BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI PETITION NO. 174/MP/2017

IN THE MATTER OF:

Suzlon Power Infrastructure Ltd.

...PETITIONER

VERSUS

Power Grid Corporation of India Ltd. & Ors.

...RESPONDENTS

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PLACE: NEW DELHI DATED: 26-9-17-

state level

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI **PETITION NO. 174/MP/2017**

IN THE MATTER OF:

Petition under Section 79(1)(c) and 79(1)(f) of the Electricity Act, 2003 read with Regulation 32 of the CERC (Grant of Connectivity, Long-Term Access & Medium-Term Open Access in Inter State Transmission & related matters), Regulation 2009

AND IN THE MATTER OF:

Suzlon Power Infrastructure Ltd.

...PETITIONER

VERSUS

Power Grid Corporation of India Ltd. & Ors. ... RESPONDENTS

WRITTEN SUBMISSIONS ON BEHALF OF THE PETITIONER

- The Petitioner has filed the present petition seeking a direction to 1. Respondent No. 1(PGCIL) to allow the utilization of 300 MW Grid connectivity and LTA granted to the Petitioner for Chandragiri Wind Farm, for the 249.90 MW Wind power Project awarded to the Petitioner in consortium with Green infra Wind Energy Limited (hereinafter referred to as "the Consortium") by the Solar Energy Corporation of India hereinafter referred to as "the SECI).
- 2. Pursuant to the RoP issued by this Hon'ble Commission, after the hearing on 18.08.017, M/s. Gamesa Renewable Pvt. Ltd., M/s. Orange Rajkot Wind Power Pvt. Ltd., M/s. Clean Wind Power (Tuticorin) Pvt. Ltd., M/s. Clean Wind Power (Bhavnagar Pvt. Ltd.), M/s. Sitac Kabini Renewables Pvt. Ltd., M/s. Ostro Kutch Wind Pvt. Ltd. and M/s. ReNEW Power Ventures Pvt. Ltd. (respondents in Petition No. 145/MP/2017) have filed their objections and responses to the present petition.
- 3. At the outset, save matters of record, the Petitioner disputes and denies all averments, contentions and allegations raised by the

objectors in their reply/written submissions unless specifically admitted hereinafter. Any omission on the part of the Petitioner to deal with any specific averment, contention or allegation of the objectors should not be construed as an admission of the same by the petitioner.

- 4. The Petitioner, at this stage, is not filing a para-wise response to the objections filed on behalf of the aforesaid objectors. The Petitioner craves leave of this Hon'ble Commission to file a detailed para-wise reply to the objections, at a later stage, if required.
- 5. The objectors have disputed the maintainability of the present petition and the reliefs prayed for therein on, *inter alia*, the following grounds:
 - a. The legal opinion mentioned in the minutes of the 16th Meeting of the SR constituents is not binding on the CTU or this Hon'ble Commission;
 - b. The Petitioner is not a generator as mere ownership of a station without generation of electricity does not make a company a "generating company". Chandragiri Wind Farm is not a generating station as it is not yet commissioned. The 300 MW Grid connectivity and LTA granted to the Petitioner for Chandragiri Wind Farm is illegal and ought to be revoked;
 - c. There is no transfer of ownership of the Petitioner and the generating station can be transferred only after commissioning;
 - d. CERC (Grant of Connectivity, Long-Term Access & Medium-Term Open Access in Inter State Transmission & related matters), Regulation 2009 (hereinafter referred to as the "Connectivity Regulations") do not envisage a consortium;

- e. Connectivity is neither transferable nor tradeable. This Hon'ble Commission cannot permit the same in exercise of inherent powers or for removal of difficulty;
- f. Amendments, if any, to the detailed procedure can only be prospective;
- g. SECI Bid cannot be used for seeking transfer of connectivity;
- h. The Petitioner is seeking post facto benefits which were not available to prospective bidders, at the time of submission of SECI bids;
- 6. At the outset, it is most humbly submitted that the objectors lack the locus and the ability to seek a relief such as revocation of the connectivity granted in favour of the Petitioner, in the present petition. The present petition has been filed by the Petitioner under Section 79(1)(c) and 79(1)(f) of the Electricity Act, 2003 read with Regulation 32 of the Connectivity Regulations for redressal of disputes which have arisen between the Petitioner and Respondent No. 1 (PGCIL). The objectors are neither parties to the transmission service agreement nor participants to the entire process of grant of connectivity and LTA to the Petitioner by the CTU. The objections filed by the aforesaid objectors are irrelevant for the purposes of deciding the disputes which have arisen between the Petitioner and Respondent No. 1.
- 7. The Petitioner obtained the investment approval for setting up the windfarms located at Chandragiri, Kumarapuram and Kadambur in Tirunelveli, by placing reliance upon the representations made by Respondent No. 1 in the 16th Meeting of Southern Region Constituents. The legal opinion obtained by the CTU/Respondent No. 1 and placed in the said meeting, categorically clarified that connectivity is granted to a generating station and any change in ownership of the generation station does not affect the connectivity in any manner. Certain relevant extracts of the legal opinion are reproduced hereunder for convenience:

