

Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai – 400 005
Tel. 022 22163964/65/69 Fax 22163976
Email: mercindia@mercindia.org.in
Website: www.mercindia.org.in

Case No. 106 of 2009

In the matter of
Petition filed by Maharashtra State Electricity Distribution Co. Ltd. for
procurement of power from Solar projects

Shri. V. P. Raja, Chairman
Shri S. B. Kulkarni, Member
Shri V. L. Sonavane, Member

ORDER

Date: May 12, 2010

The Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) submitted a Petition under affidavit before the Commission on January 22, 2010, with the following prayers:

“

- 1. To allow the 3 Nos. of Solar project holders i.e M/s Videocon (5 MW), M/s Clover Solar Pvt. Ltd. (2 MW) and M/s Panchajanya Power Pvt. Ltd. (5 MW) having EPA's with MSEDCL to migrate to JNNSM Scheme.*
- 2. To allow the 4 Nos. of Solar projects to enter into EPA with NVVN (list enclosed) and future up coming projects covered under the JNNSM Scheme.*



3. *The tariff as decided by CERC in the JNNSM Scheme for procurement of power by MSEDCL from all the Solar Projects not covered under MNRE GBI Scheme be allowed as pass through in the ARR of MSEDCL.”*

2. MSEDCL submitted that the Ministry of New and Renewable Energy (MNRE), Government of India (GoI) has announced a Policy on March 31, 2008, for promotion of grid connected solar power generation in the country. As per the said Policy, MNRE shall provide the Generation Based Incentive (GBI) up to a maximum of Rs. 12 per unit for Solar PV projects and Rs. 10 per unit for solar thermal projects to eligible project(s), which are commissioned by December 31, 2009, for a maximum capacity of 50 MW across India after taking into account the power purchase rate by the State Electricity Regulatory Commissions (SERCs).

3. MSEDCL submitted that the Commission, vide its suo-motu Order dated May 8, 2009, has determined tariff of Rs. 3 per unit for Solar based power generation projects (Solar PV and Solar Thermal Plant) commissioned under above GBI scheme of MNRE and also approved the principles of Energy Purchase Agreement (EPA) under the said Order.

4. MSEDCL submitted that seven private solar developers and Maharashtra State Power Generation Co. Ltd. (MSPGCL), for its solar project at Chandrapur, approached MSEDCL for executing EPA. MSEDCL executed EPA with four project developers, viz., MSPGCL plant at Chandrapur (1 MW), M/s Videocon (5 MW), M/s Clover Solar Pvt. Ltd. (2 MW), and M/s Panchajanya Power Pvt. Ltd. (5 MW), thus totalling 13 MW of contracted capacity.

5. MSEDCL submitted that the Jawaharlal Nehru National Solar Mission (JNNSM) states:

“Proposed Roadmap

The aspiration is to ensure large-scale deployment of solar generated power for grid-connected as well as distributed and decentralized off-grid provision of commercial energy services. The deployment across the application segments is envisaged as follows:

| S.No. | Applicant Segment | Target for Phase-I (2010-13) | Target for Phase-II (2013-17) | Target for Phase-III (2017-22) |
|--------------|--------------------------|-------------------------------------|--------------------------------------|---------------------------------------|
|--------------|--------------------------|-------------------------------------|--------------------------------------|---------------------------------------|



| | | | | |
|----|--|-----------------------------|------------------------------|------------------------------|
| 1. | <i>Solar Collector</i> | <i>7 million sq. Meters</i> | <i>15 million sq. Meters</i> | <i>20 million sq. Meters</i> |
| 2. | <i>Off-Grid solar application</i> | <i>200 MW</i> | <i>1000 MW</i> | <i>2000 MW</i> |
| 3. | <i>Utility grid power including roof-top</i> | <i>1000-2000 MW</i> | <i>4000-10,000 MW</i> | <i>20,000 MW</i> |

Policy and regulatory framework

The objective of the Mission is 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 Central Electricity Regulatory Commission has recently issued guidelines for fixing feed-in-tariff for purchase of Solar power taking into account current cost and technology trends. These will be revised on an annual basis. The CERC has also stipulated that Power Purchase Agreement that utilities will conclude with Solar power promoters, should be for a period of 25 years.

In order to enable the early launch of “Solar India” and encourage rapid scale up, a scheme is being introduced in cooperation with the Ministry of Power, the NTPC and the Central Electricity Authority, which would simplify the off-take of solar power and minimize the financial burden on Government.

...

