Anr v Grain Chamber Ltd AIR 1968 SC 772; The Naihati Jute Mills Ltd. v, Khyaliram Jagannath AIR 1968 SC 522; Mugneeram Bangur Co. v Sardar Gurbachan Singh (1965) 2 SCR 630; Davis Contractors v Fareham U.D. C . (1956) 2 All E.R.145; Tsakiroglou & Co. Ltd v Noblee Thori G.m.b.H {1961}W.LR. 633 {1962} A.C. 93; Suresh Narain Sinha v Akhauri Balbhadra Prasad & Ors AIR 1957 Patna 256; Transmission Corp. of Andhra Pradesh Ltd , & Anr v Sai Renewable Power Pvt . Ltd &Ors 2010 ELR (SC) 0697; Renewable Power Pvt. Ltd &Ors 2010 ELR (SC) 0697; M/s Alopi Parshad v Union of India. [1960] 2 SCR 793; Rajasthan State Mines and Minerals Ltd v Eastern Engg Enterprises, (1999) 9 SCC 283; Kulasekara Perumal v Pathakutty AIR 1961 Mad 405; West Bengal Electricity Board v Patel Company (2001) 2 SCC 451; Har Shankar and Ors v The Dy. Excise and Taxation Commr, & Ors (1975) 1 SCC 737; Larsen & Turbo Ltd Vs Union of India (2011)5 SCC 430; Puravankara Projects Ltd. "v- Hotel Venus International (2007) 10 SC 33; Mary v State of Kerala AIR 2014 SC 1; Simplex Concrete Piles (I) Ltd v- Union of India (order Dt. 23.02.2010 passed by the Delhi High Court); Dalmia Solar Per Ltd -v-NTPC Vidyut Vyuapar Nigam Ltd order Dated 14.03.2017 passed by Delhi High Court; Fateh Chand -v- Balkishahan Dass (1964) 1 SCR 515; Maula Bux v Union of

India (1969) 2 SCC 554; K. S. Subaramasastri v K S. Raghavan (1987) 2 SCC 42; Kailash Nath Associates - Delhi Development Authority (2015) 4 SCC 136; Ultratech Cement Ltd -v- Sunfield Resources Pvt. Ltd 2016 SCC Online Born 1723; Mahadeo Prasad -v- Siemens (Ina) Limited 1933 ILR VLX Cal. 1379; Ringrow Pvt. Ltd -v BP Australia Pvt . Ltd (Judgment Dated 17.11.275 passed by the High Court of Australia); Halsbury's Laws of England, 4m Edition and Chiitty on Contract; Surjit Kaur v. Naurata Singh & Anr (2000) 7 SCC 379; Construction & Design Services v Delhi Development Authority (2015) 14 SCC 263; BSNL v- Reliance Communication Ltd (2011) 1 SCC 394; Sat Sudhir Energy Ltd v NTPC Vidyut Vyapar Nigam Ltd 2016 SCC Online Del 5093; PTC India Ltd v GERC &Anr 2014 ELR (APTEL) 1243; Lancokondapalli Power. Ltd v APERC &Ors 2015 ELR (APTEL) 0755.

On 15.9.2017, Learned Counsel for 16/MP/2016 (MEIL) submitted that "Damages" is provided under the Indian Contract Act, 1872 to restitute a contracting party for any loss caused to him due to the breach of contract committed by the other party. Section 74 of the Contract Act, 1872 provides that the person claiming damages has to prove the factum of loss suffered by him. Where the court is unable to assess the compensation, the sum mentioned by the parties in the contract can be awarded by the court as reasonable compensation if it can be regarded as a genuine pre-estimate of the measure of compensation. However, where loss in terms of money can be determined, the party claiming compensation must prove the loss suffered by him. As per Article 4.4.1 of PPA, the amount of compensation shall be computed at the rate equal to the compensation payable by the DISCOMs towards non-meeting of RPOs, subject to a minimum of 25% of the applicable tariff.

In this regard, NVVNL has failed to demonstrate whether there has been any claim by DISCOMs against NVVNL and there is no documentary proof to demonstrate that DISCOMS were not able to meet its RPO obligations due to MEIL. Moreover, it is clear from MNREs letter dated 17.8.2016 to the Commission that most of the DISCOMs have refused to procure such expensive power. The Learned Counsel alleged that NVVNL is trying to unjustly enrich itself by recovering damages from the petitioner without meeting the pre-conditions under the contract. Unjust enrichment through recovery of damages has been prohibited by the Hon'ble Supreme Court in various cases. MEIL is not liable to pay compensation towards shortfall in contracted capacity and energy under Article 4.4.1 of the PPA since the reasons for shortfall in generation of energy is not on account of MEIL. Shortfall in generation of energy is due to reduction in DNI and consequent reduction in CUF of the power plant. These reasons are not attributable to the petitioner. The claim of compensation under Article 4.4.1 of the PPA can only be imposed if it is established that the default is attributable to the petitioner. Since, the issue on both law and facts is sub-judice before the Commission, NVVNL cannot adjust the invoices. Also, the bank guarantee cannot be encashed to compensate for loss suffered by NVVNL in so far, the same is not demonstrated by NVVNL. It is a settled law that a party claiming damages has to necessarily demonstrate actual loss suffered by it, to have a legal claim over Bank Guarantees furnished to secure such eventualities. Both NVVNL and the impleaded DISCOMs have failed to put on record actual loss suffered by them due to non-supply of power by MEIL. In support of his contentions, learned counsel relied upon the judgments of the Hon'ble Supreme Court in the case tiled Maula Baux Vs. Union of India [1969 (2) SCC 554], Union of India Vs.

Rampur Distillery & Chemical Co. Ltd. [(1973) 1 SCC 649], Kailash Nath Associates Vs. DDA [(2015) 4 SCC 136], M. Lachia Setty and Sons Ltd. Vs. Coffee Board [(1980) 4 SCC 636], M/s Gangotri Enterprises Ltd. Vs. Union of India [(2016) 11 SCC 720] and Union of India Vs. Raman Iron Foundry [(1974) 2 SCC 231]. Learned counsel for Godawari Green Energy Limited (GGEL) and Rajasthan Sun Technique Energy Private Limited (RSTEL) submitted that the issue of the liquidated damages is pending before the High Court of Delhi.

## Submissions of Respondent No.1 (NVVNL) on affidavit dated 21.08.2017:

- In an affidavit dated 21.8.2017 submitted by NVVN, following submissions were made:
  - a) Claims made by Petitioner are contrary to the Detailed Project Report (DPR) which the petitioner had made after about 6 months of signing of the PPA and at the time of financial closure along with the list of documents mentioned in RFS. At that stage, no issue was raised on DNI being incorrectly mentioned in website of MNRE.
  - b) CUF provided in bidding documents was a normative of 23 % with a maximum of 25 % and minimum of 16%. The implication is that SPD ought to achieve minimum of 16% to avoid any financial implications.
  - c) RFS document also provided for maximum of 25% qua the target 23% as the limit beyond which NVVNL will have no obligation to purchase the electricity generated by solar power project. It was also provided that in case the SPD wishes to revise the maximum from 25 % and increase it of their own volition

after the execution of the PPA and before financial closure, it can do so subject to the condition and in such event, the minimum of 16 % will also stand proportionately increased with difference of 7 % between the maximum and minimum.

- d) The fact that minimum percentage was provided at 16 % and option was given to the SPD to increase the maximum percentage of CUF with implications of corresponding increase in minimum CUF percentage read with clear disclaimer has the effect of notifying to the participating bidders that there will be no further consideration on aspect on CUF percentage.
- e) The SPD had increased the maximum percentage of CUF to 33%. In terms of bidding documents, if the maximum is increased from 25% there will be a proportionate increase in minimum percentage to be achieved. The table showing comparison of parameters given in the bid documents and the revision in the CUF were as under:

S. No.	Name	Parameters given by in the bid document			Revised CUF as per the decision of the bidder in terms of bidding documents i.e. RFS read with Article 4.4.1 of draft PPA	
		Max.	Normative	Min	Max.	Min.
1.	Godawari Green	25	23	16	29.5%	22.5%
2.	Rajasthan Sun Technique	25	23	16	32%	25%
3.	MEIL	25	23	16	28%	21%
4.	Corporate Ispat	25	23	16	33%	26%

f) RFS documents provide for the CUF to be achieved by solar PV projects. The normative was stipulated as 19% CUF with maximum of 21% and a minimum of

- 12 %. CUF specified in this case was lower in solar PV and higher in Solar thermal. NVVN has referred to report submitted to Commission by Dr. B.D. Sharma, a consultant appointed by Commission on performance of Solar Power Plants.
- g) It is wrong on the part of SPDs to contend that CUF incorporated in the PPA was done without the knowledge of the actual DNI that would be applicable to the project.
- h) Out of 7 projects, only 3 projects, namely GGEL, RSTEPL, and MEIL have proceeded to commission their plants. CUFs achieved by GGEL in FY 2014-15 was 19.69%, in 2015-16 was 19.67%; in 2016-17 was 20.82% and for period April to July 19.69%. Thus, performance has been in excess of minimum percentage of 16% specified in RFS. Shortfall is on account of the revised maximum value of 29.5% (i.e. a minimum of 22.5%) a decision made voluntarily made by M/s Godawari Green Power Ltd.
- i) Neither in the order dated 26.04.2010 passed by the Commission in petition 53/SM/2010 nor in RFS or the PPA, there is any reference to DNI. Also, there is no representation on extent of DNI to achieve the CUF. The CUF was determined as 23% for Solar Thermal and 19% for PV.
- bidders were not forced by NVVNL or MNRE to maximum/minimum values of CUF.

## **Counter-Affidavit by Petitioners:**

- Counter-Affidavit dated 28.08.2017 by Petitioner in Petition No. I. 304/MP/2014:
- In reply to NVVN's affidavit dated 21.8.2017, the petitioner submitted as under:-
- a) The contention that the SPDs had done their own due diligence and not relied solely on the DNI data on the basis of which the Commission had determined the generic tariff is incorrect. DPRs were prepared after the bidding process and the execution of the PPAs as a part of the Financial Closure. While bidding, the only data available on the basis of which the SPDs submitted their bids was the data used by the Commission for the determination of the Generic Tariff in 2009.
- b) The due-diligence was done by the Petitioner after the submission of the Bid and after the execution of the PPA. Hence, any such due-diligence done ex-post facto would not change the substratum of the Petitioners case that the Bid and the PPA had been submitted/executed with the basis being the CUF, DNI and Solar Field Size (being the basis of which the Commission had determined the Generic Tariff in 2009).
- c) Increased CUF as projected by the Petitioner was not on the basis of any different figure of DNI, but only on account of the larger Solar Field.
- d) DPR itself had only confirmed the correctness of the MNRE/Commission DNI figures by comparison with the data derived from Meteonorm. Data of Meteonorm was used to corroborate the MNRE/Commission DNI figures. This is also evident from the fact that at that time, there were no actual measurements on the site but

only by derivation from satellite imagery etc.

e) The chronology of the events are as under:

18.08.2010	The RFS was issued		
29.10.2010			
16.11.2010	,		
	available at that time.		
11.12.2010			
10.01.2011	The first PPA had been signed between the parties. The CUF		
	indicated by the Petitioner here was also not the basis of the		
	CUF, DNI and Solar Field size parameters on the basis of which		
	the generic tariff had been determined by the Commission in		
	2009.		
March 2011	The DPR was submitted to NVVNL		
11.11.2011			
11.11.2011			
	in the process of increasing its solar field size and therefore		
	sought an increase in the maximum CUF under the PPA. The		
	increase in the solar field size was predicated on the base DNI		
	which was the subject matter of the bid so as to increase the		
	CUF of the Plant.		
28.11.2011	The 1 <sup>st</sup> amendment to the PPA was signed whereby the		
	increased CUF was stipulated at 29.5%. the minimum, therefore,		
	by NVVNL's methodology was automatically 7% less i.e. 22.5%		
19.11.2013	2 <sup>nd</sup> amendment to the PPA - COD extension. Liquidated		
	Damages provisions changed accordingly. The CUF and		
	Minimum Energy numbers were never changed and remained		
	the same as in the 1 <sup>st</sup> amendment PPA. However, M/s GGEL		
	plant has been commissioned back in 19 June, 2013.		
	piant has been confinissioned back in 13 June, 2013.		

- f) The Dr. B.D. Sharma Report which is relied upon by the Respondent No. 1,entirely supports the case of the Petitioner. It clearly recommends that "... based on the merits and demerits of the different sources of radiation data it can be concluded that the most reliable data is obtained from ground based weather stations..." and "... in locations where IMD data is not available, NASA/Meteonorm data may be used...".
- g) Furthermore, in the impugned report, it is clearly recommended that "... The solar

radiation data should be measured continuously and accurately over the long term...". This is precisely what the Petitioners have contended before this Commission that between September 2010 and November 2010 when the bids were opened and submitted, it was physically impossible to measure even a full year's data before bidding. Hence the only data on the basis of which the Petitioners could have bid was the publicly available data which was also used by MNRE/Commission.

- h) The Petitioners are neither seeking to hold the MNRE or the Commission "responsible" for any loss nor claiming for damages against anybody. The Petitioners are here on the simple principle that DNI is fundamental aspect. If the Bids had been based on the basis of a particular DNI and subsequently, that DNI has changed or discovered to have been different, the entire basis of the bid has changed. Therefore the only prayer is for an adjustment in tariff on account of the fundamental basis of the bid having been changed.
- In the present case, Petitioner has generated 52.165 MU in FY 2013- 14 i.e. CUF of 15.20%,98.781 MU in 2014-15 i.e. CUF of 22,55%; 97.471 MU in 2015-16 i.e. CUF of 22.25%, 102.58 MU in 7016-17 i.e. CUF of 23.42%, and 31.617 MU in April 2017 to July 2017 i.e. CUF of 21.63%. Petitioner's CSP plant has achieved above mentioned milestones in the performance which shows that plant is capable of delivering contractual energy provided adequate DNI is available.
- j) On 17.08.2017, the Petitioner submitted compilation of CUFs of various Solar PV plants in India and the CUF of expected Solar Thermal plants.

- II. Counter-Affidavit dated 28.8.2017 Petitioner in Petition No. by 313/MP/2013:
- In reply to NVVN's affidavit dated 21.8.2017, the petitioner submitted as under:-
- a) The contention that the SPDs had done their own due diligence and not relied solely on the DNI data on the basis of which the CERC had determined the Generic Tariff is incorrect. NVVNL has conveniently glossed over the fact that such DPRs were in fact prepared by the SPDs after the bidding process was completed.
- b) The DPRs were prepared after the bidding process had been completed and prepared even after the execution of the PPAs and as a part of the Financial Closure process under the PPA. At the time of bid, the only data available on the basis of which the SPDs submitted their bids was the data used by the CERC for the determination of the Generic Tariff in 2009.
- c) The so called due-diligence was done by the Petitioner after the submission of the Bid and after the execution of the PPA. Hence any such due-diligence done ex-post facto would not change the substratum of the Petitioners case that the Bid and the PPA had been submitted/executed with the basis being the CUF, DNI and Solar Field Size (on the basis of which the Commission had determined the Generic Tariff in 2009). Increased CUF as projected by the Petitioner was not on the basis of any different figure of DNI but only on account of the larger Solar Field.
- d) DPR itself had only confirmed the correctness of the MNRE/CERC DNI figures

by comparison with the data derived from Metronorm which was used to corroborate the MNRE/CERC DNI figures. This is also evident from the fact that at that time, there were no actual measurements on the site but only by derivation from satellite imagery etc.

