# CENTRAL ELECTRICITY REGULATORY COMMISSION New Delhi

Coram: 1. Shri Gireesh B. Pradhan, Chairperson

2. Shri A. K. Singhal, Member 3. Shri. A.S.Bakshi, Member

Date: 15.5.2015

#### In the matter of:

Amendments to Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 and Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) Regulations, 2010

# **Statement of Reasons**

Government of India has planned to set up Solar Parks for promotion of Solar Power. Ministry of New and Renewable Energy(MNRE) vide letter dated 12th December,2014, conveyed the intent of Government of India to provide a framework for setting up at least 25 Solar Parks in different parts of the country with a target of over 20,000 MW installed capacity of solar power in a span of 5 years from 2014-15 to 2018-19. As regards the transmission and evacuation facility, the letter of MNRE envisioned as under:

- "8. Transmission and evacuation of power from solar park: Interconnection of each plot with pooling stations through 66 kV /other suitable voltage underground or overhead cable will be the responsibility of the solar project developer. The designated nodal agency will set up the pooling stations (with 400/220, 220/66 kV or as may be suitable switchyard and respective transformers) inside the solar park and will also draw transmission line to transmit power to 220 kV/400 KV sub-station. The responsibility of setting up a sub-station nearby the solar park to take power from one or more pooling stations will lie with the Central Transmission Utility (CTU) or the State Transmission Utility (STU), after following necessary technical and commercial procedures as stipulated in the various regulations notified by the Central/State Commission."
- 2. Implementation of the transmission and evacuation facility under the above framework requires a Solar Park Developer to apply for connectivity and long term access (LTA) to the CTU. Since the existing regulations of the Commission envisage a generating company or a bulk consumer as the eligible entity for the purpose of both

connectivity and LTA, the Commission with due regard to the need for providing regulatory backing and support for promotion of solar energy in the overall interest of the nation's energy security and in order to facilitate the Government of India in its endeavour to implement the ambitious goals for solar power generation, proposed to make the "Solar Power Park Developer" an eligible entity for grant of connectivity and LTA. Accordingly, amendments to the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 (hereinafter "Connectivity Regulations") and Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) Regulations, 2010 (hereinafter "Regulatory Approval Regulations") were proposed vide Public Notice dated 16.4.2015 and draft regulations were posted on the website of the Commission inviting comments/suggestions/objections from the stakeholders and general public. In response to the public notice, comments have been received from NTPC Limited, Powergrid Corporation of India Ltd., Central Electricity Authority, Ministry of New and Renewable sources of Energy, M/S Saurya Urja Company of Rajasthan Limited, Association of Power Producers (APP), & Indian Wind Energy Association (InWEA) and Shri Vijay Menghani, Director, Central Electricity Authority in his individual capacity. Public hearing was held on 5th May, 2015 in which NTPC Ltd. and Power Grid Corporation of India made oral presentations. In accordance with the provisions of section 178(3) of the Electricity Act, 2003 (the Act) read with Electricity (Procedure for Previous Publication) Rules, 2005, the Commission has considered the objections and suggestions received on the draft regulations which have been dealt with in the succeeding paragraphs.

# 3. Short title of the draft Connectivity Amendment Regulations:

It was mentioned that "these regulations may be called the Central Electricity Regulatory Commission (Grant of Connectivity, Long Term Access and Medium Term Open Access in inter-State Transmission and related matters)(Fourth Amendment) Regulations, 2015. However, since the fourth amendment was issued on 12.8.2014, the present amendment has been renamed as "Fifth Amendment".

## 4. Amendment to Regulation 2 of the Connectivity Regulations:

#### **4.1** Proposed **draft**:

- 4.1.1 In the draft amendment, it was proposed to add the following provisions under sub-clause (b) (i)(e) of clause (1) of Regulation 2 of the Principal Regulations in order to facilitate a Solar Power Developer to apply for connectivity to ISTS:
  - "(f) Any company designated by the Central Government as Solar Power Park Developer;"
- 4.1.2 Further, it was proposed to add the following sub-clause after sub-clause (ii) of clause (1) of Regulation 2 of the Principal Regulations to facilitate the Solar Power Park Developer to apply for long term access (LTA):
  - "(iii) Any company designated by the Central Government as Solar Power Park Developer, in respect of long term access;".
- 4.1.3 As per the proposed amendment, any company designated by the Central Government as Solar Power Park Developer shall be eligible to apply for connectivity and long term access to ISTS under the Connectivity Regulations. In the Explanatory Memorandum, it has been clarified that the Solar Power Park Developer shall be a company registered under the Companies Act, 2013 and shall be designated by the Central Government to undertake all responsibilities on behalf of Solar Power Generators with regard to connectivity and long term access to ISTS.

