

TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION LTD

From

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To

The Secretary,
Central Electricity Regulatory Commission,
4th Floor, Chanderlok Building,
36, Janpath,
New Delhi- 110001.

Lr. No. CFC/RC/SE/CERC/EE/ AEE1/ F. CERC /D. 317 /18 dt: 17.09.2018

Sir,

Sub: CERC – Draft Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Seventh Amendment) Regulations, 2018 –comments and suggestions of TANGEDCO – submitted - Regarding.

Ref:(1) CERC's public notice No. L-1/(3)/2009-CERC Dated: 9th August, 2018.
(2) CERC's public notice No. L-1/(3)/2009-CERC Dated: 5th Sep., 2018.

This has reference to the public notice of Hon'ble CERC dated 9th August, 2018, inviting comments/ suggestions/ objections on the draft CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Seventh Amendment), 2018. Subsequently, time extension has been granted to submit the comments upto 14th September, 2018.

In this connection, the comments/ objections and suggestions of TANGEDCO are submitted herewith as Annexure. It is requested to consider the above while finalizing the draft Regulations. Also, it is requested to give us an opportunity to present our views before the Hon'ble Commission.

Thanking you,

Yours faithfully,

v. mageswari

Encl: Annexure

Chief Financial Controller / Regulatory Cell (2/2)

Comments / objections / suggestions of TANGEDCO on the draft CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Seventh Amendment) Regulations, 2018

Regulation / Clause	Existing Provisions	Proposed in the draft amendment	Comments / Objections/ views of TANGEDCO
<p>Existing- 2(1)(b)(i)(a)</p> <p>Proposed - 2(1)(b)(i)(a) a)</p>	<p>(b) "Applicant" means (i) (a) a Generating station of installed capacity 250 MW and above, including a captive generating plant of exportable capacity of 250 MW and above or a bulk consumer in respect of grant of connectivity</p>	<p>(a) A generating station <i>other than Renewable Energy Generating station</i>, with installed capacity of 250 MW and above, including a captive generating plant of exportable capacity of 250 MW and above, or; (aa) A Renewable Energy generating station with installed capacity of 50 MW and above, or;</p>	<ul style="list-style-type: none"> • <i>The RE generating station collectively should have an installed capacity of 250 MW and above to get connectivity with CTU. If ISTS connectivity is granted to individual or group of generators of 50 MW capacity as proposed in the draft amendment, then the CTU will plan the transmission system even with 50 MW capacity which will be highly sub optimal. The recent bitter experiences reveal that non firming up of generation projects have lead to creation of redundant assets and unnecessary legal litigations and illegitimate tariff burden on Discoms and end consumers.</i> • <i>In order to avoid creation of redundant assets, it is suggested that ISTS connectivity shall be provided to RE generator /group of generators with a collective</i>

			<p><i>capacity of 250 MW and above. Anything less than 250 MW may be tied up with intra state network under coordinated planning to be carried out by CTU/CEA/STU and discoms</i></p>
2(1)(b)(i)(c)	<p>One of the Hydro Generating stations or generating stations using renewable sources of energy, individually having less than 50 MW installed capacity, but collectively having an aggregate installed capacity of 50 MW and above, and acting on behalf of all these generating stations, and seeking connection from CTU at a single connection point at the pooling sub-station under CTU, termed as the lead generator, or;</p>	<p>One of the Hydro Generating stations or standalone storage Project individually having less than 50 MW installed capacity, but collectively having an aggregate installed capacity of 50 MW and above, and acting on behalf of all these generating stations, and seeking connection from CTU at a single connection point at the pooling sub-station under CTU, termed as the lead generator, or</p>	<ul style="list-style-type: none"> • <i>Similar to (aa) the capacity shall be 250 MW otherwise intra state connectivity may be recommended.</i>
2(1)(b)(i)(cc)	<p>New provision</p>	<p>Renewable Energy generating station individually having less than 50 MW installed capacity, but collectively having an</p>	<ul style="list-style-type: none"> • <i>The capacity shall be replaced as 250 MW as justified in the comments on Reg. 2(1)(b)(i)(aa)</i>