- e) The Sharma Report entirely supports the case of the Petitioner. This is with particular reference to (internal page 17 of the report), in fact clearly recommends that "... based on the merits and demerits of the different sources of radiation data it can be concluded that the most reliable data is obtained from ground based weather stations..." and "... in locations where IMD data is not available, NASA/Metronorm data may be used...".
- f) Further in para 5.1.2 of the Sharma Report, it is clearly recommended that "....The solar radiation data should be measured continuously and accurately over the long term...". This is precisely what the Petitioners have contended before this Hon'ble Commission that between September 2010 and November 2010 when the bids were opened and submitted, it was physically impossible to measure even a full year's data before bidding. Hence, the only data on the basis of which the Petitioners could have bid was the publicly available data which was also used by MNRE/CERC.
- g) Factually Rajasthan Sun Technique has not been able to achieve the normative 16% CUF on a year-to-year basis. It has averaged about 7.25% (2016-17) and 9.35% (2017- 18 YTD Jul 17). It is pertinent to mention that CSP plant has achieved below mentioned milestones in the performance which show that plant

is capable of delivering contractual energy provided adequate DNI is available:

- a) The plant demonstrated the maximum load of 132.9 MW.
- b) Plant has achieved maximum daily generation of 7.87 lakh units (PLF 32.8%).
- c) Maximum monthly generation of 13.26 million units achieved (Monthly PLF 17.82 %).
- d) Plant continuously delivered average load of 116.5 MW for over 4.hours and 26 minutes.
- e) Plant touched load of more than 100 MW for 17 days in one month.
- 147. The Petitioner is not seeking to hold either the MNRE or the Commission "responsible" for any loss etc. as is sought to be portrayed by NVVNL. The Petitioners is not claiming for damages against anybody. The Petitioners are here on the simple principle that DNI is fundamental aspect; if the Bids etc. had been based on the basis of a particular DNI and subsequently, that DNI has changed or discovered to have been different, the entire basis of the bid has changed. If that be so, the Petitioner is, only seeking a prayer for an adjustment in tariff on account of the fundamental basis of the bid having been changed.

#### III. Counter-Affidavit dated 28.8.2017 by Petitioner in Petition No. 16/MP/2014:

148. In reply to NVVN's affidavit dated 21.8.2017, the petitioner submitted as under:-

- a) The Petitioner had carried out due diligence of the DNI readings available as per satellite data from different sources to verify the correctness of such DNI, and had thereafter, proceeded to work out the achievable CUF based on such data. It is pertinent to note that:
  - i. Commission while issuing the Tariff Regulations on Renewable Sources of Energy in 2009, has considered that the DNI would be in the range of 2200 kWh/m2/annum and accordingly a CUF of 25% and 23% (normative) has been suggested for the Solar Thermal Projects.
  - ii. Commission has considered the DNI of 2200 kWh/m2/annum as suggested by Clinton Foundation and supported by MNRE to calculate the capital cost for the solar power projects.
  - iii. The Commission in its Tariff Order dated 26.04.2010 has determined the tariff for Solar Thermal Power plants at INR 15.31/kWh. The CUF in terms of the Tariff Regulations, 2009 was determined at 23%. The Explanatory Memorandum for the Tariff Order indicates various CSP technologies being in operation/under development globally and the same has been considered by the Commission for determination of capital cost.
- b) The draft PPA issued by NVVNL along with the RFS indicated that the CUF would be 25% for solar thermal projects, and required the bidder to quote generation in units in accordance with such CUF. For advanced technologies, it was open to the bidder to quote a higher CUF and consequently, higher generation levels.

- The JNNSM Mission Document and the Guidelines issued by MNRE pursuant c) to which RFS was issued by NVVNL, clearly suggest that these projects were being tried out in the country for the first time for encouraging development of solar generation, and that the assumptions therein were subject to review from time to time. Therefore, it is unfair to suggest that the entire onus of DNI and other factors was of the SPD. This could clearly not have been so, considering the fact that even the basic infrastructure for measuring DNI at ground level was to be established for the first time in the country by successful bidders.
- d) The disclaimer on MNRE website is only to the extent of the satellite DNI data issued by MNRE. The disclaimer was in case there is variation in the satellite data and a subsequent loss suffered by the SPDs. It is not the case of Petitioner that there has been variation in the satellite DNI data published by MNRE, but that the same is in vast variation from the ground readings found by the Petitioner. Therefore, the reliance placed on the disclaimer is clearly irrelevant for the purpose of present proceedings.
- e) The reference to the margin allowed between the maximum and minimum CUF levels in the draft PPA is also irrelevant in the facts of the present case. The margin in the draft PPA has been worked out having regard to the possibility of inter-year variation in DNI since DNI is based on weather conditions prevailing from year to year. The issue in the present case however, is due to variation between satellite data and ground data peculiar to India.
- f) The reference by NVVNL on the DPR prepared by the Petitioner to contend that the Petitioner had proceeded on a clear understanding of the available

DNI, is misconceived. The DPR prepared by the Petitioner also considers the viability of the project in accordance with the available data of DNI. It may be pointed out that since the weather stations would have given the annual readings only after one year of its installation, the DPR could not have incorporated such readings. Therefore, the DPR was also premised on the estimates that are undertaken by the MNRE/Commission and NVVNL. It is important to note that on the first occasion where the Petitioner became aware about the deviations/variation in the DNI data, it informed the stakeholders, including MNRE and NVVNL. Both the Petitioner and NVVNL were under the mistaken belief of the generation capability of the project at the time of entering into the PPA.

- The Petitioner had initially planned to adopt storage technology for the solar g) thermal project, which would enable retention of heat for a longer period and therefore, result in higher generation during the day which would increase the generation efficiency of the project. The generation levels and CUF for such advanced technology was worked out on the same assumptions of DNI of around 2200 kWh/m2/annum. Therefore, the suggestion made by NVVN that the Petitioner had opted for higher CUF on expectation of higher generation, is clearly misconstrued and reveals their lack of understanding of the difference between solar thermal projects with and without storage facility.
- Report annexed by NVVNL, at the prima facie, has been issued after the h) bidding stage and signing of the PPA. It is irrelevant and inapplicable to the issue in hand i.e. Solar Thermal Power Generation. However, even the Report

suggests non-availability of the ground readings and reliance in that case has to be placed on the satellite data issued by MNRE/NREL and NASA.

- NVVNL by quoting the efficiency levels achieved by Godawari Green cannot i) put the Petitioner in the same basket i.e. the commissioned projects. As of date, only three of the developers namely, Godawari Green, Rajasthan Sun Technique Energy Private Limited and Megha Engineering & Infrastructures Limited have commissioned their projects where the level of generation i.e. the CUF achieved is significantly lower than the committed CUF. The other four projects have been stalled at different stages of project implementation on account of difficulties faced by them arising primarily out of the fact that there was a vast discrepancy between the satellite based DNI readings used for bidding, and the DNI at ground level. Considering the above scenario of the implemented projects, where the projects are failing to generate their respective contracted capacity under the PPAs, creating a higher credit risk, the CSP technology in its present form has been rendered unviable and not bankable by the financial institutions. Therefore, it would be a fruitless exercise to insist on the completion of these projects more so, when no loss would be caused to NVVN, DISCOMs or the consumers if these projects are discharged from their obligations.
- j) The comparison drawn by NVVNL between solar PV projects and solar thermal projects clearly demonstrate NVVNL's lack of understanding of the different nature of these projects. While solar PV projects operate on global irradiation i.e. sun rays hitting the surface of the solar cells at any angle, solar thermal projects

operate on direct normal irradiance i.e. the sun rays hitting the solar cells at right angle. The two technologies run on completely different requirements. It is unfortunate the NVVN in a bid to defend its position in an adversarial mode, has given a complete go by to these basic technological differences.

#### **Analysis and Decision:**

149. We have heard the learned counsels for the Petitioners and the Respondents and have carefully perused the records. The brief facts of the case are that Respondent No.2 issued the guidelines for selection of new grid connected Solar power projects on 25/07/2010. Respondent No. 1 floated the Request for Selection (RfS) on 18/08/2010, for inviting proposals for setting up grid connected Solar Thermal Projects for purchase of power for a period of 25 years. Bidders were required to submit the Request for Proposal (RfP) indicating discount on Commission's approved tariff of Rs.15.31/kWh. In November 2010, the Petitioners submitted their bids offering a discount in Rs/kWh on Commission's applicable generic tariff and the Power Purchase Agreements (PPAs) were executed between the Petitioners and the Respondent No.1 in January 2011. In November 2011, first amendment to PPA was signed whereby the CUF stipulated was enhanced by the Petitioners. Subsequently, the Petitioners requested Respondent No. 1 for suitable tariff adjustment based on the reduction of Direct Normal Irradiance (DNI) by 15% from 2000-2200 kWh/m<sup>2</sup>/year. Respondent No. 1, however, declined the request of the Petitioner for tariff adjustment on the ground that the same was not in accordance with the PPA. Thereafter, on consideration of the request made by the Petitioners, the second amendment to the PPA was signed in November 2013 whereby the Scheduled Commercial operation Date (SCoD) of the projects was extended by 10 months. The Petitioners filed the petition under Section 79 of the Electricity Act, 2003 in the matter of the Power Purchase and in the matter of Compensatory Tariff on account of inter alia, reduction in Direct Normal Irradiance (DNI) and foreign currency exchange variation. Further, they have stated that the Commission has the necessary jurisdiction and regulatory powers to intervene and grant the relief as prayed, since the Guidelines for Selection of New Grid Connected Solar Power Projects, July 2010 have not been issued by MNRE under Section 63 of the EA 2003. Also, the same have not been notified by MNRE under the Official Gazette and cannot be said to be issued under Section 63 of the EA 2003. In such circumstances, the Commission would have the necessary regulatory powers under Section 79(1)(b) of the EA 2003 to re-open the tariff.

Per Contra, the Respondents have submitted that the petitions filed by the Petitioners are not maintainable, misconceived and are liable to be rejected in limine. The petition is bad in non-joinder of necessary parties. Section 79 read with Section 62 of the Electricity Act, 2003 provides for the exercise of the adjudicatory powers by the Commission for sale of electricity by a generating company when ultimately such purchase is for a distribution licensee and not otherwise. The events relating to DNI or variation in the foreign exchange rate are neither Force Majeure nor change in law within the meaning of Articles 11 and 12 of the Power Purchase Agreement. NVVNL did not, at any stage give any representation on the aspect of DNI, based on which the Solar Power Developer should submit the bid for the project. The bidding documents, namely, Request for Selection and Request for Proposal do not have any clause relating to the admissible DNI. The tariff determined under the PPA was on the basis of the competitive bidding process and there cannot be any further revision of the applicable tariff under Article 9 of the Power Purchase Agreement on grounds of variation in the DNI levels and foreign exchange rate. The prayer of the Petitioner that the Commission can reopen the tariff determined by the competitive bidding process under section 79(1)(b) would be to convert a tariff based on competitive bidding to a determination of tariff under section 62 of the Act. Thus the prayer of the Petitioner is contrary to the scheme of the provisions of the Electricity Act, 2003. The Petitioners had already approached the Respondent No. 2 seeking relief on account of the alleged variation in DNI. The Government of India agreed to grant extension of time from 28 months to 38 months and further maintain the tariff agreed without any reduction in tariff applicable on account of commissioning beyond 28 months. The Petitioners duly accepted the above accommodation given by the Government of India and agreed to execute an amendment to the PPA in regard to the aspects such as Scheduled Commissioning Date (incorporating 10 months extension), Liquidated Damages for the delay under Clause 4.6 of the Power Purchase Agreement and certain other aspects. The amended PPAs were signed by the Petitioners in November 2013 when the Solar Power Developers were fully aware of the status of foreign exchange rate variation as well as the impact of DNI on the capital cost. Further, the Petitioners are not entitled to any adjustment on account of foreign exchange rate variation as the project financing was to be through internal resources and not based on any foreign debt tied by the Petitioner. Also, under article 4.4.1 of the Power Purchase Agreement signed between the parties in a contract year, an adjustment is already provided for the Petitioners by the Respondent No.1 where no penalty will be payable in case of any default up to minimum percentage of the CUF. Further, one of the Petitioners had completed the project with only 40 days of delay. Bank Guarantees are in lieu of cash deposit and are to be honored by the banks as an independent contract between the bank and beneficiaries irrespective of dispute between the parties. Restraint on encashment of Bank Guarantee is only in exceptional circumstances of fraud etc. In the present case, there is no allegation on the part of Respondents.

- From the submissions of the parties, the following issues arise before this Commission:
- Issue No 1: Whether the Commission has the jurisdiction to adjudicate and modify the tariff discovered under the Reverse Competitive Bidding for PPAs concluded under JNNSM Scheme?
- Issue No. 2: Whether the RfS document refers to DNI and CUF, inter-alia, as the bidding criteria?
- Issue No. 3: Whether the Petitioners took reasonable care in offering the bid as required in the RfS document?
- Issue No. 4: Whether the lower ground readings of DNI, fire, drought and unforeseen depreciation in Indian Rupee vis-à-vis the Dollar can be covered under 'Force Majeure' within the meaning of Articles 11 and 23 of the PPA executed between the Parties?
- Issue No. 5: Whether there is a need to evolve a mechanism regarding compensatory tariff for the remainder of the term?

- Issue No. 6: Whether the compensation amount being claimed by the Respondent No. 1 from the Petitioner becomes due on invoking of Article 4.4.1 of the PPA without any claim raised by the affected DISCOM who could not meet its 'Renewable Purchase Obligation' due to short supply of energy?
- Issue No. 7: Whether the 'compensation' amount claimed by the Respondent No.1 from the Petitioners for shortfall in the generation and supply of electricity is in the nature of 'Liquidated Damages' specifically provided in Article 4.4.1 of the PPA? Whether, such 'Liquidated Damages' need be determined as per the contract or can be denied?
- Issue No. 8: Whether the Respondents should be restrained from invoking performance bank guarantees?
- Issue No. 9: Whether there is a need for invoking 'Regulatory Powers' available under section 79 (1) (b) of the Electricity Act, 2003 by the Commission?
- 152. No other issues were pressed or claimed.
- 153. We discuss the issues one by one:

Issue No. I: Whether the Commission has the jurisdiction to adjudicate and modify the tariff discovered under the Reverse Competitive Bidding for PPAs concluded under JNNSM Scheme?

154. The Petitioners have submitted that they are Solar Power Developers engaged in setting up grid connected Solar Thermal Power plant in various States. The power generated by them is to be purchased by the nodal agency NVVNL and the same would be sold to DISCOMS situated in more than one State. NVVNL has executed back to back agreements with these DISCOMS for the supply of energy and these DISCOMS were pleaded as necessary parties. Since the petition deals with inter-State power, the Commission has the jurisdiction to adjudicate and determine the tariff under section 79(1)(b) of the Electricity Act, 2003. Further, Article 16.3.1 of the Power Purchase Agreement contemplates adjudication of disputes relating to tariff. It provides that where a dispute arises from the claims made by any party for any change in tariff or the determination whereof can result in change in or determination of the tariff or claims made by any party which particularly or wholly relate to any change in tariff, such dispute shall be submitted to adjudication by the Commission. It has been contented that the Appropriate Commission has powers to modify the tariff for a concluded PPA in the larger public interest and re-work/re-open the terms of PPA to make it available in order to protect the interests of renewable energy projects. It was further submitted that the bidding process adopted in the present petitions does not qualify under Section 63 of the Electricity Act, 2003. Section 63 of the Electricity Act, 2003 clearly provides that the Commission shall adopt tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government. It was further submitted by the Petitioners that since there were no Central Government guidelines on the basis of which the bidding was carried out, it would not qualify as competitive bidding under Section 63 of the Act. It is a bidding process carried out by NVVNL and subject to scrutiny and reworking under Section 62 of the Act. The Petitioners further submitted that the regulatory power of the Commission under Section 79 (1) (b) of the Act is untrammelled and may be invoked in this case. The Petitioners have

placed their reliance on Hon'ble Supreme Court judgment in *All India Power Engineer Federation V. Sasan Power Limited* to emphasize on the vast regulatory powers of the Commission to intervene in the matter.

Per Contra, the Respondents have submitted that the tariff determined under 155. PPA was on the basis of competitive bidding and there cannot be any further revision of applicable tariff under article 9 of the PPA on grounds of variation in DNI levels and variation in Foreign Exchange rates. The prayer that the Commission can reopen the tariff determined by competitive bidding process under Section 79(1)(b) would tantamount to converting a tariff based competitive bidding to that of determination of tariff under section 62. Thus, the prayer is contrary to the scheme of provisions of Electricity Act 2003. The present case is squarely covered under Section 63 of the Act which provides that the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the Guidelines issued by the Central Government. In terms of Section 63 of the Act, in the present case, the guidelines are issued by the Central Government i.e. MNRE. The bid process is in accordance with the Guidelines and the tariff is determined through competitive bidding process. Guidelines issued by MNRE are to be equally treated as guidelines under Section 63 of the Act. The Government can always delegate its powers for exercising its functions. In the present case, the Government has appointed a Nodal Agency i.e. NVVNL to implement the Solar Mission scheme and therefore, under the Guidelines of MNRE, NVVNL has drafted the relevant documents for competitive bidding. The guidelines and RfS and RfP are to be read together as a part of competitive bidding process under Section 63 of the Act. The Petitioners are mixing up the process initiated by the Commission for deciding the ceiling tariff with a process for decision on who should be selected through a tariff based competitive bid process under Section 63 of the Act.