"It is a common practice of the Wind Developers transferring the generating stations to third parties after commissioning of the generating unit. There is nothing in law which prohibits them from effecting such transfer. Such transfers are done mostly of the shares of the generating company and not by sale of generating station as such.

In other words, a generating company is formed, the wind project is established in the generating station and thereafter the Promoters sell the shares to third parties. The connectivity under the Connectivity Regulations is given to a generating station and not necessarily to a company as a whole. In my opinion, there is no difficulty whatsoever in regard to the connectivity granted, if there is a change in the ownership of the shares or even when there is a change in the ownership of the generating station. While granting the approval for connectivity, POWERGRID can specify that the connectivity is restricted to the generating station and will not be available for transfer to any other generating station or unit.

As regards the ownership change, POWERGRID can provide in the approval that in case of change of ownership, the developer and the new owner shall file a declaration with POWERGRID and the new owner shall be bound by all the terms and conditions of the approval granted for the connectivity."

8. A bare perusal of the legal opinion, relied upon by the CTU in the 16th meeting of the SR constituents clarifies that it is common for wind developers to develop a project and subsequently transfer the generating station to a third party. There is nothing illegal in such practice and therefore, a change in the ownership of the generating station is absolutely permissible and will not affect the connectivity granted in its favour. The Petitioner relied upon such representations of Respondent No. 1 and proceeded to invest over Rs. 2300 Lakh in the projects. Respondent No. 1 is now estopped from denying this position. All contentions raised by the objectors challenging the validity and the binding nature of the said legal position qua Respondent No. 1, are baseless and immaterial. Further, the above stand of the Petitioner is based on the existing legal position, and is independent of the SECI bedding regime. In the event, the prayers of the Petitioner are denied, then the same would have a retrospective negative effect on all permissions granted under the FIT regime till date.

- 9. Further, all allegations raised by the objectors that the Chandragiri wind farm is not a generating station and merely a site earmarked for the purposes of establishing a wind generation station cannot be termed as a generating station in terms of the Electricity Act, 2003 and any transfer of a generating station can only happen after commissioning of the station, are wrong and entirely misplaced. In this context, reference may be made to the below definition of "Generating Station":
 - "(30) "generating station" or "station" means any station for generating electricity, including any building and plant with step-up transformer, switchgear, switch yard, cables or other appurtenant equipment, if any, used for that purpose and the site thereof; a site intended to be used for a generating station, and any building used for housing the operating staff of a generating station, and where electricity is generated by water-power, includes penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic works, but does not in any case include any sub-station."

[underline supplied]

From the above definition, the following is categorically clear:

- a) that the meaning of the generating station under Section 2(30) of the Electricity Act, 2003 is very wide, and includes within its ambit even a site intended to be used for a generating station;
- b) the pre-condition (as is being alleged by the objectors) for commissioning of a station for it to constitute a "generating station" in terms of Section 2(30) of the Electricity Act, 2003, is clearly missing.

From the above, it is most respectfully submitted that if the argument of the objectors is accepted then no tariff can be determined by the appropriate commission for any generating station, prior to its commissioning, in terms of Section 62 of the Electricity Act, 2003. It is categorically stated that the status of a generating station has nothing to do with its commissioning. In other words, a generating station will remain such a station, in terms of the above definition, irrespective of the fact whether it achieves COD or not.

