CENTRAL ELECTRICITY REGULATORY COMMISSION New Delhi

Explanatory Memorandum to:

<u>Draft Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters)</u> (Fourth Amendment) Regulations, 2015

and

<u>Draft Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) (First Amendment) Regulations, 2015</u>

1. Background

- 1.1 Ministry of New and Renewable Energy (MNRE), Government of India is planning to set up Solar Park for promotion of Solar Power. The solar park is a concentrated zone of development of solar power generation projects, by providing to developers an area that is well characterized, properly infra structured and where the risk of the projects can be minimized for the developer and would facilitate the permitting process.
- 1.2 A solar park is expected to provide an impetus to solar energy generation by acting as a demonstration facility to encourage project developers and investors, prompting additional projects of similar nature, triggering economies of scale for cost reductions, technical improvements and achieving large scale reductions in GHG emissions. Some Ultra Mega projects may be set up in these Parks. 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 each with a capacity exceeding 500 MW with a target of over 20,000 MW of solar power installed capacity in a span of 5 years from 2014-15 to 2018-19. Relevant extracts (from MNRE's communication in the context), pertaining to evacuation of power are reproduced 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 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.

If the State Government is willing to buy over 50% of the power generated in the solar park, preference will be given to STU, which will ensure setting up of sub-station and development of necessary infrastructure for transmission of power from substation to load centres.

The designated implementing agency will intimate CTU and CEA at least 6 months before so that the planning and execution can be carried out in time.

If the state is not willing to buy at least 50% of the power generated in the solar park, then CTU may be entrusted with the responsibility of setting up 400 KV or bigger sub-station right next to the solar park and its connectivity with the CTU. For setting up of this transmission & evacuation infrastructure, Power Grid may prepare a separate project to be funded from NCEF / external funds / Green Corridor project, if the cost is very high. The system would be planned in such a manner so that there is no wheeling charge applicable on solar power in accordance with the CERC Regulation or reduce the wheeling charges to affordable level...."

- 1.3 Implementation of the above framework would require a Solar Park Developer to apply for connectivity and long term access (LTA) to the CTU. The existing regulations of the Commission, however, do not envisage such a developer as an eligible entity for the purpose of connectivity and LTA. With due regard to the need for providing full regulatory backing and support for promotion of solar energy for overall interest of the nation's energy security and in order to facilitate the Government of India in its endeavor to implement the ambitious goals for solar power generation, the Commission has proposed to make the "Solar Power Park Developer" eligible for grant of connectivity and LTA. Accordingly, amendments to the Connectivity Regulations have been proposed as per the draft regulations.
- 1.4 The Solar Power Park Developer shall be a company registered under the Companies Act, 2013 and shall be designated by the Central Government to act and undertake all responsibilities on behalf of the solar power generators, with regard to Connectivity and Long Term Access to inter-State Transmission System.
- 1.5 The Commission has also proposed to issue amendment to the Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) Regulations, 2010, to make the transmission schemes executed by CTU for development of Solar Power Park eligible for grant of regulatory approval as per the draft regulations.