- In this regard, we analyze the provisions of the Electricity Act, 2003. 156.
- 157. Section 62 of the Electricity Act 2003, stipulates as under:
  - "62. Determination of Tariff.
  - (1) The Appropriate Commission shall determine the tariff in accordance with provisions of this Act for -
  - (a) supply of electricity by a generating company to a distribution licensee:

Provided that the Appropriate Commission may, in case of shortage of supply of electricity, fix the minimum and maximum ceiling of tariff for sale or purchase of electricity in pursuance of an agreement, entered into between a generating company and a licensee or between licensees, for a period not exceeding one year to ensure reasonable prices of electricity:

- (b) transmission of electricity:
- (c) wheeling of electricity;
- (d) retail sale of electricity:

Provided that in case of distribution of electricity in the same area by two or more distribution licensees, the Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity.

- 158. Section 63 of the Electricity Act 2003, stipulates as under:
  - "63. Determination of tariff by bidding process.

Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government."

159. Section 79 of the *Electricity Act, 2003*, inter-alia, stipulates functions of Central Commission as under:-

- "(1) The Central Commission shall discharge the following functions, namely:-
  - (a) to regulate the tariff of generating companies owned or controlled by the Central Government:
  - (b) to regulate the tariff of generating companies other than those owned or controlled by the Central Government specified in clause (a), if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State:
  - (c) to regulate the inter-State transmission of electricity;
  - (d) to determine tariff for inter-State transmission of electricity;
  - (e) to issue licenses to persons to function as transmission licensee and electricity trader with respect to their inter-State operations;
  - (f) to adjudicate upon disputes involving generating companies or transmission licensee in regard to matters connected with clauses (a) to (d) above and to refer any dispute for arbitration; ..."

From the conjoint reading of the above, it is observed that the Appropriate 160. Commission shall either determine the tariff in accordance with provisions of Section 62 or adopt the same under Section 63 of the Electricity Act, 2003. In the instant case, MNRE has issued JNNSM Guidelines for Selection of New Grid Connected Solar Power Projects in order to provide the necessary policy framework for development of projects under the JNNSM through competitive bidding route. The successful bidder was to be selected on the basis of maximum discount in Rs/kWh offered on the tariff approved by this Commission vide its tariff order dated 26.4.2010. The Commission observes that since the competitive bidding route was adopted and the tariff was not to be determined by the Appropriate Commission, the petitions do not fall under section 62 of the Electricity Act, 2003. Now the question is whether, the competitive bidding route as envisaged by the JNNSM Guidelines for Selection of New Grid Connected Solar Power Projects falls under the purview of Section 63 of the Electricity Act, 2003. Section 63 of the Electricity Act, 2003 stipulates that "Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government." Hence, Section 63 mandates three principles viz. firstly, tariff should have been determined through transparent process of bidding. Secondly, the transparent bidding should be in accordance with the guidelines issued by the Central Government and lastly, the tariff so determined should be adopted by the Appropriate Commission. It is pertinent to note that in the instant case as per JNNSM Guidelines, the Petitioners were to offer the maximum discount in Rs./kWh on the CERC Approved Applicable Tariff so that their project could be selected. Further, the competitive bidding was held as per JNNSM guidelines which were duly issued by MNRE which is a Ministry of the Central Government. Accordingly, the Commission is of the view that although the guidelines issued did not mention section 63, it has the trappings of the said section 63 of the Electricity Act, 2003. Furthermore, Section 79(1) (b) also vests the Commission with powers to regulate the tariff of generating stations having composite scheme to generate and sell electricity in more than one State. The Hon'ble Supreme Court in Energy watchdog Vs. CERC & others has held that "the general regulatory power of the Commission under section 79(1)(b) is the source of power to regulate, which includes the power to determine or adopt tariff. In fact, sections 62 and 63 deal with determination of tariff which is part of regulating tariff." Therefore, the Commission has the jurisdiction to regulate the tariff discovered under the Reverse Competitive Bidding for PPAs

concluded under the JNNSM Scheme and adjudicate the disputes arising under the PPA.

- 161. The Commission observes that Clause 6 of the JNNSM Guidelines under the heading 'Policy and Regulatory Framework' stipulates as under:
  - "6. Policy and regulatory framework

In order to incentivise setting up of a large number of Solar Power Projects, while minimizing the impact on tariff various alternatives were explored. One of the options is to bundle solar power along with power out of the cheaper unallocated quota of Central stations and selling this bundled power to state distribution utilities..."

- 162. Section 16.3.1. of the Power Purchase Agreement executed between the parties stipulates as under:
  - "16.3 Dispute Resolution
  - 16.3.1 Dispute Resolution by the Appropriate Commission
  - i. Where any Dispute (i) arises from a claim made by any Party for any change in or determination of the Tariff or any matter related to Tariff or claims made by any Party which partly or wholly relate to any change in the Tariff or determination of any of such claims could result in change in the Tariff, or (ii) relates to any matter agreed to be referred to the Appropriate Commission, such Dispute shall be submitted to adjudication by the Appropriate Commission. Appeal against the decisions of the Appropriate Commission shall be made only as per the provisions of the Electricity Act, 2003, as amended from time to time.
  - ii. The obligations of NVVN under this Agreement towards the SPD shall not be affected in any manner by reason of inter-se disputes amongst NVVN."
- 163. From the above, the Commission observes that NVVNL was to sell the bundled power to various State utilities and those State utilities would be entitled to use the solar part of the bundled power for meeting their Renewable Purchase Obligations (RPO). Hence, this is a multi-State or a Composite scheme by design. The Commission further observes that even Article 16.3.1. of the Power Purchase Agreement executed between the parties states that where a dispute arises from

claim made by any party for any change in tariff or the determination whereof can result in the change in or determination of the tariff or claims made by any party which particularly or wholly relate to any change in tariff, such dispute shall be submitted to adjudication of the Central Commission. As per Section 79(1)(b) of the Electricity Act, 2003, this Commission is empowered to regulate the tariff of generating companies if such generating companies enter into or otherwise have a Composite scheme for generation and sale of electricity in more than one State. Further, section 79(1) (f) of the Act empowers the Central Commission to adjudicate upon disputes in respect of the projects covered under section 79 (1) (b) of the Act. Hence, the jurisdiction of the Commission in the present case is clearly established.

# Issue no.2: Whether the RfS document refers to DNI and CUF, inter-alia, as the bidding criteria?

164. The Petitioners have submitted that the performance of solar power plants can be best defined by CUF which is proportionate to DNI. No DNI data was available for any project site in India at the time of bidding. Therefore, the bidders had to rely on satellite based DNI data. As such, measurement of ground data on DNI is required to be carried out for a period of at least one year. Therefore, the Petitioners had proceeded on the basis of DNI data, as published by MNRE on its website.

Per Contra, the Respondents have submitted that the tariff determined under the PPA was on the basis of competitive bidding process and there cannot be any further revision of the applicable tariff under Article 9 of the Power Purchase Agreement on grounds of variation in the DNI levels and foreign exchange rates.

The Petitioners have also argued that CUF and hence DNI is implicitly relied upon in determination of tariff by CERC and hence, the Commercial terms in the PPA are inherently dependent on DNI. CERC while issuing the Tariff Regulations for Renewables in 2009, have considered the DNI to be in the range of 2200 kWh/m2/annum and accordingly a CUF of 25% and 23% (normative) has been indicated for the solar thermal projects. CERC Tariff Order dated 26.04.2010 has determined the tariff for Solar Thermal Power Plants at INR 15.31/kWh. The CUF in terms of the Tariff Regulations, 2009 was determined at 23%. The Explanatory Memorandum for the Tariff Order indicates various CSP technologies being in operation /under development globally and has been considered by the Commission for determination of capital cost.

The Commission observes that objective of the JNNSM mission was to establish India as a global leader in solar energy, by creating the policy conditions for its diffusion across the country as quickly as possible. In order to facilitate grid connected solar power generation in the first phase, a mechanism of "bundling" relatively expensive solar power with power from the unallocated quota of the Government of India (Ministry of Power) generated at NTPC coal based stations ( which was relatively cheaper), had been proposed by the Mission. This "bundled power" would be sold to the Distribution Utilities. The short-listing of Solar-Wind Thermal Projects was based on the following two criteria viz. a) Financial Criteria and b) Technical Criteria.

"The Bidder should be a Company (Bidding Company) or a Consortium of Companies (Bidding Consortium) with one of the Companies acting as the Lead Member of the Bidding Consortium. Short-listing of Bidder will be based on meeting the Qualification Requirements specified below:

#### A. Financial Criteria

#### (i) Net Worth

The "Net Worth" of the Bidder should be equal to or greater than the value calculated at the rate of Rs. 3 Crore or equivalent US\$ per MW of the total Installed capacity Of the Project(s) upto 20 MW. For every MW additional capacity, beyond 20 MW, additional "Net Worth" of Rs. 2 crore or equivalent US\$ per MW shall be required.

The computation of Net Worth shall be based on unconsolidated audited annual accounts of the Company. For the purpose of the computation of Net Worth, the last four financial years shall be considered. The Bidder would thus be required to submit annual audited accounts for the financial years 2006-07, 2007-08, 2008-09 and 2009-10 (if available), while indicating the year which should be considered for evaluation, along with a certificate from the chartered accountant to demonstrate the fulfillment of the criteria.

- (Note: (a) Companies formed after 1st April 2006 would be required to submit annual audited accounts starting from the financial year in which the company was incorporated till the financial year ended on 31 March'09 and financial year 2009-10 (if available) while indicating the year which should be considered for evaluation along with a certificate from chartered accountant to demonstrate the fulfillment of the criteria.
- (b) For the Qualification Requirements if data is provided by the Bidder in foreign currency, equivalent rupees of Net Worth will be calculated using bills selling exchange rates (card rate) USO / INR of State Bank of India prevailing on the date of closing of the accounts for the respective financial year as certified by the Bidder's banker.

For currency other than USO, Bidder shall convert such currency into USO as per the exchange rates certified by their banker prevailing on the relevant date and used for such conversion.}

Net Worth

= Paid up share capital

Add: Reserves

Subtract: Revaluation Reserves Subtract: Intangible Assets

Subtract: Miscellaneous Expenditures to the extent not written off and carry forward

losses

ii) For the purposes of meeting financial requirements, only unconsolidated audited annual accounts shall be used. However audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (26%) equity in each Company whose accounts are merged in the audited consolidated account and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of any other Bid.

iii) For a newly incorporated Company relying solely on its own credentials, where the annual account has not been prepared the. Net Worth criteria should be met not more than seven days prior to the last date of submission of response to RfS. To demonstrate fulfillment of the criteria, the Bidder shall submit a certificate from a Chartered Accountant certifying the Net Worth on the date seven days prior to submission of response to RfS. Further, the Bidder shall submit the un-audited financial statements of the Company duly certified by Chartered Accountant for the date on which the certificate of Net Worth has been obtained.

(iv)If the response to RfS is submitted by a Consortium the financial requirement shall be met individually and collectively by all the Members in the Bidding Consortium. The financial requirement to be met by each Member of the Consortium shall be computed in proportion to the equity commitment made by each of them in the Project Company. For computation of Net Worth of members methodology as provided in para (i) above shall be followed. Any Consortium, if selected, shall, for the purpose of supply of power to NVVN, incorporate a Project Company with equity participation by the Members in line with consortium agreement before signing the PPA with NVVN.

Note: - Technology Partner in a Bidding Consortium has to be a Company with equity participation less than 10%.

The Bidder may seek qualification on the basis of financial capability of its Parent and/or it's Affiliate(s)- for the purpose of meeting the Qualification Requirements In case any Bidder is selected for developing both Solar Thermal Project as well as Solar PV Project, the Bidder will have to meet the total Net Worth requirement for all the Projects and submit the proof for the same within one month from the date of issue of Letter of Intent.

#### B. Technical Criteria

The Bidder shall deploy commercially established technology wherein there is at least one project successfully operational of the proposed technology, for at least one year, anywhere in the world. The bidder is required to undertake to furnish evidence of meeting the above eligibility criteria in line with provisions of clause 3.21 under the title "Financial Closure". The undertaking shall be as per enclosed Format - 6.7.

Detailed technical parameters for Solar Thermal Projects are at Annexure – 1.

Annexure 1-

## Technical Qualification Requirements for Eligibility of a Solar Thermal Power **Developer to Establish Solar Power Plant under JNNSM**

- a) Only new plant & machinery to be used.
- b) Any of the Concentrated Solar Power (CSP) technology, such as Parabolic Trough Collectors, Solar Dish Stirling (or any other prime mover), Linear Fresnel Reflector, Central Tower with heliostats, or their any other combination could be used.

- c) Solar Power Developer must fulfill either of following requirements as listed from (i) to (vi) and also undertake to tie up (wherever applicable) with technology provider fulfilling technology requirements within 180 days of signing of PPA: ~
- i. Solar Power Developer is himself a technology provider who has either experience in design and engineering of at least 1 (one) MW capacity solar thermal power plant having been in operation for .a period of at least one year on the 'specified cut-off date or obtained at least one financial closure of a solar thermal power plant of at least 50% capacity based on the proposed technology.
- ii. Solar power Developer has a tie-up with a technology provider fulfilling technology requirements at S. No. (i) above.
- iii Solar Power Developer is an EPC contractor/power generating company having experience in engineering, erection and commissioning of at least 100 MW capacity conventional thermal power plant and a tie-up with a technology provider fulfilling technology requirements at S No (i) above.
- iv. Solar power Developer has a tie-up with an EPC contractor having experience in engineering erection and commissioning of at least 100 MW capacity conventional thermal power plant and a tie-up with a technology provider fulfilling technology requirements at S No. (i) above.
- v. Solar Power Developer is an EPC contractor having experience in engineering, erection and commissioning of at least 1 (one) MW capacity solar thermal power plant and a tie-up with a technology provider fulfilling technology requirements at S, No. (I) above.
- vi. Solar Power Developer has a tie up with an EPC contractor having experience in engineering, erection and commissioning of at least 1 (one) MW capacity solar thermal power plant and a tie-up with a technology provider fulfilling technology requirements at S. No. (I) above,
- d) All grid connected solar thermal power plants will install equipment for regular monitoring of solar irradiance (inducing DNI), ambient air temperature, wind speed and other weather parameters and simultaneously for monitoring of the amount of electric power generated from the plant, They will submit this data to the Ministry on line and /or through a report on regular basis for the entire duration of PPA. ..."

169. For the selection of the projects, the following was stipulated in the RfS:

"The Projects offering the maximum discount in Rs./kWh on the CERC Approved Applicable Tariff would be selected first and so on."

170. From the reading of the above, it is observed that RfS and Guidelines are silent about DNI or CUF being considered as bidding criteria.

It is understood that tariff determined by CERC was used for the purpose of reverse bidding in the JNNSM scheme. The petitioners have argued that the CERC tariff was based on a specified CUF and DNI and hence in the JNNSM scheme (in which the bidders were required to quote discount with reference to CERC tariff), the CUF and DNI are implicit criteria. In our view, this argument is far-fetched. The tariff determined by CERC was used as 'reference' for the purpose of reverse bidding in the JNNSM scheme. CERC Tariff is generic in nature which is based on a number of normative parameters like capital cost, return on equity, rate of interest and other various technical and financial parameters. CERC generic tariff is a complete package. Hence, it would not be appropriate to consider the impact of only DNI in isolation on the calculation of tariff.

The Commission in its order dated 25.2.2010 in Petition No. 13/SM/2010 has stated as under:-

"However, with due consideration to the fact that DNI could vary from place to place and to address concerns related to degradation, during initial phase of solar project development in India, the Commission has taken slightly liberal view on several capital cost components so that the revenue risk on account of variation in normative CUF or degradation factor would be minimal."

173. Thus, in our view, the DNI/CUF as specified in the generic tariff order of the Commission were not the bidding criteria; bids were invited by NVVNL on the basis of the discount offered by the bidders on CERC approved applicable tariff only. In other words, CERC tariff has only reference value in so far as the competitive bidding is concerned.