In any event, the Petitioner has already taken major steps towards setting up the Chandragiri Wind farm including acquisition at around 50 locations by investing over Rs. 2250 Lakh and purchase of land for substation /work order for survey and soil investigations worth Rs. 65 lakh. The contracts for 220 kV pooling SS at Chandragiri and the 230kV transmission lines S/C on D/C tower have also been finalized. For 33 kV lines rate contract has been finalized for RSJ poles, conductor and insulators. It is stated that the specifications for the terminal bays at PGCIL end were sought for advance procurement activity as far back in January 2017. The progress of the works has been recorded in the Joint co-ordination committee meeting of Southern region held on 16th June, 2017 at New Delhi, which was chaired by PGCIL. Subsequently, the progress report as of 31st August, 2017 was also submitted to the above committee. The cost incurred after June' 2017 is over and above the expenses incurred viz. Rs. 2300 Lakh. Therefore, all allegations that the Petitioner is not a serious developer and has no intention to utilize the connectivity or to set up the generating station, are bald and baseless. It is also pertinent to mention herein that the Chandragiri wind farm is scheduled to be commissioned in April' 2018 and the project is otherwise being developed as per schedule, but for the uncertainty now caused by Respondent No. 1.

A copy of the minutes of the Joint co-ordination committee meeting of Southern region held on 16.06.2017 is annexed herewith and marked as **Annexure 1**.

A copy of the progress report as of 31.08.2017, submitted to the Joint co-ordination committee is annexed herewith and marked as **Annexure 2**.

10. Further, the objectors case, that the Petitioner (OEM) is not eligible to be granted connectivity, is entirely misplaced. It is most respectfully submitted that this Hon'ble Commission while approving the Procedure for implementation of the Framework on Forecasting, Scheduling and Imbalance Handling for Renewable Energy (RE) Generating Stations (including wind power parks at Inter-State level), on 03.03.2017, specifically recognised the role of wind power park developers in obtaining connectivity and approved as follows:

"7.2 The Solar Power Park Developer (SPPD) or Wind Power Park Developer (WPPD) shall apply for Connectivity on behalf of Generators within the park.

...

SPPD/WPPD shall be responsible for complying with the provisions of CEA standards for Grid Connectivity and other CERC or CEA regulations. The SPPPD/WPPD shall act as the nodal and accountable entity at the connection point. SPPD/WPPD shall be responsible for sending the SCADA data to the RLDC and to the Renewable Energy Management Centre (REMC)."

In line with the above regulatory protocol governing development of solar parks, the capacity allocation, transmission approval, etc. is granted in the name of the developer with the understanding that the developer will not use the entire infrastructure for its own use. Hence, no allegations can be raised whatsoever regarding trading in capacity/ transmission.

A copy of the Procedure for implementation of the Framework on Forecasting, Scheduling and Imbalance Handling for Renewable Energy (RE) Generating Stations including power parks based on wind and solar at inter-state level is annexed herewith and marked as **Annexure 3**.

- 11. The next argument of the objectors that connectivity is neither transferable nor tradeable is entirely misplaced. Connectivity under the Connectivity Regulations, is granted to a generating station. In the present case, connectivity has been granted in favour of the Chandragiri wind farm. The Petitioner, by the present petition, is not seeking a transfer or trade of this connectivity in favour of another generating station. The present petition has been filed only for the purposes of seeking a direction to Respondent No. 1 to allow the utilization of 300 MW Grid connectivity and LTA granted for Chandragiri Wind Farm to the Petitioner, by the consortium company (Respondent No. 5) formed by the Petitioner and Respondent No. 4. The underlying generating station has remained the same. It is stated that the connectivity permission will continue in the name of the generating station. The Petitioner in no manner is trying to circumvent any approvals, and that the Petitioner is only following the applicable protocol qua development of solar parks. As already clarified by the CTU in the 16th meeting of the SR constituents, any change in ownership of the generating station does not affect the connectivity granted to the generating station. There is a clear difference between the transfer of connectivity between two Generating Stations and the change in ownership of same station between two entities. Even under Regulation 2(e) of the Connectivity Regulations, "connectivity" for a generating station means the state of getting connected to the inter-State transmission system. Such connectivity, is in no manner getting affected by the change in ownership of the generating station.
- 12. In the present case, the objectors have not pointed out any section or regulation which is violated by the transfer of the Chandragiri station to Respondent No. 5. Bald and baseless allegations of connectivity being a national resource and the Petitioner profiteering from trading in connectivity, are being raised, without any specific mention of any provision under the Act or the Regulations, only with an objective to prejudice this Hon'ble Commission. The objectors have failed to point out

violation of any statute or regulation. The entire argument has no legal basis. The Petitioner had applied for connectivity and LTA for the Chandragiri wind farm in the year 2014, after a thorough assessment of the wind resources. The objectors are now seeking a revocation of the connectivity and LTA granted in favour of the generating station, so that the same can be awarded to generators which had applied for connectivity much later, only in 2016 or 2017. This is impermissible.