#### 4.2 Comments received:

4.2.1 PGCIL has submitted that the proposed clause aims at empowering the Central Government to designate any company as a Solar Power Park Developer. However, it does not cover the cases where the Central Government empowers the respective States or respective States on their own to meet the increasing demand in their own or neighbouring States, locate appropriate developer and designate power to them for development of solar Parks. PGCIL has suggested to replace 'Central Government' with 'Appropriate Government' and consequently, to insert a clause defining the term 'Appropriate Government'. PGCIL has further suggested that term 'Solar Power

Developer' may be defined and the parameters for a company for becoming eligible for development of a Solar Park may be listed to avoid complications in future.

4.2.2 CEA has suggested that restricting the Solar Power Park Developer (SPPD) only to a company designated by the Central Government as mentioned in the draft regulations would be against the essence of encouraging competition in the Electricity Act, 2003 (the Act). CEA has opined that if SPPD is a legal entity to carry out above functions under the Act, the eligibility to seek connectivity and LTA may also be given to other companies who may be interested in developing a solar or a wind park. The duties, functions, responsibilities of a generator, a transmission licensee, distribution licensee, trading licensee and system operator are defined under the Act, whereas SPPD has not been defined in the Act.

4.2.3 Association of Power Producers (APP) has submitted that further to the letter of MNRE dated 12.12.2014, the States have also notified their solar policy/solar park policy wherein they would facilitate solar park in their States. To achieve the target of 100 GW of solar power project installation by 2022, both Central and State Governments need to work together to promote more such solar parks. APP has suggested that Solar Park Developers designated by the State Governments should suggested to replace the words "designated by Central Government' by the words "designated by the Central Government / State Government as Solar Power Park Developer".

- 4.2.4 InWEA has suggested to recognize both Solar & Wind Project Developers as eligible entity for applying for connectivity. Such amendment would be helpful in streamlining the implementation of solar/wind power projects and development of such wind/solar projects at a much faster rate. InWEA has also suggested to recognize both Solar & Wind Project Developers as eligible entity for applying for long term access.
- 4.2.5 NTPC has submitted that the proposed amendments proceed on the premise that (i) in the agreements of power supply between the Solar Power Generators (SPG) and the buyers/beneficiaries, SPG has assumed the responsibility of delivery of power at the

ISTS network; and (ii) the power from the SPGs will be sold to other States beside the home State. NTPC has submitted that this is always not the case. In the agreement signed between NTPC and Discoms of Andhra Pradesh on 24.4.2015 for NTPC Solar Generating Station at Anantpur Solar Power Park in Andhra Pradesh, NTPC would deliver power at 33 kV inter-connection point and power evacuation of the same is to be arranged by the beneficiaries i.e. Discoms. NTPC has submitted that the proposed amendment ought to incorporate all situations/eventualities.

NTPC has further submitted that Solar Power Park Developer (SPPD) has been envisaged to facilitate centralised coordination for development of land, road and other infrastructure work like development of pooling station and inter-connection of SPGs with pooling stations as per the MNRE letter dated 12.12.2014. Therefore, SPPD need to be allowed or authorised by Central Government to apply for connectivity on behalf of those generators who wish to sell power outside home State or on behalf of those beneficiaries who wish to draw power through ISTS network. Once the infrastructure has been developed by SPPD, it needs to enter into separate agreement with those entities who wish to use ISTS network either for selling the power or drawal of power for realising SPPD's cost towards development of pooling stations. Otherwise these charges are to be borne by the SPPD through some grant from Central/State Government.

4.2.6 Sh. Vijay Menghani has suggested that a company of State Government or a private company may also be considered as eligible SPPD and wind developers may also be included. He has also suggested that proper risk management is to be ensured through prudence check while assessment of the capability of company to take responsibility of payment of transmission charges, relinquishment charges and payment of deviation charges at operation stage.