# Issue no. 3: Whether the Petitioners took reasonable care in offering the bid as required in the RfS document?

174. The Petitioners have submitted that apart from the DNI data published on the website of MNRE. The Petitioners carried out due diligence from various sources to verify DNI readings available as per satellite data. The RfS document provided that a Weather Station shall be constructed after the bid was accepted and at that point of time, no ground data was available. The Petitioners at the time of submission of bid, relied on the data made available by NASA, the Commission's Regulations and Statement of Reasons thereof, MNRE and other international agencies as these were the only available official records. The MNRE website indicated DNI at above 2000kWh/m2/year in Rajasthan which formed the fundamental premise for submission of bids. For the purpose of bidding, the Petitioners had to resort to available satellite data to determine the DNI of the sun's rays at the project site, which would define the CUF of the project. Measurement of ground data for DNI was required to be carried out for a period of at least one year. Since no ground measurement of DNI was available at the relevant point of time, bidders had to rely on satellite based DNI data. There was no occasion for the bidders to assess the level of DNI radiation on ground given the restrictive timelines for the bidding process. Even the Commission had proceeded to determine generic tariff based on satellite data available to it. It was not possible for the petitioners to have independently verified the DNI data when they did not have the time to verify prior to bidding.

Per Contra, the Respondents submitted that the Petitioners were expected to do their own requisite due diligence with respect to DNI and other relevant data and submit the bid accordingly, at their own risk. Further, if the Petitioners felt that there was insufficient data available for basing the bids they could have refrained from participating in the bid process. Further, the stand taken by the Petitioners that they had only relied on the data provided in the website of the MNRE and there was no occasion for them to go into the issues of DNI, the CUF that could be achieved before committing to the percentage of the CUF is contrary to the DPR which was prepared after the execution of the PPA.

The Commission observes that 'Due Diligence' is defined in the Black's Law Dictionary as "Such a measure of prudence, activity, or assiduity, as is properly to be expected from, and ordinarily exercised by, a reasonable and prudent man under the particular circumstances; not measured by any absolute standard, but depending on the relative facts of the special case. Perry v. Cedar Falls, 87 Iowa, 315, 54 N. W." and in the Oxford Dictionary as "Reasonable steps taken by a person to avoid committing a tort or offence" OR "A comprehensive appraisal of a business undertaken by a prospective buyer, especially to establish its assets and liabilities and evaluate its commercial potential". Further, 'Due Diligence' is defined in the Cambridge Dictionary as "Action that is considered reasonable for people to be expected to take in order to keep themselves or others and their property safe; OR "The detailed examination of a company and its financial records, done before becoming involved in a business arrangement with it".

The term "due diligence" means "required carefulness" or "reasonable care" in general usage, and has been used in this sense since until it became a specialized legal term and later a common business term where the process is called "reasonable investigation". In legal and business use, the term was used for the process itself instead of how it was to be performed, so that the original expressions such as "exercise due diligence in investigating" and "investigation carried out with due diligence" were soon shortened to "due diligence investigation" and finally "due diligence". Due diligence is an investigation of a business or person prior to signing a contract, or an act with a certain standard of care. It can be a legal obligation, but the term will more commonly apply to voluntary investigations. A common example of due diligence in various industries is the process through which a potential acquirer evaluates a target company or its assets for an acquisition. 'Due Diligence' and 'caution' are essential prerequisites for any business. 'Due diligence' is a measure of prudence or activity expected from and ordinarily exercised by a reasonable and prudent person under the particular circumstances.

178. In the instant case, on 18/08/2010, Respondent No. 1 floated 'Request for Selection' (RfS) for inviting proposal for setting up grid connected Solar Thermal Projects for purchase of power for a period of 25 years. Bidders were required to submit the 'Request for Proposal' (RfP) indicating discount on Commission's approved tariff of Rs.15.31/kWh. In November 2010, the Petitioners submitted the bid and offered a discount on Commission's applicable generic tariff. The PPA initially provided for a maximum 25% CUF, whilst the suggested normative and minimum values were 23%, and 16% respectively. Inter-alia, CUF is proportionate to DNI. The petitioners have pleaded that no DNI data was available for any project site in India at the time of bidding, therefore, the bidders relied on satellite based DNI data. It is to be noted that the technical criteria gave the option of partnership with a technology expert, who could have advised the petitioners on how to convert satellite

data to expected ground-level DNI. Further, it is also noted that the first PPA had been executed between the parties in December 2010 - January 2011 while the 1st amendment to the PPA was willingly executed by the Petitioners in November 2011 wherein the increased CUF was stipulated i.e. after about eleven months. Also, the 2<sup>nd</sup> amendment to the PPA was executed by the Petitioners in November 2013 whereby the SCoD was extended by 10 months. It is noted that during this entire process, from the date of signing of original PPA to the date of signing of the 2nd amendment, the Petitioners never raised the issue of downward revision of CUF in the PPA before the Respondents. Hence, it is erroneous to contend that CUF incorporated in the PPA was done without the knowledge of the actual DNI that would be applicable to the project.

It is understood that petitioners made efforts to verify the DNI data with free data sources available at that time. However, no effort is observed to have been made to measure the actual DNI in the pre-bid stage. The argument that there was insufficient time to determine the actual DNI values or any other impractical bid conditions should have been brought up by the Petitioners at the initial stages, such as at the time of RfS or financial closure. Even in the case of paucity of time, if the Petitioners felt it was a critical bidding factor, they should have suggested the same to MNRE/NVVN for including the same under Force Majeure clauses. However, no such efforts from the petitioners can be observed.

180. It is the responsibility of the Solar Power Developers, i.e. the Petitioners herein to carry out due diligence before the bidding as required the RfS document. The Petitioners have failed to prove to our satisfaction that they carried out due diligence about the DNI before quoting the bid and even at the time of subsequent amendments to the PPAs. Therefore, the responsibility for resultant variation between the DNI stated to be assumed by the Petitioner at the time of bidding and the actual DNI on ground lies squarely to the account of the Petitioners.

Issue No. 4: Whether the lower ground readings of DNI, fire, drought and unforeseen depreciation in Indian Rupee vis-à-vis the Dollar can be covered under 'Force Majeure' within the meaning of Articles 11 and 23 of the PPA executed between the Parties?

# A. Direct Normal Irradiance (DNI):

181. The Petitioners have submitted that the events relating to DNI are covered under Force Majeure events under the PPA. Since, the DNI and intensity of sun is beyond the control of the petitioner, any event affecting the DNI ought to be appropriately covered under the definition of Force Majeure. The Commission has fixed the CUF norm of 23% for solar thermal power plants without storage, based on DNI data collected from Solar Energy Centre. At the relevant time, there was no other reliable data for estimation of DNI besides the Surface Meteorology and Solar Energy Data maintained by NASA and data maintained by Solar Energy Centre, MNRE for some cities. The Review Committee of MNRE approved the effect of low DNI to be treated as Force Majeure. Subsequently, MNRE amended the definition of "CERC Approved Tariff" and para 3.12 relating to "Commissioning" under the JNNSM. The SCoD of the projects was further extended from 28 months to 38 months. The petitioners have argued that such amendment by MNRE to the JNNSM could only be possible after recognizing low DNI as "Force Majeure" event. The case of the petitioner falls under Article 11.3.1 of the PPA. The change in DNI at the project site was neither within the control of the Petitioners nor could they have foreseen it after adopting prudent utility practices. When the scheme was envisaged, there was no prior experience in India with regard to solar thermal technology. There was only three months gap between issuance of RFS and execution of PPA. Therefore, the Petitioner had no time to record the DNI for a period of one year which is required. The mission document quoted that the guidelines would be reviewed after one year. Therefore, the Guidelines itself envisaged the flexibility. Availability of DNI is dependent upon natural atmospheric conditions, which clearly are not under the control of the petitioner. Despite undertaking effective measures to mitigate the shortfall, the petitioners could not have anticipated such fluctuation in DNI levels. MNRE once having held eventualities being faced by the petitioner as events beyond the control of the Petitioners cannot take a contrary view without assigning any reasons for such deviation. Once the Expert Committee Report has already taken a view, MNRE has failed to provide reasons why the same have not been adopted.

182. Per Contra, the Respondents submitted that the events related to DNI or FOREX were neither Force Majeure nor change in law within meaning of articles 11 and 12 of PPA. There is no mention of DNI in bid documents or guidelines. The Respondents had placed their reliance on the judgments: Seaboard Limber Company and Capital Development Company vs. United States, Ocean Tramp Tankers Corporation vs. Soveract, Continental Construction Co Ltd –v- State of Madhya Pradesh 1988 (3) SCC82, Travancore Devaswaom Board –v- Thanath International 2004 (13) SCC 44, Eacom's Controls (India) Itd –v- Bailey Control Co. and others AIR 1998 Delhi 365, Satyabrata Ghose –v- Mugneeram Bangur and Co. and anr. AIR 1954 44, Govindbhai Gordhanbhai Patel and others –v-Gulam Abbas

Mulla Allibhai and other AIR 1977 SC 1019, Mohan Lal & Anr v Grain Chamber Ltd AIR 1968 SC 772, The Naihati Jute Mills Ltd v Khyaliram Jagannath AIR 1968 SC 522, Mugneeram Bangur and Co. –v- Sardar Gurbachan Singh (1965) 2 SCR 630, Davis Contractors –v- Fareham U.D.C (1956) 2 All E.R 145, Ostime –v- Duple Motor Bodies Ltd (1961) 2 All E.R, Suresh NarainSinha –v- Akhauri Balbhadra and others AIR 1957 Patna 256 submitted.

183. Respondent No 1 submitted that the developers have increased the CUF at the time of financial closure as per the option given to them under the PPA. A band of 7% was provided between maximum CUF and minimum guarantee, to account for variability in solar resource. The final maximum and minimum CUF as agreed upon by the developers are as follows:

S. No.	Name	Parameters given by in the bid document			Revised CUF as per the decision of the bidder in terms of bidding documents i.e. RFS read with Article 4.4.1 of draft PPA	
		Max.	Normative	Min	Max.	Min.
1	Godawari	25	23	16	29.5%	22.5%
2	Rajasthan Sun Technique	25	23	16	32%	25%
3	MEIL	25	23	16	28%	21%
4	Corporate Ispat	25	23	16	33%	26%

184. Respondent No. 1 has highlighted that it was a conscious decision by the developers to increase the maximum CUF value while being fully aware of the consequences regarding the minimum guaranteed CUF. It is to be underscored that based on available data, minimum CUF value as suggested by NVVN was 16%. The observed generation in commissioned projects is greater than this CUF. Therefore, the prayers of the Petitioners that it is a Force Majeure event is not maintainable.

Order in Petition No. 304/MP/2013 & Ors.

185. Respondent No.1 further states that various claims made by the petitioners in regard to the reliance on the representations made by MNRE are contrary to the Detailed Project Report (DPR) which the petitioners had, themselves, about 6 months of the execution of the PPA and at the time of the financial closure made along with the list of documents, mentioned in the RFS. The DPR determines the viability of the projects to be implemented by the petitioners. At that stage, no issue was raised on the DNI being incorrectly mentioned in the website of the MNRE. It is not open to the petitioners to complain that the DNI given as information in the website of MNRE based on which a minimum percentage as recommended in RfS was 16% should be considered as a representation by MNRE to warrant the DNI to achieve a minimum of 21% and above. It is the decision of the petitioners to have quoted the percentage to be achieved by them on their own based on the viability report given in the form of DPR by their Consultant. A disclaimer was also given in the website of Respondent No. 2 (MNRE) which stated as under:

"This website belongs to Ministry of New and Renewable Energy, Government of India. Content displayed on this website is managed by MNRE and are for reference purpose only. All efforts have been made to make the information as accurate as possible. The MNRE will not be responsible for any loss or harm, direct or consequential or any violation of laws that may be caused by inaccuracy in the information available on this website. Any discrepancy found may be brought to the notice of Ministry. Website Designed and Developed by NIC-MNRE Computer Centre and Developed by NIC MNRE Computer Centre & Hosted at NIC web server."

However, the targeted minimum CUF was reduced from 23% to 16% in case of Solar Thermal and from 19% to 12% in the case of Solar PV. The Petitioners were asked to bid on this basis and the Petitioners had given the bid of their own volition. Most of the bidders have increased the targeted minimum on their own. Neither NVVNL nor MNRE ever forced any petitioner to either participate in the bid process or give the bid in a particular manner to be selected for execution of the PPA.

The Respondent No 1 further stated that three projects namely GGEL. 186. RSTEPL, MEIL have proceeded to commission the project. The CUF achieved by GGEL in FY 2014-15 was 19.69%; in 2015-16 was 19.67%; in 2016-17 was 20.82% and for the period April to July 2017 it has been 19.69%. Thus the performance has been in excess of the minimum percentage (16%) specified in the RfS documents. Respondent No. 1 underscores that the shortfall in generation by GGEL has been on account of revised minimum of 22.5% by reason of aggressive increase of Maximum percentage to 29.5%, a decision voluntarily made by GGPL.

# B. Forex:

187. The Petitioner M/s Rajasthan Sun Technique Energy Pvt. Ltd. (RSETPL) vide its Petition No. 312/MP/2013 submitted that project cost inclusive of equity and debt component was envisaged. The computation of the total cost of the project was based in USD and Indian rupees. At the time of bid submission, the exchange rate of the USD was Rs.45 per USD. Average exchange rate during the construction period works out approximately Rs. 45.16 per USD assuming 0.36% annual depreciation of Indian Rupee v/s USD during construction period as prescribed by the Commission Notification dated 31/03/2010. The total debt of the project was assessed at Rs.1510 Crores. Petitioner was developing Solar Thermal Projects with Compact Linear Fresnel Reflective Technology (CLFR). It was a new technology and there were no suppliers in India and accordingly the Petitioner had to tie up with supplier from USA and Europe for supply of equipment. On the basis of exchange rate of Rs. 45 per USD at the time of submission of the aggregate project cost was Rs.2075 Crores. However, the exchange rate increased steeply and has gone as high as 62.73 per USD, thereby depreciating approximately 39% from the date on which the Petitioner submitted its bid in November, 2010. This was unprecedented, unforeseen and uncontrollable. Steep increase in exchange rate thereby depreciating rupee approximately by 39% has necessitated infusion of additional equity. Since, the additional equity requirement was unforeseen at the time of submission of bid, the additional cost on account of equity has not been built into the project. Hence, as the return on additional equity amount is 'NIL', it has also resulted into additional cash outflow for debt servicing which has increased at about Rs.658 Crores over the loan period.

Petitioner MEIL Green Power Ltd vide its Petition No. 16/MP/2014 has submitted that due to lower DNI levels Petitioner was required to re-design their system for arriving at the size of the solar field, mirror surface area plus tubes and supporting systems. Accordingly, Petitioner re-designed the solar field with 112 loops of the solar field. This caused a delay in the project. Such delay along with the force majeure event due to drought, political disturbances and public unrest in Andhra Pradesh along with fire accident at the project site has not only resulted in delay in the execution of the project but along with foreign exchange rate variation, also adversely affected the cost of the project. Petitioner submitted that Commission may increase the tariff under Article 9 of the PPA to compensate on devaluation of rupee during the period of delay caused due to reduction in DNI and consequent problems.

189. Per Contra the Respondents submitted that adjustment of tariff is specifically excluded in the PPA and cannot be generally claimed under the exercises of general regulatory power. The events relating to DNI or variation in the foreign exchange rate are neither Force Majeure nor change in law within the meaning of Article 11 and Article 12 of the PPA. The non-availability, late delivery or change in the cost of the plant, machinery equipment, material spare parts or consumables for the power project is one of the specific exclusions agreed to between the parties from Force Majeure. Similarly, insufficiency of finances or funds or agreements becoming onerous to perform is also exclusion from the Force Majeure. The tariff determined under the PPA was on the basis of the competitive bidding process and that there cannot be any further revision of the applicable tariff under Article 9 of the PPA on grounds of variation in the DNI levels and foreign exchange rates. The prayer of the Petitioner that the Commission can re-open the tariff determined by the competitive bidding process under section 79(1)(b) of the Electricity Act, 2003 would tantamount to convert a tariff based competitive bidding to a determination of tariff under section 62 which is contrary to the scheme of the provisions of the Electricity Act, 2003.