13. The objectors have further urged that "Connectivity Regulations" do not envisage a consortium and the Petitioner is seeking post facto benefits which were not available to prospective bidders, at the time of submission of bids in the competitive bidding carried out by SECI. This allegation is wrong and denied. It is most respectfully submitted that the Connectivity Regulations envisage connectivity in favour of a generating station. The Applicant for connectivity, as defined under Section 2(b) of the Connectivity Regulations, is a generating station. There is no bar to change in ownership of the generating station under the provisions of the Connectivity Regulations. The regulations only envisage a fresh application in case of a material change in location or quantum of power, no such provision exists for a change in ownership of the generation station. It needs to be understood that only in the event the location of power plant or quantum of power to be evacuated, is changed, then the earlier connectivity becomes infructuous, however, if nothing qua the above has happened then the connectivity has to continue as the same is based upon the ability of the grid to evacuate power, and the same depends upon the laws of physics and not upon a change in ownership of the power plant. It is stated that the SECI Bid permitted a company or a consortium of companies to participate in the Bid. The relevant extracts of the RfS are reproduced hereunder for convenience:

> "Bidder" shall mean Bidding Company or a Limited Liability Partnership (LLP) or a Bidding Consortium submitting the Bid. Any reference to the Bidder

includes Bidding Company/LLP/Bidding Consortium/Consortium Member of a Bidding Consortium (including Lead Member) including its successors, executors and permitted assigns jointly and severally, as the context may require;

"Bidding Consortium" or "Consortium" refers to a group of Companies that has collectively Submitted the response in accordance with the provisions of these guidelines

14. Therefore, participation in the SECI Bid was all along permitted by means of a consortium. Further, the RfS envisaged that a consortium, if selected as a successful bidder, shall incorporate a project company before signing the PPA with SECI. The relevant clause is reproduced hereunder for convenience:

"3.5 Qualification Requirements

Bidder as defined in section 2 is eligible to participate under his RfS. Any consortium, if selected as successful bidder for the purpose of supply of power to SECI, shall incorporate a Project company with equity participation by the Members in line with consortium agreement (to be submitted along with the response to RfS) before signing of PPA with SECI, i.e. the Project Company incorporated shall be the same shareholding pattern as given at the time of submission of response to RfS.

..."

15. It is most respectfully submitted that the Petitioner is not claiming any post facto benefits which were not available to the prospective bidders, at the time of submission of the bids. As stated earlier, connectivity is granted in favour of the generating station and the grant of approval for Connectivity would be valid as long as there is no change pertaining to the physical characteristics of the "Generating Station" per se, the change in ownership of "Generating Station" would neither affect the legality of the permissions nor the transactions conducted or likely to be undertaken relating to the Generating Station, and nor the ability of the grid to evacuate power. The RfS permitted a consortium to participate in the bid and form a project company, after being

successfully selected. In the present case, the connectivity in favour of the Chandragiri wind farm is not affected by the change in ownership of the generating station, from the Petitioner to Respondent No. 5. The case in point is a mere change in ownership of Generating Station from the Petitioner to the consortium.

16. In fact, neither the clarifications issued by SECI on 23.12.2016 nor the draft covering letter as per the bidding formats of SECI prevented the petitioner from entering into a consortium with Respondent No. 4, for the purposes of participating in the bid. The LOA issued by SECI on 05.04.2017 also reiterates the Bid condition and permits the consortium to incorporate a project company for the bid project, post selection as a successful bidder. The relevant extract of the LOA is reproduced hereunder for convenience:

"Any consortium, if selected as a successful bidder for the purposes of supply of power to the Trader, shall incorporate a Project Company with equity participation by the Members in line with consortium agreement (to be submitted along with the response to RfS) before signing of PPA with the Trader i.e. the Project Company incorporated shall have the same shareholding pattern as given at the time of submission of response to RfS. This hall not change till the signing of PPA."

- 17. The Petitioner, after placing reliance upon the representations made by Respondent No. 1 in the 16th meeting of the SR constituents has invested in the projects and participated in the Bid. Further, the present petition and the prayers sought therein, in no manner, alter or amend the Connectivity Regulations, the detailed procedure or the SECI Bid conditions.
- 18. Apart from the aforesaid, certain extraneous issues have been raised by the objectors on the shareholding pattern of the consortium. It is most respectfully submitted that as is apparent from the Connectivity Regulations and the minutes of the 16th meeting of the SR constituents, what is relevant is the ownership of the generating station and not the ownership of the Petitioner.