#### 4.3 Decision of the Commission

4.3.1 The Commission has considered the comments received on the proposed amendment. The scheme for development of Solar Parks and Ultra Mega Solar Power Projects is coordinated and promoted by the Ministry of New and Renewable Energy,

Government of India. The proposed amendment sought to facilitate evacuation of power from the solar power generators to be located in the solar park through the inter-State transmission system (ISTS) and accordingly sought to enable the SPPD to apply for connectivity and long term access to ISTS on behalf of the solar power generators. In our view, the SPPDs of the solar parks promoted by MNRE should be a company authorised by the Central Government. Accordingly, the term 'designated' has been substituted by the word 'authorised'.

4.3.2 With regard to the comments of CEA that the duties, responsibilities and functions of SPPD have not been defined in the Act unlike the other entities like generator, transmission licensee, distribution licensee, it is clarified that SPPD will be a legal entity who shall act as an agent of the generating companies which will set up solar power plants in the park and generating company is a defined term in the Act. As regards the comments of CEA, APP, PGCIL and Shri Menghani that the SPPDs of solar parks developed by the State Governments or any other company who may be interested to develop solar park should be made eligible for applying for connectivity and long term access to ISTS, we are of the view that SPPD promoted by the concerned State Government or any other company should be recognised by the Central Government who shall carry out the due diligence about the capability and commitments of such companies to bear the transmission charges and losses on account of the connectivity and long term access of the solar power generators to the ISTS in their respective solar parks. As regards the suggestions of Shri Vijay Menghani regarding prudence check for the company being authorised as SPPD, it is clarified that responsibility to lay down the guidelines with regard to SPPD rests with MNRE. As regards the submission of NTPC that SPPD need to be allowed or authorised by Central Government to apply for connectivity on behalf of those generators who wish to sell power outside home State or on behalf of those beneficiaries who wish to draw power through ISTS network, it is clarified that under the present scheme of solar park mooted by MNRE, SPPD shall be responsible for developing on behalf of solar power generators the transmission systems within the park and therefore, power from the solar power generators(SPGs) shall be evacuated through ISTS irrespective of whether a particular generator has an

arrangement under the PPA with the distribution company for evacuation of power from its bus bar. In this connection, it is necessary to refer to the clarification given by MNRE in its letter dated 13.5.2015 which is extracted as under:

"Solar Power Park Developer (SPPD) will develop the transmission system including the pooling station within the premises of the park on behalf of solar power generation developers. Such SPPD shall be considered as an agent of generating company and discharge all responsibility with regard to the dedicated transmission line under the Electricity Act. Such SPPD shall be authorised by the Central Government to develop, operate and maintain the solar park.

- 2. Initially the SPPD shall develop the transmission system inside the solar park. After identification of solar power generation developers, a Committee will be formed with their representatives. The Committee will take the responsibility of day to day management of the park as well as the transmission system. Solar Power Park Developer shall arrange Connectivity and Long term Access on behalf of Solar Power Generators and discharge all responsibilities for the Solar Power Generators."
- 4.3.3 As regards the suggestion of InWEA to include Wind Power Developer in the amendment, we are of the view that the amendment was proposed to facilitate the policy of the Central Government for promotion of the solar generation. Moreover, it will not be appropriate to include the "Wind Power Generator" without following the due procedure as it was not a part of proposed amendment.
- 4.3.4 In view of the above, proposed Regulations 2(1)(b)(i)(f) and 2(1)(iii) shall be modified as under in the final regulations:
  - "(f) Any company **authorized** by the Central Government as Solar Power Park Developer;"
  - "(iii) Any company **authorized** by the Central Government as Solar Power Park Developer, in respect of long term access;".

# 5. Amendment to Regulation 8 of the Principal Regulations:-

#### 5.1 Proposed draft:

5.1.1 The following proviso was proposed to be added after third proviso to clause (1) of Regulation 8 of the Principal Regulations:

"Provided also that the application by the applicant defined under Regulation 2(1) (b)(i) (f) shall be considered by CTU only if the Solar Power Park Developer is authorised by the Central Government to undertake infrastructural activities including arrangement for

connectivity on behalf of the solar power generators and all operational and commercial responsibilities for the renewable energy generating station(s) in following the provisions of the Indian Electricity Grid Code and all other regulations of the Commission, such as grid security, scheduling and dispatch, collection and payment/adjustment of Transmission charges and losses, UI charges, congestion and other charges etc., and submit the documents to that effect to the CTU, alongwith the application for connectivity, with copy to the respective RLDC in whose control area it is located."