## C. Fire:

190. The Petitioner MEIL Green Power Ltd. (MGPL) vide its Petition No. 16/MP/2014 submitted that on 6<sup>th</sup> September, 2013, there was fire accident at the project site due to which numbers of equipment were completely burnt. This was a Force Majeure event as per Article 11.3.1 (A). Petitioner on 10<sup>th</sup> September, 2013 intimated the Respondent No.1 of such Force Majeure event under Article 11.5.1 of the PPA which occurred in the project site from 7<sup>th</sup> September, 2013. On 1<sup>st</sup> January, 2014 once again wrote to Respondent No.1 intimating the loss suffered by the

Petitioner due to fire and subsequent steps taken to mitigate the same. However, it took 116 days for procurement of damaged equipment and accordingly NVVNL was requested to extend the SCoD of the project from 9<sup>th</sup> March, 2014 to 3<sup>rd</sup> July, 2014. However, on 21st January, 2014 Respondent No.1 has refused to consider fire as a Force Majeure event under Article 11.3.1 (A) of the PPA.

Per Contra the Respondents submitted that the Petitioner is seeking six months extension beyond the new SCoD i.e. 09.03.2014 on account of force majeure events like fire and drought. As per Clause 11.3.1(a) of the PPA, the event such as fire, explosion etc. is allowed under force majeure only to the extent originating from the source external to the site. In the instant case as per Fire Accident Report, it was observed that the fire did not originate from the source external to the site and the same was also communicated to the Petitioner vide letter dated 21.01.2014; hence the Petition may be dismissed.

## D. Drought:

MEIL vide its Petition No. 16/MP/2014 submitted that on 9<sup>th</sup> January, 2013, Government of Andhra Pradesh declared the area in which project was situated to be drought affected area. On 2<sup>nd</sup> February, 2013, Petitioner wrote to Respondent No.1 intimating that there has been a severe drought at the project site which hindering the implementation of the project. These incidents should be considered as Force Majeure event under Article 11.5 of the PPA. The Petitioner again wrote to Respondent No.1 on 5<sup>th</sup> April, 2013 intimating that due to prevailing force majeure even regarding drought situation, synchronizing of the project to grid system would be delayed.

193. The Commission observes that the Article 11 of the Power Purchase Agreement (PPA) stipulates that:

#### **"11. ARTICLE 11: FORCE MAJEURE**

- 11.1 Definitions
- 11.1.1 In this Article, the following terms shall have the following meanings:
- 11.2 Affected Party
- 11.2.1 An affected Party means NVVN or the SPD whose performance has been affected by an event of Force Majeure.

#### 11.3 Force Majeure

- 11.3.1 A 'Force Majeure' means any event or circumstance or combination of events those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with **Prudent Utility Practices:** 
  - a) Act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon or tornado:
  - b) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
  - c) radioactive contamination or ionising radiation originating from a source in India or resulting from another Force Majeure Event mentioned above excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Power Project by the Affected Party or those employed or engaged by the Affected Party.
  - d) An event of Force Majeure identified under NVVN-Discom PSA, thereby affecting delivery of power from SPD to Discom.

### 11.4 Force Majeure Exclusions

- 11.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:
- a. Unavailability, late delivery, or changes in cost of the plant, machinery, equipment, materials, spare parts or consumables for the Power Project;
- b. Delay in the performance of any contractor, sub-contractor or their agents;
- c. Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment:
- d. Strikes at the facilities of the Affected Party;
- e. Insufficiency of finances or funds or the agreement becoming onerous to perform;
- f. Non-performance caused by, or connected with, the Affected Party's:
  - i. Negligent or intentional acts, errors or omissions;
  - ii. Failure to comply with an Indian Law; or

iii. Breach of, or default under this Agreement.

11.5 Notification of Force Majeure Event

11.5.1 The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement.

Provided that such notice shall be a pre-condition to the Affected Party's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the Force Majeure Event.

11.5.2 The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

11.6 Duty to Perform and Duty to Mitigate

11.6.1 To the extent not prevented by a Force Majeure Event pursuant to Article 11.3, the Affected Party shall continue to perform its obligations pursuant to this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any Force Majeure Event as soon as practicable.

- 11.7 Available Relief for a Force Majeure Event
- 11.7.1 Subject to this Article 11:
  - a. no Party shall be in breach of its obligations pursuant to this Agreement except to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event;
  - b. every Party shall be entitled to claim relief in relation to a Force Majeure Event in regard to its obligations, including but not limited to those specified under Article 4.5;
  - c. For avoidance of doubt, neither Party's obligation to make payments of money due and payable prior to occurrence of Force Majeure events under this Agreement shall be suspended or excused due to the occurrence of a Force Majeure Event in respect of such Party.
  - d. Provided that no payments shall be made by either Party affected by a Force Majeure Event for the period of such event on account of its inability to perform its obligations due to such Force Majeure Event.

In the event affecting the 'delivery of power', it has to be seen that whether the same qualifies under 'Force Majeure' or not."

194. Furthermore, Article 7 of the Power Sale Agreement (PSA) between NVVNL and Rajasthan Discoms covers the event of Force Majeure as follows:

#### "ARTICLE 7: FORCE MAJEURE

### 7.3 Force Majeure

7.3.1 A 'Force Majeure' means any event or circumstance or combination of events and circumstances as stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement. but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care in performing its obligations:

- a) Act of God, including, but not limited to lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, resulting in evacuation of power being disrupted from the Delivery Points; or
- b) Explosion, accident or breakage of transmission facilities to deliver power from the Delivery Points to the receiving substation(s); or
- c) any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action making the performance of obligations as specified herein as impossible; or
- d) radio active contamination or ionising radiation originating from a source in India or resulting from another Force Majeure Event mentioned above excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Power Project by the Affected Party or those employed or engaged by the Affected Party.
- e) An event of Force Majeure identified under NVVN-NTPC PPA and/or NVVN-SPD PPA thereby affecting supply of power by SPD and/or NTPC.
- f) An event of force majeure affecting the concerned STU/CTU, as the case may be, thereby affecting the evacuation of power from the Delivery Points by the Discom;

#### 7.4 Force Majeure Exclusions

- 7.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:
- a. Non-performance resulting from normal wear and tear typically experienced in power generation materials and equipment:
- b. Strikes at the facilities of the Affected Party;
- c. Insufficiency of finances or funds or the agreement becoming onerous to perform;
- d. Non-performance caused by, or connected with, the Affected Party's: i. Negligent or intentional acts, errors or omissions;

- ii. Failure to comply with an Indian Law; or iii. Breach of, or default under this Agreement."
- The main contention of the Petitioners is that actual values of DNI as observed at the site were much lower than the expected values as per the data available at the time of bidding. The Petitioners claim this is a Force Majeure as DNI is completely out of their control. Both MNRE and NVVN strongly oppose this saying that no representation was made by them during the bidding process on DNI, and use of available data was at developer's own risk.
- The Commission has carefully examined the submissions of the petitioners 196. and respondents, and would like to make the following observations:
  - a. DNI is one of the variables responsible for CUF of a Solar Thermal Plant, which also depends on other factors such as plant design & technology and solar field size. DNI is the natural resource on which Solar Thermal plants are based, which is measurable, observable and predictable. Whilst the technology for Solar Thermal plants was new in India at the time of the bidding, measurement of weather parameters is a well-established science.
  - b. The developers were mandated to install weather stations at the respective sites within 6 months of signing the PPA. For instance, GGEL set up its station in May 2011. At the time of signing the second amendment to the PPA in September 2013, the Petitioner had recorded data for a little over two years. GGEL has referred to this data as a case for change in plant design and hence revision in SCoD in the representation made by the developers in front of MNRE in May 2012:

"These variations in the annual sum of DNI and the frequency distribution, have forced the developers to rework the basic engineering of the plant completely. In addition the procurement activities have been affected as the earlier technical specifications like pumps, valves, heat exchangers, select power block components etc. had to be revised."

From the above, it is observed that even after their reported realization of mismatch between anticipated and observed values of DNI, the developers never felt the need for raising the issue of downward revision of CUF. Instead, they put forth a plan for change in design of the plant to account for the same, for which an extension of SCoD was sought and obtained. Three developers have installed the projects and are generating power. All this demonstrates that the developers were comfortable with their CUF commitment even after observation of actual DNI values. To conclude, developers went back to NVVNL twice after the initial signing of PPA, but did not intend to negotiate the CUF on either occasion.

c. The developers had, of their own volition, revised the minimum guaranteed CUF in an aggressive manner, and in doing that they failed to exercise proper caution and follow 'prudent utility practices'. Whereas the sample PPA as submitted by NVVN shows that suggested minimum CUF was 16%:

Power Sale Agreement clause 6.8.3

"...If for any Contract Year, it is found that the SPD has not been able to generate minimum energy of ......Million kWh (MU) [Insert value of energy generated corresponding to a CUF of 12% for solar PV and CUF of 16% for solar thermal projects..."

As the maximum CUF provided an upper limit to the quantum of power offtake by the Discom, the developers were over-aggressive with that value, while at the same time failing to evaluate the feasibility of minimum guarantee that they were committing to (max CUF - 7%). CUFs achieved by GGEL in FY 2014-15 was 19.69%, in 2015-16 was 19.67%; in 2016-17 was 20.82%. Thus, performance has been in excess of minimum percentage of 16% specified in RfS. While it is acknowledged that this was the first time solar thermal plants were being built in India, there was no reason for the developers to make excessive commitment on minimum units of power guaranteed.

The Commission thereby concludes that the issue of DNI as brought up by the Petitioners was not a Force Majeure event as the following condition under clause 11.3.1 of the PPA was not met:

# ".....could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices..."

197. Additionally, some Petitioners have argued that Expert Committee Report of MNRE acknowledged that reduction in DNI is a Force Majeure, a stance that cannot be altered now. It is noted that MNRE which constituted the committee, itself did not take cognizance of this recommendation of the expert committee. MNRE considered the recommendation of the committee only to the extent of extension of SCoD. As such the argument of the petitioners in regard to the expert committee is not relevant.

198. To examine the validity of other claims for Force Majeure, viz. fire, drought and depreciation of rupee, it is valuable to revisit the following part of the Order of the Hon'ble Supreme Court in the case "Energy Watchdog vs. Central Electricity Regulatory Commission & Ors":

- "32. "Force majeure" is governed by the Indian Contract Act, 1872. In so far as it is relatable to an express or implied clause in a contract, such as the PPAs before us, it is governed by Chapter III dealing with the contingent contracts, and more particularly. Section 32 thereof. In so far as a force majeure event occurs de hors the contract, it is dealt with by a rule of positive law under Section 56 of the Contract. Sections 32 and 56 are set out herein:
  - "32. Enforcement of Contracts contingent on an event happening Contingent contracts to do or not to do anything if an uncertain future event happens, cannot be enforced by law unless and until that event has happened. If the event becomes impossible, such contracts become void."
- 56. Agreement to do impossible act An agreement to do an act impossible in itself is void.

Contract to do act afterwards becoming impossible or unlawful. A contract to do an act which, after the contract made, becomes impossible or, by reason of some event which the promisor could not prevent, unlawful, becomes void when the act becomes impossible or unlawful.

Compensation for loss through non-performance of act known to be impossible or unlawful. Where one person has promised to do something which he knew or, with reasonable diligence, might have known, and which the promisee did not know, to be impossible or unlawful, such promisor must make compensation to such promise for any loss which such promisee sustains through the non-performance of the promise."

- 33. Prior to the decision in Taylor vs. Caldwell, (1861-73) All ER Rep 24, the law in England was extremely rigid. A contract had to be performed, notwithstanding the fact that it had become impossible of performance, owing to some unforeseen event, after it was made, which was not the fault of either of the parties to the contract. This rigidity of the common law in which the absolute sanctity of contract was upheld was loosened somewhat by the decision in Taylor vs. Caldwell in which it was held that if some unforeseen event occurs during the performance of a contract which makes it impossible of performance, in the sense that the fundamental basis of the contract goes, it need not be further performed, as insisting upon such performance would be unjust.
- 34. The law in India has been laid down in the seminal decision of Satyabrata Ghose v. Mugneeram Bangur & Co., 1954 SCR 310. The second paragraph of Section 56 has been adverted to, and it was stated that this is exhaustive of the law as it stands in India. What was held was that the word "impossible" has not been used in the Section in the sense of physical or literal impossibility. The performance of an act may not be literally impossible but it may be impracticable and useless from the point of view of the object and purpose of the parties. If an untoward event or change of circumstance totally upsets the very foundation upon which the parties entered their agreement, it can be said that the promisor finds it impossible to do the act which he had promised to do. It was further held that where the Court finds that the contract itself either impliedly or expressly contains a term, according to which performance would stand discharged under certain circumstances, the dissolution of the contract would take place under the terms of the contract itself and such cases would be dealt with under Section 32 of the Act. If, however, frustration is to take place de hors the contract, it will be governed by Section 56.

- 35. In M/s Alopi Parshad & Sons Ltd. v. Union of India, 1960 (2) SCR 793, this Court, after setting out Section 56 of the Contract Act, held that the Act does not enable a party to a contract to ignore the express covenants thereof and to claim payment of consideration, for performance of the contract at rates different from the stipulated rates, on a vague plea of equity. Parties to an executable contract are often faced, in the course of carrying it out, with a turn of events which they did not at all anticipate. for example, a wholly abnormal rise or fall in prices which is an unexpected obstacle to execution. This does not in itself get rid of the bargain they have made. It is only when a consideration of the terms of the contract, in the light of the circumstances existing when it was made, showed that they never agreed to be bound in a fundamentally different situation which had unexpectedly emerged, that the contract ceases to bind. It was further held that the performance of a contract is never discharged merely because it may become onerous to one of the parties.
- 36. Similarly, in Naihati Jute Mills Ltd. v. Hyaliram Jagannath, 1968 (1) SCR 821, this Court went into the English law on frustration in some detail, and then cited the celebrated judgment of Satyabrata Ghose v. Mugneeram Bangur & Co. Ultimately, this Court concluded that a contract is not frustrated merely because the circumstances in which it was made are altered. The Courts have no general power to absolve a party from the performance of its part of the contract merely because its performance has become onerous on account of an unforeseen turn of events.
- 37. It has also been held that applying the doctrine of frustration must always be within narrow limits. In an instructive English judgment namely, Tsakiroglou & Co. Ltd. v. Noblee Thorl GmbH, 1961 (2) All ER 179, despite the closure of the Suez canal, and despite the fact that the customary route for shipping the goods was only through the Suez canal, it was held that the contract of sale of groundnuts in that case was not frustrated, even though it would have to be performed by an alternative mode of performance which was much more expensive, namely, that the ship would now have to go around the Cape of Good Hope, which is three times the distance from Hamburg to Port Sudan. The freight for such journey was also double. Despite this, the House of Lords held that even though the contract had become more onerous to perform, it was not fundamentally altered. Where performance is otherwise possible, it is clear that a mere rise in freight price would not allow one of the parties to say that the contract was discharged by impossibility of performance.
- 38. This view of the law has been echoed in 'Chitty on Contracts', 31st edition. In paragraph 14-151 a rise in cost or expense has been stated not to frustrate a contract. Similarly, in 'Treitel on Frustration and Force Majeure', 3rd edition, the learned author has opined, at paragraph 12-034, that the cases provide many illustrations of the principle that a force majeure clause will not normally be construed to apply where the contract provides for an alternative mode of performance. It is clear that a more onerous method of performance by itself would not amount to an frustrating event. The same learned author also states that a mere rise in price rendering the contract more expensive to perform does not constitute frustration. (See paragraph 15-158)
- 39. Indeed, in England, in the celebrated Sea Angel case, 2013 (1) Lloyds Law Report 569, the modern approach to frustration is well put, and the same reads as under:

"111. In my judgment, the application of the doctrine of frustration requires a multi-factorial approach. Among the factors which have to be considered are the terms of the contract itself, its matrix or context, the parties' knowledge, expectations, assumptions and contemplations, in particular as to risk, as at the time of the contract, at any rate so far as these can be ascribed mutually and objectively, and then the nature of the supervening event, and the parties' reasonable and objectively ascertainable calculations as to the possibilities of future performance in the new circumstances. Since the subject matter of the doctrine of frustration is contract, and contracts are about the allocation of risk, and since the allocation and assumption of risk is not simply a matter of express or implied provision but may also depend on less easily defined matters such as "the contemplation of the parties", the application of the doctrine can often be a difficult one. In such circumstances, the test of "radically different" is important: it tells us that the doctrine is not to be lightly invoked; that mere incidence of expense or delay or onerousness is not sufficient; and that there has to be as it were a break in identity between the contract as provided for and contemplated and its performance in the new circumstances."