Therefore, the emphasis on the ownership/ shareholding pattern of the Petitioner or Respondent No. 5 is irrelevant. Further, the SECI bid permitted bidding by a consortium and specified that the lead member should have a minimum shareholding of 51% in the project company. In the present case, the lead member, Respondent No. 4 herein, has 99% stake in the project company. The objectors have failed to state how this shareholding pattern is in violation of any provision of law or any of the conditions stipulated in the tender document.

In view of the aforesaid facts and submissions, it is most respectfully prayed that this Hon'ble Commission may graciously be pleased to allow the present petition.

THROUGH

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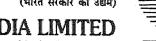
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PLACE: NEW DELHI DATED: 26-9-17

Annesure-1 13

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(भारत सरकार का उद्यम



POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

केन्द्रीय कार्यालयः "सौदामिनी" प्लॉट सं. २. सैक्टर-29, गुडगाँव-122 001. (हरियाणा) दूरमाषः 0124-2571700-719, फैक्स : 0124-2571762, "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001, (Haryana) Tel. : 0124-2571700-719, Fax : 0124-2571762, Web.: www.powergridindia.com

CIN: L40101DL1989GOI038121

Ref. No.: C/CTU/SR/OA/19JCC

9th Aug, 2017

As per Distribution List

Sub: 19th Joint Co-ordination Committee Meeting for High Capacity Corridor for IPPs in Southern Region – Minutes of Meeting.

Dear Sir,

The 19th meeting of Joint Co-ordination Committee was held on **16**th **Jun 2017** at POWERGRID Office, Gurgaon to review the status of generation & transmission projects. In this regard, please find enclosed the minutes of meeting indicating the progress of generating projects and associated transmission system. The same is available on POWERGRID website (<u>www.powergridindia.com</u> >> CTU Open Access >> Joint Coordination Committee Meetings >> Southern Region).

Thanking you,

Yours faithfully,

Ashol Rd.

(Ashok Pal) General Manager (CTU-Planning)

Copy to:

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स्वहित एवं राष्ट्रहित में ऊर्जा बचाएं Save Energy for Benefit of Self and Nation

1 tour copy

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12. Surana Power Limited

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13. Managing Director 14. Senior Vice President. **VSF Projects Limited** M/s Samalkot Power Ltd. (SPL) Plot no. 89/A, Aiswarya Sagar Society PB No. 22, IDA Peddapuram, ADB road, Road No. 2, Banjara Hills Samalkot, E.G. Dt., - 533 440 Hyderabad - 500 034. Andhra Pradesh Email: vsfprojectsltd91@gmail.com Email: dwarakanath.cheruvu@reliancada.com Tel: 09866222235 sameer.ku.gupta@relianceada.com Mob: 8822392354 / 7498246536 15. VP & Head-Power Evacuation, 16. Senior Manager Suzion Power Infra Ltd. M/s Gamesa Renewable Pvt. Ltd. (GRPL) One Earth opp. Magarpatta City The Futura, IT Park, B- Block, 8th Floor, Hadapsar, Pune-411028 No. 334, Rajiv Gandhi Salai, Maharasthra, India Shollinganallur, Chennai Email: pnaresh@suzlon.com Email:ashukla@gamesacorp.com Tel: 020-40125034 / +919850829701 Mob: 07869913518 17. General Manager - P.E. 18. AGM Inox Wind Infrastructure Ltd Orange Sironj Wind Power Pvt. Ltd. Inox towers, Plot 17, #301B, 3rd Floor, D21 Corporate Park. Sector-16A, Noida - 201 301. Sector-21, Dwarka, Email: alok@inoxwind.com New Delhi - 110075 bjuneja@glf.co.in Email: lalitbirla@orangerenewable.net Mob: +91 9717364276 / 9891795111 Mob: 09650015982 19. AVP - Project Development 20. Head, Project Development Renew Power Ventures Pvt. Ltd. Ostro Alpha Wind Pvt. Ltd. (OAWPL) 10th Floor, DLF Square, Jacranda Marg, Unit G-0, Ground Floor, Mira Corporate Sector-25, DLF Phase-2, Gurgaon Suites. Haryana 1&2 Ishwar Industrial Estate, Mathura Road, Email:rakesh@renewpower.in New Delhi - 110 065 vinod@renewpower.in Email: p.pratikpoddar@gmail.com Mob: 09711486060 pratik.poddar@ostro.in Tel: 0910200736 21. AGM-Regulatory Affairs, 22. Sr Project Engineer ReGen Wind Farm(TN) Private Limited Greenmint Power Pvt. Ltd. S7 Krishna Arcade, Old No. 36, New No. One Indiabulls Centre, The Hub, 10, Rajabathar Street, T. Nagar, 10th Floor, Tower B, S.B Marg, Chennai - 600 017 Elphinstone (W), Mumbai - 400 013 Email: dheeraj.j@regenpowertech.com Email: projects@greenmintpower.com Ravi.as@regenpowertech.com Tel: 09702155514 Tel: 09910778484/ 09840940609 23. Manager, Business Development 24. Deputy General Manager BLP Energy Pvt. Ltd. Green Infra Wind Energy Ltd. 12th Floor. Crescent Prestine 5th Floor, Tower C, Building No. 8, Shantiniketan. DLF Cyber city, Gurgaon - 122 002 ITPI main Road, Hoodi, Email: rakesh.rathore@sembcorp.in Whitefield, Begaluru - 560 048 Tel: 7738091123 Email: venkata.krishnan@enel.com swaroop.iyer@enel.com Tel: 09900085766/9148783016