		aggregate installed capacity of 50 MW and above, and acting on behalf of all these generating stations, and seeking connection from CTU at a single connection point at the pooling sub-station under CTU, termed as the lead generator, or;	
2(1)(b)(i)(h)		A Project Developer based on standalone storage source(s) of installed capacity 50 MW or above;	<ul style="list-style-type: none"> • <i>Again, connectivity for 50 MW which requires a dedicated feeder will lead to a sub optimal, uneconomic system design and burden on the consumers. Pooling of such storage facilities and ISTS connectivity for a pooled capacity of 250 MW and above will be optimal. Otherwise Intra STS will suffice the requirement for below 250 MW</i>
Reg.6	Sl No. 1 in the table: Up to 100 MW	TANGEDCO's Suggestion:	<ul style="list-style-type: none"> • <i>Upto 250 MW (in line with the eligible quantum for ISTS Connectivity)</i>
Reg. 8 – First proviso	Provided that where after filing of an application, there has been any material change in the location of the applicant or change in the quantum of power to be interchanged with	Provided that where after filing of an application, there has been any material change in the location of the applicant or change in the quantum of power to be interchanged with the inter-state transmission system, by more than 100 MW	<ul style="list-style-type: none"> • <i>As per the proposed Reg. 40% of installed capacity for 50 MW implies that upto 30 MW there is no necessity for filing fresh application which infers that 30 MW is adequate to process the application and design the transmission system. This will lead to highly</i>

	<p>the inter-state transmission system, by more than 100 MW in the case of applicant defined under Regulation 2 (1) (b) (i) (a) and 40% of the installed capacity, in the case of applicant defined under Regulation 2(b)(i)(b), and 40% of the aggregate installed capacity, in the case of applicant defined under Regulation 2(b)(i)(c) such an applicant shall make a fresh application, which shall be considered in accordance with these regulations.</p>	<p>in the case of applicant defined under sub-clauses (b)(i)(a) of Clause (1) of Regulation 2 and 100MW or 40% of the installed capacity, whichever is less, in the case of applicant defined under sub-clauses (b)(i)(aa), (b)(i)(b), and (b)(i)(h) of Clause (1) of Regulation 2 and 100MW or 40% of the aggregate installed capacity, whichever is less, in the case of applicant defined under sub-clauses (b)(i)(c) and (b)(i)(cc) of Clause (1) of Regulation 2 such an applicant shall make a fresh application, which shall be considered in accordance with these regulations.</p>	<p><i>uneconomical and inefficient ISTS system since the ISTS pooling stations are either 765/400 kV or 400/230 kV substations. Hence the minimum requirement for connectivity to ISTS should be 250 MW and above (pooled capacity) to avoid creation of redundant capacity in the system.</i></p> <ul style="list-style-type: none"> • <i>There are number of cases in the recent past as well as in the present that huge redundant transmission capacities are created due to default of the generators and non firming up of the beneficiaries / generators as well as relinquishment of LTA immediately after declaration of COD of the transmission assets created for evacuation of power.</i> • <i>For instance, the transmission schemes evolved for IPPS viz. CEPL, IBPL, IL&FS, PELPL, East Coast Energy Private Limited and NSL in Southern Region have become redundant and large capacity is also under utilised due to non firming up of the generation projects / end beneficiaries. Also, in the case of green energy corridor evolved for evacuation of power from RE</i>
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			<p><i>generators, the RE generators have not entered into LTA even after five years inspite of the fact that the transmission assets are created and declared COD. ex. Tuticorin II GIS pooling station where the scheme was designed based on anticipated generation capacity of 1764 MW, whereas the LTA granted is only 600 MW as on date. Similar case is with other RE projects.</i></p> <ul style="list-style-type: none"> <i>Hence, in order to have an efficient economic transmission system in place as mandated under EA 2003, it is essential to have minimum required capacity as 250 MW(aggregate) eligible for connectivity to ISTS.</i>
Reg. 8 – Second proviso	New	<p>Provided that an applicant connected with the grid or granted connectivity for a specific project can, with prior approval of CTU, utilize the same Connectivity for additional generation capacity (for same or hybrid of renewable sources), subject to the condition that net injection</p>	<ul style="list-style-type: none"> <i>The second proviso should be subject to point of injection and drawal remaining the same and does not require any system augmentation.</i> <i>The principle generators shall also undertake the commercial responsibilities with regard to the provisions under the Central Electricity Regulatory</i>

		<p>at any point of time does not exceed the quantum of total Connectivity granted for the existing project. For such additional generation capacity, existing generating station shall undertake all operational and commercial responsibilities for the additional capacity 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, UI charges, congestion and other charges etc., and submit an undertaking in this regard to the CTU, with copy to the respective RLDC in whose control area it is located;</p>	<p><i>Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015, to be followed by RE generators</i></p>
Reg. 8 – Fourth proviso	[Provided further that the application by the applicant defined under Regulation 2(1) (b)(i) (e) shall be considered by CTU only if the	No amendment	<ul style="list-style-type: none"> • <i>Since the Regulation 2(1) (b)(i) (e) is proposed to be amended, this proviso needs detailed explanation. The principal generator (if it is conventional generator) would have entered into LTA with CTU. wherein the</i>