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 at the CERC regulated price. This will bring down the gap between average cost of power and sale price of power. For the purpose of bundling, power has to be purchased by an entity and re-sold to the state power distribution utilities. Such function can be done only by a trading company/Discoms, as per the existing statutory provisions.

NTPC has a wholly owned subsidiary company engaged in the business of trading of power – NTPC Vidyut Vyapar Nigam Ltd. (NVVN). NVVN will be designated as nodal agency by the Ministry of Power (MoP) for entering into a Power Purchase Agreement (PPA) with Solar Power Developers. The PPAs shall be signed with the developers who will be setting up Solar Projects within next three years (i.e. upto March 2013) and are connected to the grid at 33 KV level and above. The PPAs will be valid for a period of 25 years. For each MW of solar power installed capacity for which PPA is signed by NVVN, MOP shall allocate to NVVN an equivalent amount of MW capacity from the unallocated quota of NTPC stations.

NVVN will bundle this power and sell this bundled power at a rate fixed as per CERC regulations. In case of significant price movement in the market rate, the Government will review the situation.

...

The Mission will encourage rooftop solar PV and other small solar power plants, connected to LT/11 KV grid, to replace conventional power and diesel-based generators. Operators of solar PV rooftop devices will also be eligible to receive the feed-in tariff fixed by the CERC, both on the solar power consumed by the operator and the solar power fed into the grid. Utilities will debit/credit the operator for the net saving on conventional power consumed and the solar power fed into the grid, as applicable. A Generation Based Incentive will be payable to



the utility to cover the difference between the solar tariff determined by CERC, less the base price of Rs. 5.50/kWh with 3% p.a. escalation. The metering and billing arrangements between the utility and the rooftop PV operator, will be as per guidelines/regulations of the appropriate commission.”

6. MSEDCL submitted that out of four projects who have executed EPA with MSEDCL, so far, only MSPGCL has been considered for GBI scheme of MNRE. MSEDCL added that as a promotional activity, it is keen to procure clean power from upcoming solar projects. MSEDCL requested the Commission to allow them to purchase power from solar power projects as per tariff approved by Central Electricity Regulatory Commission (CERC) and the same should be allowed as ‘pass through’ in Aggregate Revenue Requirement (ARR). MSEDCL added that it supports the JNNSM by allowing migration of the solar power plants from the earlier GBI scheme of MNRE to the new proposed methodology.
7. The Commission, vide its Notice dated February 3, 2010, scheduled an Admissibility Hearing on February 22, 2010, and directed MSEDCL to serve a copy of its Petition to Secretary (Energy) GoM, Mantralaya, Maharashtra Energy Development Agency (MEDA) and the four authorized Consumer Representatives.
8. MEDA, vide its letter dated February 15, 2010, submitted that:
 - i) In order to enable an early start of the Solar Mission implementation, it is proposed to allow migration of the projects that were initially covered under the MNRE GBI scheme and where substantial work has already been done for project development.
 - ii) Migration of projects, which have signed Power Purchase Agreement (PPA) with any distribution licensee and/or filed a Petition for determination of tariff with the concerned SERC for proposed sale arrangement on or before November 19, 2009 should be allowed.
 - iii) Seven solar developers approached MSEDCL for execution of PPA under MNRE GBI scheme. In accordance with the Commission's suo-motu Order dated May 8, 2009, four PPAs have already been executed and out of these



projects, only MSPGCL project has been considered under MNRE GBI scheme.

- iv) Further, to enable the developer to migrate to the JNNSM, MNRE has specified that the concerned State/Distribution Utility must give consent to buy the entire power of the proposed solar power project through NVVN at the tariff determined by CERC.
- v) The State Utilities will be entitled to use the solar part of the bundled power for meeting their Renewable Purchase Obligation (RPO). Further, it is proposed in the JNNSM that the Tariff Policy will be modified to mandate the Commission to fix separate solar RPO for States to the extent of 0.25% in Phase I which will increase to 3% by 2022. In view of the above, migration of solar power projects will help in fulfilling the solar RPO to certain extent.
- vi) In the light of the provisions of JNNSM, after getting consent from the concerned investor, MEDA approached the GoM to seek approval for migration of seven solar projects totalling to 27 MW under NVVN. The Government of Maharashtra (GoM) in turn agreed in-principle to allow the migration of these projects subject to acceptance by MSEDCL and approval from the Commission, vide letter dated January 4, 2010.
- vii) MSEDCL filed a Petition before the Commission on January 22, 2010 for migration of solar projects, which have either already executed PPA or intend to do so with MSEDCL.
- viii) In view of the above, MEDA requested the Commission to allow all solar power projects as mentioned in the prayer of MSEDCL to migrate under JNNSM and support the setting-up of solar power projects in Maharashtra.