- **5.2 Comments received:** Comments have been received from PGCIL, NTPC, Shri Vijay Menghani, CEA, APP & Indian Wind Energy Association (InWEA).
- 5.2.1 PGCIL has suggested that multiple injections be permitted along with multiple drawls in LTA applications. Current Regulations allow multiple injections only in case of single drawal.
- 5.2.2. NTPC has submitted that as per proposed amendment, the SPPD would undertake scheduling activities with RLDC on behalf of generators. The generation schedule received from RLDC would be further communicated by SPPDs to Solar Power Generators (SPGs). The scheduling and dispatch function are the main responsibilities of RLDCs/SLDCs as per the Act and these statutory functions in full or part need not be transferred to any third agency such as Solar-park developers. The scheduling, dispatch functions including issuance of UI etc. need to be performed by RLDC/SLDC only based on control area jurisdiction. NTPC has also submitted that as per the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012, energy metering for the purpose of billing is to be done at inter-connection point which has been defined as line isolator on outgoing feeder on HV side of Solar Power Generator (1st) pooling Sub-station.
- 5.2.3 InWEA submitted that the amendment should recognise both solar and wind park developer which would be responsible to undertake all operational and commercial responsibilities of solar/wind power developer. InWEA has suggested that the wind or solar power park developer may not be involved in operation of the project after completion of the project and the responsibilities to undertake infrastructural activities including arrangement for connectivity on behalf of the solar power generators and all operational and commercial responsibilities for the renewable energy generating

station(s) in following the provisions of the Indian Electricity Grid Code and all other regulations of the Commission, such as grid security, scheduling and dispatch, collection and payment/adjustment of Transmission charges and losses, UI charges, congestion and other charges etc., may be transferred to the lead generator or to the generators upon completion of the project.

- 5.2.4 Saurya Urja Company of Rajasthan Limited has suggested that the application for connectivity/LTA should be done by the Park Developer on behalf of generators and the Solar generators who set up the solar project are to be responsible for operational activities .The performance (Operational and Commercial) of the solar project is beyond the control of the SPPD and may be excluded from the scope of Park developer.
- 5.2.5 MNRE has commented that the role of SPPD is limited to creating facility for the solar power developer and for evacuation of power from the solar park. The SPPD will not become the generator as solar power projects coming up in the park will have different owners and will be the generators. Accordingly, MNRE has suggested modification to the effect that SPPD shall "coordinate all operational and commercial responsibilities for the renewable energy generating stations".
- 5.2.6 CEA has submitted that as per the draft amendment, SPPD would undertake infrastructural activities including arrangement for connectivity on behalf of the solar power generators, all operational and commercial responsibilities for the renewable generating stations such as grid security, scheduling and despatch, collection and payment/ adjustment of transmission charges and losses, UI charges, congestion and other charges. Similarly, MNRE letter dated 12.12.2014 provides that SPPD shall discharge such functions: "develop transmission network within the park to collect power from each project and transmitting it to the transmission sub-station at the park boundary, provide transmission facility consisting pooling station (with 400/220, 220/66 kV switchyard and respective transformers) to allow connection of individual projects with pooling stations through the network of underground cables or overhead lines, provide telecommunication facilities and provide construction power". CEA has

submitted that these functions are either to be performed by a system operator or a transmission licensee or trading licensee and as such SPPD may be required to obtain suitable licence for performing these functions.

5.2.7 APP has suggested to insert the word "State Government" in the proposed amendment to the proviso to cause (1) of Regulation 8 of the Connectivity Regulations.

#### 5.3 Decision of the Commission

5.3.1 With regard to PGCIL suggestion to allow multiple injections with multiple drawals, it is clarified that the scheme for development of solar power park is such that there may be multiple generation developers within the park who shall be injecting at various points within the park and shall ultimately inject at interface with ISTS. Hence primafacie it will be treated as single injection at the interface point with ISTS. The issues related to scheduling in this regard shall be dealt with by making necessary provisions in the IEGC through amendment.