45. We are, therefore, of the view that neither was the fundamental basis of the contract dislodged nor was any frustrating event, except for a rise in the price of coal, excluded by clause 12.4, pointed out. Alternative modes of performance were available, albeit at a higher price. This does not lead to the contract, as a whole, being frustrated. Consequently, we are of the view that neither clause 12.3 nor 12.7, referable to Section 32 of the Contract Act, will apply so as to enable the grant of compensatory tariff to the respondents. Dr. Singhvi, however, argued that even if clause 12 is held inapplicable, the law laid down on frustration under Section 56 will apply so as to give the respondents the necessary relief on the ground of force majeure. Having once held that clause 12.4 applies as a result of which rise in the price of fuel cannot be regarded as a force majeure event contractually, it is difficult to appreciate a submission that in the alternative Section 56 will apply. As has been held in particular, in the Satyabrata Ghose case, when a contract contains a force majeure clause which on construction by the Court is held attracted to the facts of the case, Section 56 can have no application. On this short ground, this alternative submission stands disposed of."

199. The Commission would like to reiterate the stance of the Supreme Court in the aforementioned judgment:

<u>"The Courts have no general power to absolve a party from the performance of</u> its part of the contract merely because its performance has become onerous on account of an unforeseen turn of events."

200. Furthermore, it is pertinent to mention that contracts are about risk allocation and just because it becomes onerous (such as more expensive) to fulfill a contract that is not sufficient ground to void the same. The contention that change in foreign

exchange rate is a ground for Force Majeure, fails this test. Forex rate is a known risk factor in projects that have a significant import component, and has to be accounted for by the businesses at the time of bidding for the projects. Therefore it is concluded that fluctuation in exchange rate is not a Force Majeure event.

- 201. The Petitioner (M/s GGEL), vide its I.A. No. 57 of 2016 in Petition No. 304/MP/2013 has submitted that benefit of deemed generation due to nonavailability of grid has to be given to the petitioner, as it is a force majeure event as per clause 'd' of Article 11.3.1 of the PPA and Article 7.3.1 (f) of the PSA executed between respondent and the Discoms.
- 202. The relevant clauses are quoted above. Both definitions of Force Majeure as per PPA and PSA begin as follows:
  - "A 'Force Majeure' means any event or circumstance or combination of events those stated below...."
- That is, only the events or circumstances that are enlisted in the Article are covered under Force Majeure. In the instant case, grid unavailability or back-down are not covered under Force Majeure, and hence do not qualify for this benefit. However, the relief for the grid unavailability has been dealt in terms of Article 4.4.1 of the PPA in issue no. 7 and 8.
- MEIL in its Petition No. 16/MP/2014 has claimed fire as a Force Majeure 204. event. As per clause 11.3.1 of PPA,
  - "'Force Majeure' means any event or circumstance or combination of events those stated below that wholly or partly prevents or unavoidably delays an Affected Party in..."

e) Act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon or tornado;"

From the letter of NVVNL to MEIL dated 21.01.2014, it is observed that the fire had originated within the project site itself, thereby not satisfying the condition laid out in the PPA. Since the fire did not originate from a source external to the site and the same was also communicated to the Petitioner vide letter dated 21.01.2014, the fire incident does not qualify as a Force Majeure event. Hence no compensation can be awarded to the Petitioner under the said clause.

206. The Commission is of the view that on 9<sup>th</sup> January, 2013, Government of Andhra Pradesh had declared the area in which the project was situated to be drought affected area and the same was brought to the notice of the Respondents by MEIL on 2<sup>nd</sup> February, 2013. This incident is squarely covered as Force Majeure event under Clause 11.3.1(a) of the PPA. Accordingly, the prayer for extension of Scheduled Commercial Operation Date or the SCoD of the 50 MW project of MEIL for the period during which the drought persisted is allowed. The Respondent No.1 (NVVNL) is directed to ascertain the duration of the drought based on the necessary notification/circular issued by the Government of Andhra Pradesh and revise the SCOD of this project accordingly.

<u>Issue No. 5</u>: Whether there is a need to evolve a mechanism regarding compensatory tariff for the remainder of the term of the PPAs covered in Petition No 312/MP/2013 and 313/MP/2013?

207. The Petitioner, M/s RSTPL in Petition No 312/MP/2013 and 313/MP/2013 has requested to evolve a mechanism for compensatory tariff due to reduction in DNI and depreciation in rupee vis-a-vis USD which may arise for the remainder of the term of the PPA dated 08/01/2011.

The Petitioner in these petitions has submitted that the project cost which was 208. inclusive of equity and debt was assessed when the exchange rate for USD was Rs 45 per USD. The petitioner had also availed Rupee facility agreement with AXIS Bank for Rs 114 Crores and Foreign Currency facility from ADB and EXIM Bank for USD 288 million for import of equipments from USA and Europe. This was due to the fact that there were no suppliers for such equipment in India. However, as the exchange rate has increased steeply to Rs 62.73 per USD, the depreciation of the Rupee is approximately 39% from the date on which the petitioner submitted its bid in November 2010. This depreciation has resulted in increase in capital cost by Rs 175 Crores resulting in additional cash outflow of Rs 658 Crores for the debt servicing over the loan period. In order to tide over these unforeseen circumstances of Rupee depreciation, the petitioner has sought for adjustment in tariff to compensate the depreciation.

On the issue of DNI, the petitioner has stated that the project was developed using Compact Linear Fresnel Reflective Technology (CLFR) and the project was to be located in western part of Rajasthan which had DNI in the range of 2000 to 2200 kWh/mt<sup>2</sup>/year. This range of DNI was based on the DNI information contained in map dated 17/09/2010 published by MNRE through the Solar Energy Centre and as available on MNRE website at the time of the bidding. The said site depicts a map which estimate average DNI at 10 km Resolution basis on hourly estimate of radiation over seven years, i.e. 2002 to 2008. The data was also compared with

Meteonorm (basically is derived from satellite data sets). Accordingly, the petitioner submitted its bid offering discount of 334 paise per kWh to the CERC applicable tariff. However, when the ground data of DNI was measured in line with Article 7 of the PPA, DNI over a period of 20 months (from December, 2010 to July, 2012) was around 1830 kWh/m<sup>2</sup>/year. Thus, there was a drop in DNI around 15 to 25%. The petitioner submitted that a drop in DNI would lead to drop in expected generation which would result in lower revenue of approximately Rs. 67 Crore per annum and approximately Rs.1675 Crore during the term of PPA. Hence, the petitioner has prayed for a compensatory tariff due to reduction in DNI from the assumption made while bidding. The Petitioner has also requested for evolving a mechanism in this regard that may arise for the remainder of the term of the PPA.

The issue of whether lower ground readings of DNI and unforeseen depreciation in Indian Rupee vis-a-vis the Dollar are covered under Force Majeure clause. The Commission has already addressed this in Issue 4 detailed above. From perusal of documents and records and submissions of the parties concerned, it is evident that most of the bidders increased the targeted minimum on their own. Hence, there was no question of any representation being given by either the Government of India or by NVVNL on the aspect of DNI that could be achieved. On the issue of depreciation in the Rupee vis-à-vis the US Dollar, it has been discussed in Issue No 4 above that the foreign exchange was not an event of Force Majeure nor change in law within the meaning of Article 11 and Article 12 of the PPA. The change in the cost of the plant, machinery equipment, material spare parts or consumables for the power project is one of the specific exclusions from Force Majeure agreed to between the parties in the PPA. Hence, the tariff determined under the PPA was on the basis of the competitive bidding process and that there cannot be any further revision of the applicable tariff under Article 9 of the PPA on grounds of variation in the DNI levels and foreign exchange rates. In view of the discussion detailed above, there is neither any case for granting compensatory tariff nor any requirement to evolve a mechanism for that purpose for the reminder of the term of the PPAs.

Issue No. 6: Whether the compensation amount being claimed by the Respondent No. 1 from the Petitioner becomes due on invoking of Article 4.4.1 of the PPA without any claim raised by the affected DISCOM who could not meet its 'Renewable Purchase Obligation' due to short supply of energy? And

Issue No. 7: Whether the 'compensation' amount claimed by the Respondent No.1 from the Petitioners for shortfall in the generation and supply of electricity is in the nature of 'Liquidated Damages' specifically provided in Article 4.4.1 of the PPA? Whether, such 'Liquidated Damages' need be determined as per the contract or can be denied?

- 211. Since, Issue no. 6 and Issue no. 7 are inter-connected, the same are taken together.
- 212. The Petitioner (M/s GGEL), vide its I.A. No. 57 of 2016 in Petition No. 304/MP/2013 submitted that the Respondent should place on record the details regarding energy 'procured' from Solar Power Developers under the relevant Power Purchase Agreements vis-à-vis details regarding energy 'sold' to the distribution company(s) under the relevant Power Sale Agreements so that the loss specifically attributable to it can be arrived at. This is so because, in the name of 'Liquidated Damages', only reasonable compensation can be awarded.
- 213. The Petitioner (M/s MEIL), in its I.A. No. 8 of 2017 in Petition No. 16/MP/2014 submitted that the 'compensation' amount becomes payable to the Respondents,

only if the same is due to short supply of power energy by the Petitioner. The Discoms could not comply with the 'Renewable Purchase Obligation' (RPO) and that the affected Discoms have made the claim to the Respondent No.1 and hence the Respondent No.1 needs to be re-compensated. The Petitioner has submitted that Clause 4.4.1 of the PPA clearly specifies "those reasons solely attributable to the SPD". Further, MNRE has indicated in the Review Committee Report and its subsequent letter dated 17.8.2016 that the events faced by the petitioner are akin to 'force majeure' and even the Respondent No.1 has not been able to demonstrate that the shortfall in supply of contracted capacity is attributable to the petitioner. Additionally, it is a settled principle that without demonstrating actual loss, liquidated damages cannot be claimed under law. Also, the grounds other than reduction in DNI, such as fire accident, drought affecting water drawl for construction, State bifurcation agitation affecting statutory approvals like IBR, etc. claimed by the petitioners for seeking relief of 'force majeure' and corresponding extension by another 6 months, are events which have been recognized as force majeure events at various fora. Any claim towards the Petitioners by Respondent No.1 can only be made once Respondent No.1 demonstrates that shortfall is for reasons solely attributable to the Petitioners.

Per Contra, the Respondent No.1 has submitted that one to one correlation between the power procured from the Solar power Developers under the PPA and sale to the distribution companies under the PSA cannot be established because the total quantum of power procured is allocated to various distribution companies. The 'Compensation' claimed from the Petitioner for shortfall in the generation and supply of the electricity is in the nature of 'Liquidated Damages' specifically provided in Article 4.4.1 of the PPA and as such 'Liquidated Damages' as per the contract cannot be denied. The provision for Liquidated Damages under Article 4.4.1 of the PPAs provides for an absolute obligation on the petitioner for fulfillment of its obligations and in case of non-fulfillment, to pay the qualified amount. In the present case, the damages are being claimed by a public utility under a regulatory regime and in the interest of consumers at large. The stipulation by way of liquidated damages with a provision in Article 4.4.1 has been adopted in a regulatory framework considering the fact that it is difficult to prove the actual level of damage. There has to be a certainty for both the parties on the quantum of damages. If the sum is named as liquidated damages, then, it is payable and the burden for showing that there has been no loss or injury is on the petitioners. In support of these contentions, learned counsel relied upon the judgments of the Hon'ble Supreme Court in Kailash Nath Associates Vs. DDA [(2015) 4 SCC 136] and Construction and Design Services Vs. DDA, [(2015) 14 SCC 263].

- The Commission observes that Clause 6 of the JNNSM Guidelines under the 215. heading 'Policy and Regulatory Framework' stipulates as under:
  - "6. Policy and regulatory framework

The National Tariff Policy 2006 mandates the State Electricity Regulatory Commissions (SERC) to fix a minimum percentage of energy purchase from renewable sources of energy taking into account availability of such resources in the region and its impact on retail tariff. National Tariff Policy, 2006 would be modified to mandate that the State electricity regulators fix a percentage for purchase of solar power. The solar power purchase obligation for States may start with 0.25% in the phase I and to go up to 3% by 2022. This could be complemented with a solar specific Renewable Energy Certificate (REC) mechanism to allow utilities and solar power generation companies to buy and sell certificates to meet their solar power purchase obligations.

.... When NVVN supplies bundled power to State utilities ......, those State utilities will be entitled to use the solar part of the bundled power for meeting their Renewable Purchase Obligations (RPO) under the Electricity Act, 2003.

216. Article 4.4.1 of the Power Purchase Agreement executed between the parties stipulates that:

"Article 4.4.1: NVVN, at any time during a Contract Tear, shall not be obliged to purchase any additional energy from the SPD beyond 122.640 Million kWh(MU). If for any contract year, it is found that the SPD has not been able to generate minimum energy of 91.980 Million kWh (MU), on account of reasons, solely attributable to the SPD, the non-compliance by SPD shall make SPD liable to pay compensation provided in the PSA as payable to Discoms and shall duly pay such compensation to NVVNL to enable NVVNL to remit the amount to Discoms. This compensation shall be applied to the amount of shortfall in generation during the Contract Year. The amount of compensation shall be computed at the rate equal to the compensation payable by the Discoms towards non-meeting of RPOs, subject to a minimum of 25% of the applicable tariff."

The Commission further observes that Article 6.8.3 of the 'back to back' Power Sale Agreement executed between Respondent No.1 and Discoms stipulates that:

"Article 6.8.3: NVVN, at any time during a Contract Year, shall not be obliged to purchase any additional energy from the SPD beyond .....Million kWh (MU). If for any Contract Year, it is found that the SPD has not been able to generate minimum energy of ...... Million kWh(MU), on account of reasons solely attributable to the SPD, the noncompliance by SPD shall make SPD liable to pay the compensation provided in the PSA as payable to Discoms and shall duly pay such compensation to NVVN to enable NVVN to remit the amount to Discoms. This compensation shall be proportional to the amount of shortfall in solar energy during the Contract Year."

From a conjoint reading of the above, the Commission observes that the main 218. objective of the JNNSM mission was to create a policy and regulatory environment which provides a predictable incentive structure that enables rapid and large-scale

capital investment in solar energy applications and encourages technical innovation and lowering of costs. The Tariff Policy 2006 mandated the SERCs to fix a minimum percentage of energy purchase from renewable sources of energy taking into account availability of such resources in the region and its impact on retail tariff. The Ministry of Power allocated to NVVN, equivalent megawatt capacity, from the Central unallocated quota, from NTPC power stations, for bundling together with solar power. NVVN undertook the sale of the bundled power to State utilities. These State utilities were entitled to use the solar part of the bundled power for meeting their Renewable Purchase Obligations (RPO) under the Electricity Act, 2003. Therefore, inter-alia; the main objective of the scheme was also to meet RPOs targets by the DISCOMS. Further, as per Article 4.4.1 of the PPA and 6.8.3 of the PSA, in case of short supply of the energy, the SPD was liable to pay compensation provided in the PSA as payable to Discoms. The compensation was to be paid to Respondent No.1 to enable it to remit the same to Discoms in terms of the PSA. However, as per Articles mentioned above, the 'compensation' amount becomes payable by the Petitioner to the Respondent No.1, only if the Discoms failed in complying with the 'Renewable Purchase Obligation' (RPO) targets due to short supply of power by the Petitioners, and that the affected Discoms have made the claim to the Respondent No.1 and hence the Respondent No.1 needs to be recompensated. Hence, the Commission is of the view that the Respondent No. 1 cannot invoke section 4.4.1 without any claim being raised by the affected DISCOM.