Minutes of 19th Joint Co-ordination Committee meeting of Generation Projects granted Connectivity/ LTA in Southern Region (SR) held on 16.06.2017 at POWERGRID, Gurgaon

- The 19th Joint Co-ordination Committee meeting of generation projects in Southern Region was held at POWERGRID Office, Gurgaon on 16th June, 2017. The list of participants of the meeting is enclosed at Annexure-I.
- After welcoming the participants, it was informed that Minutes of the 18th meeting of the Joint Co-ordination Committee of generation projects which were granted LTA in SR held on 27.03.2017, were issued vide letter ref. no. C/CTU/SR/OA/18JCC dated 11.05.2017. As no observations/comments were received on the minutes, accordingly the minutes of 18th Joint Co-ordination Committee are confirmed as circulated.
- 3. It was re-iterated that JCC forum has been created for co-ordination purposes to attempt matching of generation schedules with the associated transmission system, and accordingly, the information given by generation developers is being taken into cognizance for co-ordination purpose which can be achieved only if the applicant/generation developers provide realistic schedule & other status of generation project /dedicated line. However, for any substantial issue, it may kindly be submitted by official correspondence addressed to CTU, by clarifying the nature of issue to be dealt therein, as per the Regulatory framework. It was further informed that some letters are being sent by LTA customers related to relinquishment which are not clear in the content; therefore it was advised that such communication should strictly follow CERC Regulatory provisions (Regulation 18) specifically regarding notice, clearly therein mentioning the relinquishment quantum, date of relinquishment and consent for payment of applicable relinquishment charges.
- 4. It was also emphasized that Joint Coordination Committee meetings were institutionalized by the Hon'ble Central Electricity Regulatory Commission to enable better coordination of generation and transmission projects in terms of the applicable CERC Regulations, Detailed Procedure and BPTAs/LTAAs. In this regard, it is also pertinent to mention that the BPTAs/LTAAs executed with the generation project developers/companies monitored hereunder provides that if any of the developers fail to construct the generating station/dedicated transmission line or makes an exit or abandons its project, then POWERGRID shall have the right to collect the transmission charges and/or damages as the case may be in accordance with the CERC Regulations, Orders etc. Further, as per the BPTAs/LTAAs, the construction phase bank guarantee submitted by the project developers/LTA customers is also encashable in case of adverse progress of individual generations project(s)/unit(s) assessed during the Joint Coordination Committee meetings. It was also informed that In light of a number of recent CERC orders, wherein the Hon'ble Comission has emphasized upon stricter implementation of the various Regulations, Procedures and statutory Agreements, CTU shall assess the progress of various generation projects and take appropriate actions in terms of the applicable provisions/clauses of the Regulations/Procedure/Agreements.