5.3.2 The other points raised by the stakeholders involve such issues as pooling, depooling, segregated metering, scheduling, accounting, treatment for drawl of power in case of outages (i.e. if anyone generator is out) or during off hours night hours), operational and commercial responsibilities for the solar energy generating station(s) within the Solar park. These issues require detailed deliberations in consultation with the stakeholders and will require amendment to the relevant provisions of the IEGC. This will also require operational instructions in the form of detailed procedure. We direct NLDC to prepare detailed procedure with regard to scheduling, metering, energy accounting, operational and commercial responsibilities related to Deviation Settlement Mechanism (DSM), congestion charges etc., and submit the same. for approval of Commission within one month. We direct the staff to process the draft amendment to IEGC and the detailed procedure to be submitted by NLDC within a period of 15 days thereafter. Since all the details shall be dealt in the procedure to be prepared by NLDC, the proposed amendment of the proviso clause (1) of Regulation 8 of the Principal Regulations has been modified.

- 5.3.3 Accordingly, the proposed proviso after third proviso has been modified as under:
  - "Provided also that the application by the applicant defined under Regulation 2(1) (b)(i) (f) shall be considered by CTU only if the Solar Power Park Developer is authorized by the Central Government to undertake infrastructural activities including arrangement for connectivity on behalf of the solar power generators."
- 6. Other issues: On the basis of the responses received, the following issues have arisen for consideration of the Commission:
  - (a) Whether internal transmission systems within the park should be dedicated transmission line or require a licence?
  - (b) Recovery of cost of transmission assets, if stranded on account of delay in commissioning of solar power plant.
  - (c) Additional charges for solar power generators.
- 7. Dedicated transmission line or licensed transmission line

#### 7.1 Comments received:

- 7.1.1 NTPC has suggested that the Solar Power Park Developer would need to take license in case pooling substation is to be owned by it; however licensing would not be an issue in case STU owns the same. NTPC has also suggested for setting up of the Standard of Performance in line with performance parameters set for a Transmission licensee as the pooling sub-station would be owned by SPPD, the solar generators need to be compensated in the form of deemed generation for non availability of their system i.e. pooling substation and associated transmission lines at least to the tune of CUF level.
- 7.1.2 Shri Vijay Menghani has suggested that if single point connection of solar park with ISTS is there then this internal transmission can be considered as dedicated. If Multiple infeed and multiple connections from pooling point to ISTS and state network are there, it will result in loss of dedicated nature.

7.1.3 CEA has suggested that the functions of solar power park developer as per MNRE reference mentioned in the amendment is to be performed by a system operator, a transmission licensee or a trading licensee. As such a solar power park developer may be required to obtain suitable license(s) for performing above functions.

#### 7.2 Commission's decision

7.2.1 We have considered the submissions of the stakeholders. Dedicated transmission line has been defined in section 2(16) of the Act as under:

"(16) "dedicated transmission lines" means any electric supply-line for point to point transmission which are required for the purpose of connecting electric lines or electric plants of a captive generating plant referred to in Section 9 or generating station referred to in Section 10 to any transmission lines or sub-stations or generating stations, or the load centre, as the case may be."

As per the above definition, the dedicated transmission lines provide point to point connection to a generating station with another generating station or transmission line or sub-station or load centre. There is no prohibition for more than one generator to develop a common transmission line to deliver power at the sub-station of the transmission licensee. This has also been recognised by the Appellate Tribunal of Electricity in Appeal No. 16 of 2013 (Ms/ Meenakshi Energy Private Limited Vs. CERC & Ors) in which it has been observed that "merely because a transmission line connects two generating station it does not lose the character of the dedicated transmission line. Further, the Appellate Tribunal in its judgment dated 2.1.2013 in Appeal No. 81 of 2011 as observed as under:-

"24.19. It is perfectly legal for two generating companies to plan in coordination with CEA and Power Grid and construct and operate & maintain their dedicated transmission systems together for optimal utilization of the transmission corridor with a view to minimize cost of point to point transmission of electricity and minimize the requirement of transmission corridor as long as the dedicated transmission system is used exclusively for evacuation and point to point transmission of power of their generating stations."

In case of the solar power generators in the solar park, their power will be evacuated through the transmission system developed by the SPPD within the solar park at the interconnection point in CTU. Even though there will be multiple solar power generators within the park, the transmission line being exclusively utilized for evacuation

of their power at the pooling station of CTU shall be considered as a dedicated transmission line.