The Commission observes that Section 74 of the Contract Act, 1872 stipulates:

- "Section 74: When a contract has been broken, if a sum is named in the contract as the amount to be paid in case of such breach, the party complaining of the breach is entitled, whether or not actual damage or loss is proved to have been caused thereby, to receive from the party who has broken the contract reasonable compensation not exceeding the amount so named."
- 220. Further, Hon'ble Supreme Court in the judgment titled "Construction & Design Services Vs. Delhi Development Authority" (2015)14 SCC 236 held that:
  - "14. There is no dispute that the appellant failed to execute the work of construction of sewerage pumping station within the stipulated or extended time. The said pumping station certainly was of public utility to maintain and preserve clean environment, absence of which could result in environmental degradation by stagnation of water in low lying areas. Delay also resulted in loss of interest on blocked capital as rightly observed in Para 7 of the impugned judgment of the High Court. In these circumstances, loss could be assumed, even without proof and burden was on the appellant who committed breach to show that no loss was caused by delay or that the amount stipulated as damages for breach of contract was in the nature of penalty. Even if technically the time was not of essence, it could not be presumed that delay was of no consequence.
  - 15. Thus, even if there is no specific evidence of loss suffered by the respondent-plaintiff, the observations in the order of the Division Bench that the project being a public utility project, the delay itself can be taken to have resulted in loss in the form of environmental degradation and loss of interest on the capital are not without any basis.
  - 16. Once it is held that even in absence of specific evidence, the respondent could be held to have suffered loss on account of breach of contract, and it is entitled to compensation to the extent of loss suffered, it is for the appellant to show that stipulated damages are by way of penalty. In a given case, when highest limit is stipulated instead of a fixed sum, in absence of evidence of loss, part of it can be held to be reasonable, compensation and the remaining by way of penalty. The party complaining of breach can certainly be allowed reasonable compensation out of the said amount if not the entire amount. If the entire amount stipulated is genuine pre-estimate of loss, the actual loss need not be proved. Burden to prove that no loss was likely to be suffered is on party committing breach, as already observed."
- Further, Hon'ble Supreme Court in another judgment titled "Kailash Nath 221. Associates Vs. Delhi Development Authority" (2015)4 SCC 136 held that:

"43.1 Where a sum is named in a contract as a liquidated amount payable by way of damages, the party complaining of a breach can receive as reasonable compensation such liquidated amount only if it is a genuine pre-estimate of damages fixed by both parties and found to be such by the Court. In other cases, where a sum is named in a contract as a liquidated amount payable by way of damages, only reasonable compensation can be awarded not exceeding the amount so stated.

Similarly, in cases where the amount fixed is in the nature of penalty, only reasonable compensation can be awarded not exceeding the penalty so stated. In both cases, the liquidated amount or penalty is the upper limit beyond which the Court cannot grant reasonable compensation.

43.2 Reasonable compensation will be fixed on well-known principles that are applicable to the law of contract, which are to be found inter alia in Section 73of the Contract Act.

- 43.6 The expression "whether or not actual damage or loss is proved to have been caused thereby" means that where it is possible to prove actual damage or loss, such proof is not dispensed with. It is only in cases where damage or loss is difficult or impossible to prove that the liquidated amount named in the contract, if a genuine pre-estimate of damage or loss, can be awarded.
- 43.7 Section 74 will apply to cases of forfeiture of earnest money under a contract. Where, however, forfeiture takes place under the terms and conditions of a public auction before agreement is reached, Section 74 would have no application."
- 222. Further, Hon'ble Delhi High Court in the judgment titled "Engineers India Limited Vs. Tema India Limited" FAO(OS)487/2015 pronounced on 07<sup>th</sup> of January, 2016, held that:
  - "18. In the case of Vishal Engineers & Builders v. Indian Oil Corporation: 2012 (1) Arbitration Law Report 253 (Delhi), it was held that the plaintiff must first prove the damages that they have suffered to recover simpliciter a sum by way of liquidated damages. Further, the legal position, as explained in Indian Oil Corporation v. Lloyds Steel Industries Limited: 2007 (4) Arbitration Law Report 84 (Delhi), wherein it is held that in a particular case where there is a clause of liquidated damages the Court will award to the party aggrieved only reasonable compensation which would not exceed an amount of liquidated damages stipulated in the contract. It would not, however, follow there from that even when no loss is suffered; the amount stipulated as liquidated damages is to be awarded. Such a clause would operate when loss is suffered but it may normally be difficult to estimate the damages and,

therefore, the genesis of providing such a clause is that the damages are preestimated. Thus, discretion of the Court in the matter of reducing the amount of damages agreed upon is left unqualified by any specific limitation. The guiding principle is 'reasonable compensation'. In order to see what would be the reasonable compensation in a given case, the Court can adjudge the said compensation in that case. For this purpose, as held in Fateh Chand (supra) it is the duty of the Court to award compensation according to settled principles.

Settled principles warrant not toward a compensation where no loss is suffered, as one cannot compensate a person who has not suffered any loss or damage. There may be cases where the actual loss or damage is incapable of proof; facts may be so complicated that it may be difficult for the party to prove actual extent of the loss or damage. Section 74 exempts him from such responsibility and enables him to claim compensation in spite of his failure to prove the actual extent of the loss or damage, provided the basic requirement for award of 'compensation', viz. the fact that he has suffered some loss or damage is established. The proof of this basic requirement is not dispensed with by Section 74. That the party complaining of breach of contract and claiming compensation is entitled to succeed only on proof of 'legal injury' having been suffered by him in the sense of some loss or damage having been sustained on account of such breach, is clear from Sections 73 and 74.

Section 74 is only supplementary to Section 73, and it does not make any departure from the principle behind Section 73 in regard to this matter. Every case of compensation for breach of contract has to be dealt with on the basis of Section 73. The words in Section 74 'Whether or not actual damage or loss is proved to have been caused thereby' have been employed to underscore the departure deliberately made by Indian legislature from the complicated principles of English Common Law, and also to emphasize that reasonable compensation can be granted even in a case where extent of actual loss or damage is incapable of proof or not proved. That is why Section 74 deliberately states that what is to be awarded is reasonable compensation. In a case when the party complaining of breach of the contract has not suffered legal injury in the sense of sustaining loss or damage, there is nothing to compensate him for; there is nothing to recompense, satisfy, or make amends. Therefore, he will not be entitled to compensation See State of Kerala v. United Shippers and Dredgers Ltd. Even in Fateh Chand (supra) the Apex Court observed in no uncertain terms that when the section says that an aggrieved party is entitled to compensation whether actual damage is proved to have been caused by the breach or not, it merely dispenses with the proof of 'actual loss or damage'. It does not justify the award of compensation whether a legal injury has resulted in consequence of the breach, because compensation is awarded to make good the loss or damage which naturally arose in the usual course of things, or which the parties knew when they made the contract, to be likely to result from the breach. If liquidated damages are awarded to the petitioner even when the petitioner has not suffered any loss, it would amount to 'unjust enrichment', which cannot be countenanced and has to be eschewed."

- 223. Therefore, in the light of the above cited judgments, the Commission observes that the following principles are laid down: firstly the party complaining of breach of contract and claiming compensation is entitled to such compensation only on proof of 'legal injury' having been suffered by him in the sense of some loss or damage having been sustained on account of such breach. Secondly, the actual loss need not be proved and can be given on the basis of pre-estimate of damage or loss; and thirdly, the Commission is required to find out the genuineness of the pre-estimate damages incurred by the Respondent and the extent of 'reasonable compensation' which can be accounted for as 'liquidated damages'.
- 224. Furthermore, the Commission observes that Article 10.3.2 of the PPA stipulates that:
  - "Article 10.3.2: All payments required to be made under this Agreement shall also only include any deduction or set off for:
  - i) deductions required by the Law; and
  - ii) amounts claimed by NVVN, if any, from the SPD, through an invoice duly acknowledged by the SPD, to be payable by the SPD, and not disputed by the SPD within thirty (30) days of receipt of the said Invoice and such deduction or set-off shall be made to the extent of the amounts not disputed. It is clarified that NVVN shall be entitled to claim any set off or deduction under this Article, after expiry of the said thirty (30) Days period."
- Further, as per Hon'ble Supreme Court Of India judgment tilted Union of India v. Karam Chand Thapar and Bros. (Coal Sales) Ltd. and others, while referring to concept of set-off, this Court has stated thus: -
  - "15. "Set-off" is defined in Black's Law Dictionary (7th Edn., 1999) inter alia as a debtor's right to reduce the amount of a debt by any sum the creditor owes

the debtor; the counter balancing sum owed by the creditor. The dictionary quotes Thomas W. Waterman from A Treatise on the Law of Set-Off, Recoupment, and Counter Claim as stating:

"Set-off signifies the subtraction or taking away of one demand from another opposite or cross-demand, so as to distinguish the smaller demand and reduce the greater by the amount of the less; or, if the opposite demands are equal, to extinguish both. It was also, formerly, sometimes called stoppage, because the amount to be set off was stopped or deducted from the cross-demand"."

Thereafter, the learned Judges referred to Sub-rule (1) of Rule 6 of Order VIII and proceeded to opine thus: - "What the rule deals with is legal set-off. The claim sought to be set off must be for an ascertained sum of money and legally recoverable by the claimant. What is more significant is that both the parties must fill the same character in respect of the two claims sought to be set off or adjusted. Apart from the rule enacted in Rule 6 above said, there exists a right to set-off, called equitable, independently of the provisions of the Code. Such mutual debts and credits or cross-demands, to be available for extinction by way of equitable set-off, must have arisen out of the same transaction or ought to be so connected in their nature and circumstances as to make it inequitable for the court to allow the claim before it and leave the defendant high and dry for the present unless he files a cross-suit of his own. When a plea in the nature of equitable set-off is raised it is not done as of right and the discretion lies with the court to entertain and allow such plea or not to do so "

Therefore, based on the above cited judgments, the following principle emerge: firstly in case of legal set-off, the claim sought to be set off must be for an ascertained sum of money and legally recoverable by the claimant. **Secondly**, both the parties must fulfill the same character in respect of the two claims sought to be set off or adjusted. The Commission is of the view that Article 10.3.2 covers only the commercial transactions which are raised through the invoices and does not cover the compensation being levied by the Respondent No. 1 due to shortfall in generation of electricity. The Respondent No. 1 cannot set-off the compensation from the invoice raised by the Petitioner. The demand of the compensation is a separate and independent claim which needs to be raised and demanded separately from the Petitioner. The Commission feels that it is unfair and unjust of the Respondent No.1 to set-off the entire compensation out of the invoice raised by the petitioner in one-go as the same would lead to risking of the financial viability of the project. Furthermore, the projects won't be able to meet even their operational costs.

227. In the light of the above discussions, in I.A. No. 57 of 2016 in Petition No. 304/MP/2013 (GGEL), the Respondent has placed on record letter No. SE/RDPPC/Billing/XEN-RE/D-6224 dated 02.02.2016 issued by O/o Superintending Engineer (Billing), RDPPC, Heerapur, Jaipur whereby DISCOM has already deducted the compensation amount of Rs. 27,21,59,802/- from Jan-16 Bundle Power Invoice of NVVNL. This letter states shortfall to the tune of about 12 MUs per contract year (for FY 2014-15 and FY 2015-16). As the DISCOM has claimed compensation, NVVN has charged the same from the SPD, as per Article 4.4.1 of the PPA.

The Petitioner has pleaded that generation losses incurred due to "grid failure or backing down instructions" from SLDCs should be taken into consideration while deciding the issue of shortfall in generation. The data placed on record states loss of ~1.677 MUs and ~3.53 MUs for FY 2014-15 and 2015-16 respectively. So it is evident that the shortfall in generation (12 MUs) was much higher than the loss of generation (~1.677 MUs and ~3.53 MUs) due to grid unavailability or any back-down instructions by SLDC.

229. In addition, we observe that clause 4.4.1 of the PPA stipulates that:

"....If for any contract year, it is found that the SPD has not been able to generate minimum energy of 91.980 Million kWh (MU), on account of reasons, solely attributable to the SPD, the non-compliance by SPD shall make SPD liable to pay compensation provided in the PSA as payable to

Discoms and shall duly pay such compensation to NVVNL to enable NVVNL to remit the amount to Discoms...."

- 230. Since grid unavailability or back-down instructions cannot be attributed to the SPD, the 'amount of shortfall in generation' should be adjusted to that extent. Otherwise, the SPD is not only incurring the loss of tariff payable for these units that were lost due to lack of evacuation from DISCOM, but also paying penalty for the same, which is inequitable.
- Therefore, the Commission directs Rajasthan SLDC to validate the 'Grid Failure Report' as submitted by the Petitioner on record. Subsequently, the Discom/ NVVN and the generator are directed to adjust the amount of shortfall to the extent of loss of generation as certified by the SLDC.
- 232. Whereas, in I.A. No. 8 of 2017 in Petition No. 16/MP/2014 (MEIL), ostensibly, the letters dated 21.08.2015, 16.12.2016, & 27.12.2016 and letters dated 6.1.2017 & 16.1.2017 neither state that the DISCOMs have failed in compliance of RPO and that they have suffered a loss and needs to be compensated by the Petitioner, nor, state that the 'compensation' claimed is for onward transfer to the effected DISCOMs. In the impugned letters, the Respondent No.1 has referred only to invoking of Article 4.4.1. Further, Respondent No.3 has also not referred to any loss caused due to non-compliance of RPOs. Therefore, the Respondents have failed to bring on record the proof of any 'legal injury' in the sense of some loss or damage having been sustained on account of breach i.e. short supply of the power energy to the DISCOMS. Hence, NVVNL and the distribution companies are not entitled to raise any claim from the Petitioner on this account unless they prove that they

suffered loss by the way of penalty from the SERC on account of non-compliance of RPO due to shortfall generation.

One of the Petitioners, M/s Rajasthan Sun Technique has approached the Hon'ble High Court of Delhi against the NVVNL decision imposing liquidated damages. The Hon'ble High Court of Delhi vide its interim order dated 30.3.2017 in Case No. O.M.P. (1) (Comm.) 124/2017 has restrained NVVNL from deducting payment from the petitioner's invoices and is listed for arguments. Therefore, the liability of the petition will be decided in the light of judgment of the Hon'ble High Court of Delhi.

# Issue No. 8: Whether the Respondents should be restrained from invoking performance bank guarantees?

234. The petitioners, M/s RSTPL, M/S GGEL, M/s MEIL and M/S CIAL in IAs filed before the Commission have sought for orders of the Commission to restrain the respondents from taking coercive action and invoking the Performance Bank Guarantees.

Both Respondents 1 & 2, i.e. M/s NVVN and MNRE have submitted that 235. Bank Guarantees are in lieu of cash deposits and the BGs would be honored by the banks as these are independent contracts between the bank and the beneficiaries. Disputes between parties are not relevant to the encashment of the BGs. As such, restraint on the encashment of Bank Guarantee can be enforced only in exceptional circumstances such as fraud and there is no such allegation in this case

236. The Petitioner, M/s GGEL in Petition No. 304/MP/12013 and M/s MEIL in IA 8 of 2017 in petition No 16/MP/2014 have referred to the case of M/s ACME which has a 2.5 MW Solar thermal plant at Bikaner wherein, on account of lower DNI, ACME had obtained an Interim Order Dated 21.2.2013 from High Court of Delhi restraining the respondent from invocation of Bank Guarantee given by ACME. In response to the claims of the Respondent, M/s MEIL has submitted that the Bank Guarantees cannot be encashed unless NVVN demonstrates that contracted capacity as agreed in the PPA cannot be supplied by the petitioner (for reasons attributable to the petitioner), NVVN has suffered a loss due to shortfall in contracted capacity and such losses need to be compensated to the DISCOMS.

237. M/s CIAL in Petition No 42/MP/2014 in their petition stated that subsequent to the execution of the PPA, they entered into a lease agreement on 09.06.2011 for taking on lease 462.4 acres of land allotted to the Project. However, while executing the Project, the Petitioner faced several impediments that not only delayed the execution of the Project, but also made the Project financially unviable for the Petitioner. None of these impediments is attributable to the Petitioner as they had arisen for reasons beyond the control of the Petitioner. Subsequently, the Petitioner (as per the terms of the PPA) also set up a Weather Station at the Project Site in July 2011, to continuously measure solar irradiance (including DNI), ambient air temperature, wind speed and other weather parameters. On completion of one year of measurement of DNI at the Project site, the DNI was recorded in June, 2012 at 1751.55 kWh/m2/year. Therefore, the DNI data notified by the NREL-MNRE at the time of the bidding was found inaccurate and the DNI data was found at significantly lower levels on ground for areas around the project site in Rajasthan. The change of DNI from 2167 kwh/m2/year to 1751.55 kWh/m2/year was a substantial change which has substantial bearing on the CUF of the Project.