9. During the hearing, the Commission observed that the JNNSM has been announced by GoI. The Commission supports the migration of all eligible solar projects in accordance with the Guidelines stipulated by the MNRE. The Guidelines for migration of existing under-development grid connected solar projects from existing arrangements to the JNNSM stipulates that the trading arm of National Thermal Power Corporation (NTPC), i.e., NTPC Vidyut Vyapar Nigam (NVVN) will execute agreements with the



concerned generating companies. Further, NVVN will bundle the solar power with cheaper unallocated quota of NTPC coal based stations and sell this power to Distribution Utilities at a bundled price based on (i) the CERC determined price for the NTPC coal based stations and (ii) CERC's reference price for procurement from solar projects. The eligibility criteria for migration specify that the Project Developer should have signed a PPA/EPA with any Distribution Utility for sale of power.

10. During the hearing, MEDA submitted that the Guidelines for migration of existing under-development grid connected solar projects from existing arrangements to the JNNSM specified that migration of the projects shall be carried out:

“On or before November 19, 2009, the Project Developer should have signed a Power Purchase Agreement for sale of entire power to any Distribution Utility with approved tariff or the Project Developer should have filed a Petition alongwith Power Purchase Agreement for determination of tariff with the concerned Electricity Regulatory Commission (ERC).”

The Project Developer satisfying the condition specified at 3.1 above shall submit the details of its Project for migration to NVVN not later than February 26, 2010.”

Further, for migration of a solar project, the developer must submit a copy of duly executed EPA and consent of Distribution Utility to purchase the entire solar power along with unallocated power through NVVN in accordance with JNNSM.

11. During the hearing, the Commission enquired whether MEDA has received any statement from MNRE regarding approval of MSPGCL project under GBI scheme. In response, MEDA submitted that it has received a statement from MNRE mentioning that MNRE has rejected all the proposals of solar generators except MSPGCL. Further, MSEDCL added that GoM vide its letter dated January 4, 2010, submitted the information to MNRE pertaining to all the seven solar projects considered for migration from existing MNRE scheme to the JNNSM and agreed in-principle that the Distribution Utilities in the State should agree to enter into PPA with NVVN under JNNSM as per CERC determined tariff in respect of projects permitted to migrate under the JNNSM.



12. Having heard all concerned and based on the above submissions, the Commission is of the view that the present proposal is to bundle solar power along with power out of the cheaper unallocated quota of Central stations and to sell this bundled power to state distribution utilities at the CERC regulated price. Thus, as the price would be decided by the CERC, the only aspect that remains to be decided by this Commission in accordance with the requirements of Section 86(1)(b) of the Electricity Act, 2003 is as to whether MSEDCL should procure the said bundled solar power from NVVN . Section 86(1)(b) read as follows -

*86. (1) The State Commission shall discharge the following functions, namely: -
....
(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;”*

Also, Rule 8 of the Electricity Rules, 2005 provides as under:-

“8. Tariffs of generating companies under section 79.- The tariff determined by the Central Commission for generating companies under clause (a) or (b) of sub-section (1) of section 79 of the Act shall not be subject to re-determination by the State Commission in exercise of functions under clauses (a) or (b) of sub-section (1) of section 86 of the Act and subject to the above the State Commission may determine whether a Distribution Licensee in the State should enter into Power Purchase Agreement or procurement process with such generating companies based on the tariff determined by the Central Commission.”

13. The Commission appreciates the proposed scheme for migration under National Solar Mission, which would enable the State Utilities to benefit from the harnessing of solar power within the State and at the same time meet their renewable purchase obligations, and thus does not have any objection for all the eligible solar projects from the State being part of the Migration Scheme under JNNSM. However, the issues of approval



of power purchase cost and quantum from such eligible solar power projects under JNNSM can be considered in accordance with the requirements of Section 86(1)(b) subject to regulatory scrutiny; at the time of approval of aggregate revenue requirement upon due regulatory process. The Commission hereby directs MSEDCL to submit details of power purchase quantum and cost thereof corresponding to such eligible solar power projects under JNNSM, separately, alongwith copies of power purchase agreement(s) thereof alongwith its Petition for approval of aggregate revenue requirement.

Accordingly, the Petition filed by MSEDCL in Case No. 106 of 2009 stands disposed of.

(V. L. Sonavane)
Member

(S. B. Kulkarni)
Member

(V. P. Raja)
Chairman



(K. N. Khawarey)
Secretary, MERC