	<p>existing generating station agrees to act as the "Principal Generator" on behalf of the renewable energy generating station(s) seeking connectivity through the electrical system of the generating station and formalizes a written agreement/arrangement among them to undertake 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, UI charges, congestion</p>		<p><i>transmission system designed for evacuation of power from the principal generator may not have enough margin for additional connectivity. If the RE generator intent to avail the margin if any available, then as per the provisions of Sharing Regulations, the transmission charges shall have to be recovered from the beneficiaries if the generators /beneficiaries do not qualify for waiver. If the connectivity is granted based on the capacity margin created on account of backing down / relinquishment by the principal generator then accordingly the LTA of the principal generator needs to be revised.</i></p>
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	and other charges etc., and submit a copy of the agreement to the CTU, along with the application for connectivity, with copy to the respective RLDC in whose control area it is located.]		
Regulation 8(2)(c)	New provision	(2C) In case of applicants covered under sub-clause (b)(i)(g) of clause (1) of Regulation 2, the connectivity granted to such applicants may be transferred or assigned, in part or full, in favour of the Renewable Power Developers selected by the said applicants after award of the project. On transfer or assignment of connectivity, such developers shall enter into Connectivity Agreement with CTU and accept all responsibilities and liabilities for connectivity as required under these Regulations and Detailed Procedure.	<ul style="list-style-type: none"> • <i>An additional Clause shall be included as below:</i> • <i>“The Stage II connectivity applicant shall have to enter into an indemnifying agreement with CTU upon grant of Stage II connectivity. CTU shall process the implementation of the transmission scheme only after indemnification between CTU and the developer of RE project to recover the transmission charges for the assets created on account of the RE generator in case of non firming up of generation project or end beneficiaries.”</i>
Regulation	New provision	(3A) For applicants covered under sub-clauses,(aa), (cc),	<ul style="list-style-type: none"> • <i>The alternate location should be mentioned as “subject</i>

8(3)(A)		(e), (f), (g) and (h) of clause (1)(b)(i) of Regulation 2, CTU shall grant Stage-I Connectivity by indicating two locations - one Primary and other alternate location.	<i>to the primary location becomes infeasible”</i>
First proviso under Regulation 8(8)	Provided that in case of a thermal generating station of 500 MW and above and a hydro generating station or of capacity of 250 MW and above, other than the captive generating plant, shall not be required to construct a dedicated transmission line to the point of connection and such station shall be taken to account for coordinated transmission planning by the Central Transmission Utility and CEA	Provided that in case of a thermal generating station of 500 MW and above or a hydro generating station or <u>a renewable energy generating station or a project based on standalone storage source(s)</u> of capacity of 250 MW and above, CTU shall plan the system such that maximum length of dedicated transmission line does not exceed 100 km from switchyard of the generating station till the nearest pooling substation of transmission licensee	<ul style="list-style-type: none"> • <i>This provision is against the mandate of the EA 2003 under sections 9 and 10.</i> • <i>Hence, the dedicated transmission lines shall be under the purview of the generator irrespective of nature of the source. Hence, this proviso shall be modified in such a way to recover the cost of the dedicated lines from the concerned generators. Further, the bays for the dedicated lines at ISTS substation shall also be built, operate and maintained by the generators.</i>
Regulation 9(1)	Before awarding long-term access, the Central Transmission Utility shall have due regard to the augmentation of inter-	Before <u>granting</u> long-term access, the Central Transmission Utility shall have due regard to the augmentation of inter-State transmission system proposed under the	<ul style="list-style-type: none"> • <i>In order to design an efficient economic and optimal transmission system as mandated under EA 2003 and Electricity Policy, the regulation may be modified as <u>“Before granting Long Term access, the Central</u></i>