- 7.2.2 MNRE vide its letter dated 13.5.2015 has clarified the scheme of the evacuation system within the solar park as under:-
  - "2. Initially the SPPD shall develop the transmission system inside the solar park. After identification of solar power generation developers, a Committee will be formed with their representatives. The Committee will take the responsibility of day to day management of the park as well as the transmission system. Solar Power Park Developer shall arrange Connectivity and Long term Access on behalf of Solar Power Generators and discharge all responsibilities for the Solar Power Generators."

In view of the above clarification of MNRE with regard to the scheme of the transmission system within the solar park and its future maintenance and operation by a Committee to be with the representative of the Solar Power Generators, we are of the view that the transmission system within the solar park shall be considered as a dedicated transmission system and there is no requirement for SPPD to seek transmission license for that purpose. As regards the NTPC suggestion for setting of the standard of performance for the system developed by SPPD, it is clarified that being a dedicated transmission line, the generator shall be responsible for maintaining the standard of performance of the said line for which necessary provisions shall be made in the agreement between the solar power generators within the solar park and SPPD/Committee to be appointed by the generators.

# 8. Recovery of transmission charges on account of delay in commissioning of solar generation

#### 8.1 Comments received

8.1.1 PGCIL has submitted that SPPD should submit Construction Bank Guarantee while applying for connectivity which requires system strengthening for power evacuation as per the Regulations. PGCIL has also mentioned that directions are necessary for payment of transmission charges in case of delay in commissioning of generating unit, where the transmission system for evacuation has already been commissioned.

8.1.2 NTPC has suggested that in case of mismatch in commissioning of generating station vis-a-vis transmission system, any provision regarding bearing of transmission charges of transmission licensee /Annual fixed cost of the generator should be equitable to both the parties. It has also submitted that as commissioning of Solar Generation in the Solar Park would be in a phased manner. Accordingly, the commissioning of transmission system should also be in a phased manner matching with commissioning of generating capacity to reduce the impact of transmission charges on beneficiaries which would be levied through PoC mechanism. NTPC has also raised the issue of equitable payments by a transmission licensee and generator in case of delay by either of the two and that similarly treatment of delay of intervening system by SPPD should be addressed by the Commission. NTPC has also stated that development of transmission should be in a phased manner matching with commissioning of generating capacity.

#### 8.2 Commission's decision:

8.2.1 With regard to the suggestions of PGCIL, it is clarified that SPPD who shall apply for Connectivity/Long term Access shall be liable to deposit Application Bank Guarantee/Construction Bank Guarantee as required under Connectivity Regulation. Further, SPPD shall also be liable for payment of transmission charges for delay in commissioning of generator and relinquishment charges towards transmission access under Connectivity Regulations and Sharing Regulations. Regulation 7(1)(u) of the Sharing Regulations provides that "No transmission charges for the use of ISTS network shall be charged to solar based generation" is applicable only when the power is evacuated through the transmission system to the beneficiaries after the commercial operation of the generating station. Therefore, transmission charges for delay in commissioning of solar power generators shall be payable by such solar generators/SPPD on the same line as the liability for payment by the thermal and hydro generating station in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

8.2.2 With regard to delay of internal system, it is clarified that SPPD shall be executing internal system on behalf of solar power generators. The treatment of delay or other modalities should be covered in Agreement between solar power generators and SPPD. In regard to NTPC's comments on development of transmission matching with generation, it is clarified that CTU shall carry out coordination with the SPPD/solar power generators in accordance with Section 38 of the Act.

### 9. Additional charges for solar power generator.

- 9.1 NTPC has suggested that any other cost beyond inter-connection point such as O&M cost of SPPDs pooling sub-station, servicing of expenditure towards other infrastructure work (Connectivity/LTA expenses, Scheduling, dispatch expenses etc.) incurred by Solar Power Park Developer (SPPD), would need to be passed through in tariff as has been allowed by Hon'ble Commission for the RLDC charges for Conventional (Thermal, Hydro) Generation. Otherwise generic tariff would need to be re-determined after incorporating the expenses to be paid by Solar Generators to Solar park developer. NTPC has further submitted that alternatively, the SPPD would need to enter into separate agreements with beneficiaries for recovery of his charges. NTPC has further suggested that since the charges of SPPD would be mainly on account of intervening transmission system developed by it, the charges of SPPD may be recovered through PoC Mechanism by escalating the transmission charges proportionally and paid back to SPPD by CTU. NTPC has also submitted that in case of SPPD for Anantpur, the SPPD APSPCL is charging Rs. 20 lac/MW for 250 MW (Phase-I) towards land acquisition, internal transmission system, other facilities at the solar park. Such cost should be passed through to beneficiaries.
- 9.2 We have considered suggestions of NTPC. In the context of the solar power park at NP Kunta, MNRE has clarified as under:-