The Petitioner also referred to the report of the Review Committee wherein it 238. was recommended that the solar thermal power developers under the JNSM Phase I be allowed a general extension of 10 months beyond initial SCoD of 28 months from the date of the PPA and failure to achieve the SCOD will give Respondent No.1 the right to encash the bank guarantees furnished by solar power developers. They also submitted that though Clause 4.6 of the PPA sets out the penalties in the form of encashment of bank guarantee in the event of delay in achieving SCOD of the Project, the encashment of the bank guarantee for the unintentional and uncontrollable delay in the execution of the project will gravely prejudice the Petitioner in as much as the Petitioner has been made liable and subject to adverse consequences for delays caused by factors completely out of its own control. The PPA and the designing of the Project pursuant thereto having been done on the basis of DNI data published by MNRE in relation to solar radiation, the encashment of the bank guarantee would be unfair.

239. We now examine the prayers of the petitioners. The Petitioners on their own accord have submitted that they are bound by Clause 4.6 of the PPA which lays down the provisions for encashment of Performance Bank Guarantees. We also examine clauses of PPA which relate to provisions for invoking the Performance Bank Guarantee:

## Clause 3.3: Performance Bank Guarantee

3.3.1. The Performance Bank Guarantee to be furnished under this agreement shall be for guaranteeing the commencement for the supply of power upto the contracted capacity within the time specified in the agreement as per format provided in Schedule 1

- 3.3.2. The failure on the part of SPD to furnish and maintain the Performance Bank Guarantee including the Ernest Money Deposit at the time of RfS and Bid Bond at the time of RfP shall be a material breach of the term of this agreement on the part of the SPD
- 3.3.3 If the SPD fails to commence supply of power from the Scheduled Commissioning Date specified in this Agreement, subject to conditions mentioned in Article 4.5, NVVN shall have the right to encash the Performance Bank Guarantee without prejudice to the other rights of NVVN under this Agreement.

## 3.4:Return of Performance Bank Guarantee

- 3.4.1 Subject to Article 3.3, NVVN shall return / release the Performance Bank Guarantee three (3) months after the Commissioning Date.
- 3.4.2 The return / release of the Performance Bank Guarantee shall be without prejudice to other rights of NVVN under this Agreement.

#### 4.5 Extensions of Time

- 4.5.1 In the event that the SPD is prevented from performing its obligations under Article 4.1 by the Scheduled Commissioning Date due to:
  - a) any NVVN Event of Default; or
  - b) Force Majeure Events affecting NVVN, or
  - c) Force Majeure Events affecting the SPD,

the Scheduled Commissioning Date and the Expiry Date shall be deferred, subject to the limit prescribed in Article 4.5.2, for a reasonable period but not less than 'day for day' basis, to permit the SPD or NVVN through the use of due diligence, to overcome the effects of the Force Majeure Events affecting the SPD or NVVN, or till such time such Event of Default is rectified by NVVN.

4.5.2 Subject to Article 4.5.6, in case of extension occurring due to reasons

specified in Article 4.5.1(a) any of the dates specified therein can be extended, subject to the condition that the Scheduled Commissioning Date would not be extended by more than eight (8) months.

4.5.3 In case of extension due to reasons specified in Article 4.5.1(b) and (c), and if such Force Majeure Event continues even after a maximum period of six (6) months any of the Patties may choose to terminate the Agreement as per the provisions of Article 13.5.

4.5.4 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on the tune period by which the Scheduled Commissioning Date or the Expiry Date, should be deferred by any Party may raise the Dispute to be resolved in accordance with Article I 6.

4.5.5 As a result of such extension, the Scheduled Commissioning Date and the Expiry Date newly determined shall be deemed to be the Scheduled Commissioning Date and the Expiry Date for the purposes of this Agreement.

4.5.6 Notwithstanding anything to the contrary contained in this Agreement, any extension of the Scheduled Commissioning Dale arising due to any reason envisaged in this Agreement shall not be allowed beyond March 31, 2013 or the Date determined pursuant to Article 4.6.3, whichever is later.

# 4.6 :Liquidated Damages for delay in commencement of supply of power to <u>NVVN</u>

4.6.1 If the SPD is unable to commence supply of power to NVVN by the Scheduled Commissioning Date other than for the reasons specified in Article 4.5.1, the SPD shall pay to NVVN, Liquidated Damages for the delay in such commencement of supply of power and making the Contracted Capacity available for dispatch by the Scheduled Commissioning Date as per the following

Delay upto one (1) month. NVVN shall encash 20% of the total Performance Bank Guarantee

Delay of more than one (1) month and upto two months – NVVN will encash another 40% of the total Performance Bank Guarantee

Delay of more than two and upto three months - NVVN will encash the remaining Performance Bank Guarantee

- 4.6.2. In case the commissioning of the Power Project is delayed beyond 5 ( five ) months, the SPD shall pay to NVVN, the Liquidated Damages at the rate of Rs 1,00,000 per MW per day of delay for the delay in such commissioning. Provided that the SPD shall be required to make such payments to NVVN in advance on a week to week basis for the period of delay
- 4.6.3. The maximum period allowed for commissioning of the Power Project with encashment of the Performance Bank Guarantee and payment of Liquidated damages shall be limited to thirty six (36) months from the date of signing of this agreement. In case the commissioning of the Power Project is delayed beyond thirty six (36) months from the date of signing of the Agreement, it shall be considered as an SPD event of default and provisions of Article 13 shall apply and the Power Project shall be removed from the list of selected projects in the event of termination of this Agreement.
- 240. A reading of Clause 3.3.1 suggests that the Performance Bank Guarantee furnished is for guaranteeing the commencement for the supply of power upto the contracted capacity within the time specified in the agreement. Clause 3.4.1 of the PPA further states that, subject to Article 3.3, NVVN shall return / release the Performance Bank Guarantee three (3) months after the Commissioning Date. Hence, a conjoint reading of these two clauses indicates that Performance Bank Guarantees are kept alive for encashment only if the power plant does not commence supply of power within the time stipulated in the PPA or agreed otherwise by any modification to the PPA. Once the plant is operational and declares its CoD, the Respondent 1 is liable to return the PBG within 3 months of the commissioning date.
- 241. In the instant cases, M/s GGEL commissioned the plant on 19.6.2013, M/s RSTPL commissioned the plant on 17.11.2013 and M/s MEIL commissioned on

4.11.2014. As per Article 4.6 of the PPA, the Respondent 1 has the right of invoking the Bank Guarantee against these plants for the number of days delayed beyond the period extended by MNRE i.e. beyond revised SCOD. Therefore, the Commission is of the view that except in the case where the delay is covered under force majeure as approved by the Commission, there is no embargo on MNRE to take appropriate measures in terms of the respective PPAs, subject to our observations in para 242 of this order. However, in the case of M/s RSPTL, the Petitioner has filed separate petition No. 119/MP/2017 which is listed for hearing therefore the matter will be adjudicated upon in the said Petition separately.

In the case of M/s CIAL in petition No 42/MP/2014, the power plant is yet to be commissioned. Clause 3.3.3 of the PPA stipulates that if the SPD fails to commence supply of power from the Scheduled Commissioning Date specified in this Agreement, subject to conditions mentioned in Article 4.5, NVVN shall have the right to invoke the Performance Bank Guarantee without prejudice to the other rights of NVVN under this Agreement. M/s CIAL has maintained that the delay in commissioning the plant was due to reasons beyond their control. They state that they faced several impediments which not only delayed the execution of the project but also made the project financially unviable. This includes stoppage of financial support by the Banks of the petitioner (as there was uncertainty in the extension of SCoD) due to which the work at the project site has come to a halt. The Commission observes that three of the Petitioners namely, M/s GGEL, M/s MEIL and M/s RSTPL have commissioned the projects despite facing similar challenges. demonstrates their commitment and intent to set up the solar thermal plants, which the Commission appreciates. In their cases, we request the Central Government to consider their cases for extension of SCOD on the basis of their representations which are under consideration of the Central Government. Till the decision of the Central Government for extension of SCOD, their bank guarantees shall not be invoked. These generators are directed to maintain the bank guarantee.

# Issue No. 9: Whether there is a need for invoking 'Regulatory Powers' available under section 79 (1) (b) of the Electricity Act, 2003 by the Commission?

243. The Petitioners filed the petition under Section 79 of the Electricity Act, 2003 in the matter of the Power Purchase and in the matter of Compensatory Tariff on account of inter alia, drop in Direct Normal Irradiance (DNI) and foreign currency exchange variation. Further, they stated that the Commission has the necessary jurisdiction and regulatory powers to intervene and grant the relief as prayed. The Petitioner has submitted that it is a settled law that the appropriate Commission has powers to modify the tariff for concluded PPA in larger public interest and to rework and redesign the terms of the PPA in order to protect the interests of the renewable energy projects. The Petitioner also submitted that the Commission has wide regulatory powers under Section 79(1)(b) of the Act to re-open the PPA to make it workable and prevent the developer from suffering economic hardship.

244. The Commission observes that as per the judgment of the Hon'ble Supreme Court in the case titled "Energy Watchdog vs. Central Electricity Regulatory Commission & Ors." on 11, April, 2017, it was held that:

<sup>&</sup>quot;18. The construction of Section 63, when read with the other provisions of this Act, is what comes up for decision in the present appeals. It may be noticed that Section 63 begins with a non-obstante clause, but it is a non-obstante clause covering only Section

- 62. Secondly, unlike Section 62 read with Sections 61 and 64, the appropriate Commission does not "determine" tariff but only "adopts" tariff already determined under Section 63. Thirdly, such "adoption" is only if such tariff has been determined through a transparent process of bidding, and, fourthly, this transparent process of bidding must be in accordance with the guidelines issued by the Central Government. What has been argued before us is that Section 63 is a standalone provision and has to be construed on its own terms, and that, therefore, in the case of transparent bidding nothing can be looked at except the bid itself which must accord with guidelines issued by the Central Government. One thing is immediately clear, that the appropriate Commission does not act as a mere post office under Section 63. It must adopt the tariff which has been determined through a transparent process of bidding, but this can only be done in accordance with the guidelines issued by the Central Government. Guidelines have been issued under this Section on 19th January, 2005, which guidelines have been amended from time to time. Clause 4, in particular, deals with tariff and the appropriate Commission certainly has the jurisdiction to look into whether the tariff determined through the process of bidding accords with clause 4.
- 19. It is important to note that the regulatory powers of the Central Commission, so far as tariff is concerned, are specifically mentioned in Section 79(1). This regulatory power is a general one, and it is very difficult to state that when the Commission adopts tariff under Section 63, it functions de hors its general regulatory power under Section 79(1) (b). For one thing, such regulation takes place under the Central Government's quidelines. For another, in a situation where there are no quidelines or in a situation which is not covered by the guidelines, can it be said that the Commission's power to "regulate" tariff is completely done away with? According to us, this is not a correct way of reading the aforesaid statutory provisions. The first rule of statutory interpretation is that the statute must be read as a whole. As a concomitant of that rule, it is also clear that all the discordant notes struck by the various Sections must be harmonized. Considering the fact that the non-obstante clause advisedly restricts itself to Section 62. we see no good reason to put Section 79 out of the way altogether. The reason why Section 62 alone has been put out of the way is that determination of tariff can take place in one of two ways - either under Section 62, where the Commission itself determines the tariff in accordance with the provisions of the Act, (after laying down the terms and conditions for determination of tariff mentioned in Section 61) or under Section 63 where the Commission adopts tariff that is already determined by a transparent process of bidding. In either case, the general regulatory power of the Commission under Section 79(1) (b) is the source of the power to regulate, which includes the power to determine or adopt tariff. In fact, Sections 62 and 63 deal with "determination" of tariff, which is part of "regulating" tariff. Whereas "determining" tariff for inter-State transmission of electricity is dealt with by Section 79(1) (d), Section 79(1) (b) is a wider source of power to "regulate" tariff. It is clear that in a situation where the guidelines issued by the Central Government under Section 63 cover the situation, the Central Commission is bound by those guidelines and must exercise its regulatory functions, albeit under Section 79(1) (b), only in accordance with those guidelines. As has been stated above, it is only in a situation where there are no guidelines framed at all or where the guidelines do not deal with a given situation that the Commission's general regulatory powers under Section 79(1) (b) can then be used."
- 245. From the above, the Commission observes that the regulatory powers of the Commission are specifically mentioned in Section 79(1) which is a general one. The

general regulatory power of the Commission under Section 79(1) (b) is the source of the power to regulate, which includes the power to determine or adopt tariff. The provision of Section 79(1) (b) is a wider source of power to "regulate" tariff. It is only in a situation where there are no guidelines framed at all or where the guidelines do not deal with a given situation that the Commission's general regulatory powers under Section 79(1) (b) can be used. In our view, since all issues have been addressed, we do not find any reason for invocation of power under Section 79(1)(b) of the Electricity Act, 2003.

- 246. To sum up, the decisions are as follows:
- a. Issue No.1: The Commission has the jurisdiction to regulate the tariff discovered under the Reverse Competitive Bidding for PPAs concluded under the JNNSM Scheme and adjudicate the disputes arising under the PPAs.
- b. Issue No.2: RFS is silent about DNI being considered as bidding criteria. The selection of the projects was based on the discount offered in Rs. /kWh on the CERC Approved Applicable Tariff.
- c. Issue No. 3: It is the responsibility of the Solar Power Developers, i.e. the Petitioners herein to carry out due diligence before the bidding as required the RfS document. The Petitioners have failed to prove to our satisfaction that they carried out due diligence about the DNI before quoting the bid and at the time of amendments to the PPAs. Therefore, the responsibility for resultant variation between the DNI stated to be assumed by the Petitioners at the time of bidding and the actual DNI on ground lies squarely to the account of the Petitioners.

- d. Issue No. 4: Variation between assessment of DNI by the Petitioner vis-à-vis actual DNI, fluctuation in foreign exchange rate and fire from an internal source are not Force Majeure events. Hence, no compensation can be awarded to the Petitioners under the provisions of the PPA. However, the drought in Andhra Pradesh that affected the project of MEIL is covered as Force Majeure event under Clause 11.3.1(a) of the PPA and accordingly, SCOD of the project shall stand extended by the period of actual drought after ascertaining from the Government of Andhra Pradesh.
- e. Issue No. 5: In view of the decision with regard to force majeure in this order, there is neither any case for granting compensatory tariff nor any requirement to evolve a mechanism therefor for the remainder of the term of the PPAs.
- f. Issue No. 6 & 7: In I.A. No. 57 of 2016 in Petition No. 304/MP/2013, since the compensation has been claimed by the DISCOM, the Commission directs Rajasthan SLDC to validate the 'Grid Failure Report' as submitted by the Petitioner on record. Subsequently, the Discom/NVVN and GGEL are directed to mutually adjust the amount of shortfall to the extent of loss of generation as certified by the SLDC. In I.A. No. 8 of 2017 in Petition No. 16/MP/2014, the Respondents have failed to bring on record any proof of 'legal injury' in the form of loss or damage having been sustained on account of breach i.e. short supply of the power energy to the DISCOMS. NVVNL and the distribution companies are not entitled to raise any claim from the Petitioner on this account unless they

prove that they suffered loss on account of non-compliance of RPO due to shortfall generation.

- g. Issue No. 8: As regards invocation of Performance Bank Guarantee, the Commission is of the view that except in the cases where the delay is covered under force majeure as approved by the Commission, there is no embargo on MNRE to take appropriate measures in terms of the respective PPAs, subject to our observations in para 242 of this order. However, in the case of M/s RSPTL, the Petitioner has filed separate petition No. 119/MP/2017 which is listed for hearing therefore the matter will be adjudicated upon in the said Petition separately.
- h. Issue No. 9: Since all the issues raised in the petitions have been addressed, the Commission finds no reason to invoke Regulatory powers provided under Section 79(1) (b) of the Electricity Act, 2003.

247. In view of the above the Petition No. 304/MP/2013, 312/MP/2013, 313/MP/2013, 16/MP/2014 and 42/MP/2014 along with I.A.'s stands disposed of.

sd/sd/sd/sd/-(Dr. M. K. Iyer) (A. S. Bakshi) (A. K. Singhal) (Gireesh B. Pradhan) Member Member Member Chairperson