- 5. CTU emphasized that generation developers should ensure completion of their dedicated transmission lines to match with the commissioning of transmission network in order to prevent bottling up of power. It was further stated that interim arrangements through LILO of existing lines were provided only as a contingency measure and the generation developers need to implement the final dedicated transmission system as the matter has been very seriously looked into by Hon'ble CERC in Petition no. 112/TT/2013.
- 6. CTU informed that recently in no of cases, generation developers have submitted online additional details in respect of Connectivity (CON-4) only when the generation projects are on the verge of commissioning. Thus, a very short period of time is available for processing and issuance of Connection Offer (CON-5) and subsequent signing of Connection Agreement. As per the CERC Connectivity Regulations/ Detailed Procedure, 2009, the CON-4 details are to be furnished to CTU at least 2 (two) years prior to physical interconnection which may be noted by all the applicants.
- 7. All information exchanged, discussions/decisions taken in the JCC meeting shall be subject to the CERC Regulations and Detailed procedure made therein.
- 8. It is noted that some of the generation developers / applicants have been repetitively not attending the JCC Meetings. All such generation developers / applicants were requested to attend the future meetings so as to have a better co-ordination.
- 9. All those generation projects that have achieved COD and their respective dedicated transmission lines have also been commissioned, may not be required to attend JCC as the coordination work has already been over. Therefore they are not being called for further JCC meetings (Details of all such generation projects as per Table T1).
- 10. The LTA customers were requested to update the progress of their generation projects and the discussion are summarised below:

Status of the Generation Projects >

HIGH CAPACITY TRANSMISSION CORRIDOR – VI (Transmission System Associated with IPPs in Krishnapatnam Area, Andhra Pradesh)

SI.	LTOA / LTA Applicant	LTOA Quantum		Benefic	iaries	Firm beneficiary	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Dedicated / Connectivity line &	Remarks
	Applicant	(MW)	SR	WR	NR	beneficiary	(18 300) (19 300)		Status	
1	Meenakshi Energy Private Limited (2x150 + 2x350)	546	186	177	183	NIL	U-1/2: commissioned	Not attended	SEPL/MEPL- Nellore 400kV quad	No reprentative from Meenakshi Energy Ltd was present in the meeting. Letter for
2	Meenakshi Energy Pvt . Ltd.	364	364	0	0		U-3/4: Dec'17/Mar'18		D/c line & commissioned	opening of LC was sent on 03.01.17., Further, in petition no 312/MP/2015

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SI.	LTOA / LTA	LTOA	Tourst	Danas		T =:			ICC Meeting of generation p	
No.	Applicant	Quantum	Target			Firm beneficiary	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Dedicated / Connectivity line &	Remarks
		(MW)	SR	WR	NR		,	(Status	
	-									CERC has directed MEPL to open LC for 727 MW. However, LC has not been opened.
			:							Committee opined that in view of the default, the necessary regulatory actions including curtailment of STOA needs to be explored.
										In the previous JCC also, MEPL was requested to sign the TSA and open LC, however MEPL has not taken any action.
	·									MEPL was again requested to comply with above regulatory provisions.
3	NCC Power Projects Limited (2x660 MW)	740	740	0	0	NIL	U-1: Commissioned U-2: Comissioned on Feb'17 (COD 17.02.17)	U-1: Commissioned U-2: Comissioned on Feb'17 (COD 17.02.17)	NCC-Nellore PS 400kV quad D/c line by POWERGRID & commissioned	It was observed that in the last JCC meeting representative of NCC had assured that they will open the LC very shortly. However, no action has been taken in this regard. In this meeting, the reprentative of NCC agreed to open the LC within 7 working days. In view of the continued default, the committee recommended that regulatory actions including curtailment of STOA and/or opening of connectivity line may be taken.

HIGH CAPACITY TRANSMISSION CORRIDOR – VII (Transmission System Associated with IPP projects in Tuticorin Area, Tamil Nadu)

SI.	LTOA / LTA	LTOA		Benefi	ciaries	Firm	Comm. schedule		Dedicated /	Remarks	
No.	Applicant	Quantu m (MW)		WR	NR	beneficiary	(18 th JCC)	(19 th JCC)	Connectivity line & Status		
1	Ind-Barath Power (Madras) Limited (2x660 MW)	900	225	270	405	NIL	Not attended Project Uncertain	Not attended	Ind-Barath-Tuticorin PS 400kV quad D/c line - Uncertain	No representation has been made. As reported by the representative in the 16 th JCC, that the project is uncertain. Therefore, necessary actions in terms of the BPTA and/or regulatory provisions may be taken.	