"The issues regarding tariff agreement between Andhra Pradesh Government and NTPC came up during the discussions. It is clarified that NTPC is setting up a total capacity of 1000 MW as owner-cum-developer of solar projects in Andhra Pradesh. They have arrived at tariff on cost plus basis by inviting open tenders for setting up of first 250 MW capacity through EPC contractors. They have added other costs like cost of land, internal transmission etc. to be charged by the solar park developer. Thereafter, they

have used the CERC formula to arrive at tariff which has been then scrutinized by the concerned authorities in Andhra Pradesh. Therefore, this tariff includes all costs of NTPC as agreed by the Andhra Pradesh Government."

As per the above clarification, the cost for proposed 250 MW NTPC solar plant at NP Kunta includes cost towards internal transmission system. This has also been confirmed by NTPC in its submission dated 8.5.2015 wherein it has been categorically stated that "these charges have been factored in the tariff negotiated by NTPC with AP Discoms up to inter-connection point". In respect of all solar parks, it is clarified that since internal transmission system is dedicated transmission system for generators, all cost related to dedicated transmission system and as charged by SPPD need to be accounted for by generators themselves in their Agreements.

# 10. Amendment to the Regulatory Approval Regulations

10.1 The Commission also proposed the following amendments to the Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of inter-State Transmission Scheme to Central Transmission Utility) Regulations, 2010 (Regulatory Approval Regulation):

"A new sub-clause (iii) was proposed to be inserted after sub-clause (ii) of clause 1 of Regulation 3 of the Principal Regulations as under:

- "(iii) ISTS Scheme proposed by CTU, for which the Central Government designated Solar Power Park Developer has sought long term access, and for which consultation with CEA and beneficiaries wherever identified has been held for setting up the ISTS scheme and the Solar Power Park Developer undertakes to bear all liabilities on behalf of the Solar Project Developers to be set up in the Solar Park."
- 10.2 Comments have been received from PGCIL and NTPC. PGCIL has submitted that the term Central Government may be replaced with the term Appropriate Government. NTPC has suggested that since PPA is signed for delivery of power at exbus (i.e. inter-connection point which is line isolator on outgoing feeder on HV side of the pooling sub-station of Solar Power Plant Switchgear Terminal) and it is the responsibility of beneficiaries to arrange the requirement for evacuation of power from Generator ex bus onward the Solar Power Park Developer may undertake to bear all

liabilities on behalf of the beneficiaries of the Solar Projects, and therefore, the clause may be amended as under:

- "(iii) ISTS Scheme proposed by CTU, for which the Central Government designated Solar Power Park Developer has sought long term access, and for which consultation with CEA and beneficiaries wherever identified has been held for setting up the ISTS scheme and the Solar Power Park Developer undertakes to bear all liabilities on behalf of the beneficiaries of the Solar Projects to be set up in the Solar Park."
- 10.3 We have considered comments of NTPC. As already noted, SPPD is acting on behalf of all the generators who shall be coming up in the solar park. Since, the transmission system shall be developed for evacuation of power from all the generating stations in the solar park, CTU needs to be authorized to seek regulatory approval on the basis of the LTA application by SPPD irrespective of the fact that some generators within the parks have entered into the PPA with the beneficiaries. In view of this there is no requirement to modify the Regulation as suggested by NTPC. However, the word "designated" has been substituted by the word "authorized", as per our decision in connection with the amendment to Connectivity Regulations. Accordingly, sub-clause (iii) of Clause 1 of Regulation 3 of Regulatory Approval Regulation shall be added as under:-
  - "(iii) ISTS Scheme proposed by CTU, for which the Central Government authorized Solar Power Park Developer has sought long term access, and for which consultation with CEA and beneficiaries wherever identified has been held for setting up the ISTS scheme and the Solar Power Park Developer undertakes to bear all liabilities on behalf of the solar power generators to be set up in the Solar Park."

sd/-(A. S. Bakshi) Member sd/-(A. K. Singhal) Member

sd/-(Gireesh B Pradhan) Chairperson