	State transmission system proposed under the plans made by the Central Electricity Authority	plans made by the Central Electricity Authority	<p><u>transmission Utility shall have due regard to the augmentation of the inter state transmission system proposed under the plans made by the Central Electricity Authority.”</u></p> <ul style="list-style-type: none"> • <i>Provided also, in case of RE generators, for augmentation of the ISTS, CTU shall also take into account of the Intra State transmission system planned and under execution to avoid redundant transmission capacity and to develop such planned Intra State transmission system under Central financial Assistance .</i>
Third Proviso under Regulation 12 (1)	[Provided also that the such augmentation of the transmission system may be taken up by the CTU or the transmission licensee in phases corresponding to the capacity which is likely to be commissioned in a given time frame after ensuring that the generating company has released the advance for the main	[Provided also that except in cases involving Renewable Energy generating Station(s) ,the such augmentation of the transmission system may be taken up by the CTU or the transmission licensee in phases corresponding to the capacity which is likely to be commissioned in a given time frame after ensuring that the generating company has released the advance for the main plant packages i.e. Turbine	<ul style="list-style-type: none"> • <i>The exception to RE generators will lead to creation of redundant assets. The Stage I connectivity applicants will vanish after grant of connectivity due to their inability to acquire land, financial closure and other issues. The asset created will become redundant and will pose a huge financial burden to the existing DICs. This has been witnessed in the case of green energy corridor being developed for RE generators in Tuticorin area and the transmission corridors being developed for</i>

	<p>plant packages i.e. Turbine island and steam generator island or the EPC contract in case of thermal generating station and major civil work packages or the EPC contract in case of hydro generating stations for the corresponding capacity of the phase or the phases to be commissioned, subject to a minimum of 10% of the sum of such contract values:</p>	<p>island and steam generator island or the EPC contract in case of thermal generating station and major civil work packages or the EPC contract in case of hydro generating stations for the corresponding capacity of the phase or the phases to be commissioned, subject to a minimum of 10% of the sum of such contract values:</p>	<p><i>solar power parks.</i></p> <ul style="list-style-type: none"> <i>Hence, in order to avoid creation of redundant capacity, it is essential to have a check on the preparedness of the RE promoters and hence, phasing of the transmission assets should be matching with the commissioning of the RE generators. Considering the huge RE capacity addition, this Clause is inevitable to safeguard the interest of DISCOMS, end consumers as well as CTU. Further, indemnification agreement is also essential to safeguard the interest of CTU.</i>
<p>Regulation 12(1A)</p>	<p>New</p>	<p>(1A) Notwithstanding anything contained in Clause 2A of Regulation 8, Stage II Connectivity shall not be a pre-requisite for applying for LTA for applicants under Regulation 2(1)(b)(i)(e) and 2(1)(b)(i)(g).</p>	<ul style="list-style-type: none"> <i>The Regulation 2(1)(b)(i)(g) specifies that Any company or entity designated by the Central Government or State Government as Implementing Agency on behalf of the Renewable Power Developers who are eligible for grant of connectivity under Clause 2(1)(b)(i)(aa) and 2(1)(b)(i)(cc) or;</i> <i>If the company or entity defined under Reg2(1)(b)(i)(g) is relieved off the requisite for Stage II connectivity, then</i>

			<p><i>without the mandatory requirements under Stage II Connectivity or even without any firm commitment from the RE generators the agency acting on behalf of RE generators can apply for LTA. This will lead to uncertainty in planning the transmission system and also unjustifiable capital investment by the TSP and burden to beneficiaries. Hence, the mandatory conditions under Stage II connectivity shall have to be fulfilled by the RE generators who avails LTA through the Nodal agency or company acting on behalf of RE generators.</i></p>
<p>Regulation 13(1): System Studies by Nodal agency</p>	<p>(1) On receipt of the application, the nodal agency shall, in consultation and through coordination with other agencies involved in inter-State Transmission system to be used, including State Transmission Utility, if the State network is likely to be used, process the application and carry out the</p>	--	<p><i>Suggestion by TANGEDCO: the following may be added in the context of existing DICS made liable to share the transmission charges for the RE generation projects under waiver category:</i></p> <p><i>“1) On receipt of the application, the nodal agency shall, in consultation and through coordination with other agencies involved in inter-State Transmission system to be used <u>including existing DICS</u>, including State Transmission Utility....”</i></p>

	necessary system studies as expeditiously as possible so as to ensure that the decision to grant long-term access is arrived at within the timeframe specified in Regulation 7:		
Provision under Regulation 13(2):	(2) Based on the system studies, the nodal agency shall specify the interState transmission system that would be required to give long-term access. In case augmentation to the existing inter-State Transmission system is required, the same will be intimated to the applicant.		<p>Additional Clause Proposed by TANGEDCO:</p> <ul style="list-style-type: none"> • In order to avoid over loading of intra state transmission system due to regional RE entities and to better utilise the existing transmission assets the following provision may be introduced: • <i>“Provided if the augmentation of ISTS impacts the transfer capability of Intra State network, then a coordinated transmission planning shall be carried out by CTU,CEA and STU and existing DICs .”</i>