HIGH CAPACITY TRANSMISSION CORRIDOR – VIII (Transmission System Associated with IPP projects in Srikakulam Area, Andhra Pradesh)

	LTOA / LTA Applicant	LTOA	Target	Benefic	ciaries	Firm	Comm. schedule	Comm. schedule	Dedicated /	Remarks
NO.	Applicant	Quantu m (MW)	SR	WR	NR	beneficiary	(18 th JCC)	(19 th JCC)	Connectivity line & Status	
1	East Coast Energy Private Limited (2x660 MW)	1240.8	1240.8	0	0	AP: 300 MW Kerala : 100 MW AP RFQ short list : 488.55 MW	U-1: Sep'18 U-2: Mar'19	U-1: Sep'18 U-2: Mar'19	ECEPL-Srikakulam PS 400kV quad D/c line – Sep'18	It was informed that almost 45% of the project work has been completed. All civil woks has been completed. However, no supply of equipment has been received in absence of funds. The representative agreed for signing of TSA within 15 days. Project is stalled for the time being and action is being taken for revival of the project.



Other Generation Projects – Granted Connectivity & LTA Generation Projects granted LTOA/LTA →

Jeneration Frojects granted ETOAJETA

SI.	LTOA/LTA	LTOA Quantum	Tar	get Be	neficia	aries	Firm beneficiar	Comm. schedule	Comm. schedule	Dedicated / Connectivity line &	Remarks
No.	Applicant	(MW)	SR	WR	NR	NER	у	(18 th JCC)	(19 th JCC)	Status	Remarks
1	NTPC Limited (Kudgi TPS) (3x800 MW)	2392.49 (358.87 unallocat ed)	2033. 62	0	0	0	Allocation Kar-1200 TN-300 Ker-105 Tel-234 AP-201 Unallocate d-360	Not attended (As per 17 th JCC: U1: Dec'16 (commissioning) / March'17 (COD) U2: Jun'17 U3: Sep'17)	U1: Dec'16 (commissioning) / Jul'17 (COD) U2: Mar'17 (Commissioned) (COD: Aug'17) U3: Jul'17 (COD: Oct'17)	Kudgi TPS - Narendra (New) 400 kV 2xD/c quad lines	Letter for opening of LC has been already sent to beneficiaries and NTPC.
2	Neyveli Lignite Corporation Limited (400 MW Replacement)	334 (60 unallocat ed)	334	0	0	0	TN-53.07 AP-52.46 TS-61.31 Kar-70.54 Ker-32.38 Pud-4.24	U1: Apr'18 U2: Apr'18	U1: Apr'18 U2: Apr'18	Provision of 7x167 MVA (single phase), 400/220 kV transformers at generation switchyard; 1x80 MVAR Bus Reactor at generation switchyard; LILO of existing Neyveli TS-II – Pondycherry 400 kV S/c at NNTPS generation switchyard – Apr'18	As per the request in the previous JCC, Implementation Agreement with POWERGRID was signed on 27.01.17. NLC informed that they are likely to draw start up power from Jun'17 through STU network.
3	Andhra Pradesh Solar Power Corporation Pvt Ltd	1500	1500	0	0	0	Nil	Not attended (As Per 17 th JCC: Ph-I (250 MW) Commissioned Ph-II (750 MW) 125 MW to be retendered. Date will be informed later. 375 MW-Mar'18, 250 MW-Jun'18, Ph-III (500 MW) 400 MW-Nov/Dec'17	Not attended Ph-I (250 MW) Commissioned Ph-II (750 MW) Nov'18 Pḥ-III (500 MW) Feb/Mar'18	400/220KV NP Kunta Pooling Station – Commissioned through LILO of Cuddapah – Kolar 400 kV line	Progress report has been sent through mail. Transmission is as per the schedule i.e. Oct'17/Nov'17. As per the grant of regulatory approval, transmission charges shall be

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			T		Τ	T	T.	100 MW-Mar'18)	T	T T	applicable till the
1								100 mm ma. 10)			COD of the
											generation
				Ì							project (to be
											borne by the
-		 									applicant).
									Ph-1:	LILO of 400kV Gooty -	Award issued &
									Sept'17(250 MW)	Tumkur	works in
			İ		l				Dec'17(350 MW+200	(Vasantnarsapur) D/c at	progress. 1x500 MVA ICT, Gooty-
									MW) For the bal 200 MW.	Tumkur (Pavagada)	Tumkur LILO at
					ĺ			Ph-1:	finalization of tender	Pooling station 1x500 MVA, 400/220KV	Tumkur and
								Jun'17(250 MW)	is under process by	Pooling station at	associated bays
	Karnataka							Sept'17-Dec'17(350	SECI and Kredi.	Tumkur (Pavagada),	are anticipated
	Solar Power							MW+200 MW)		1x125 MVAR BR at	with DOCO -
4	Development	2000	2000	0	0	0	Kar-600	For the bal 200 MW,	Internal Infrastructure	Tumkur (Pavagada),	Sep'17.
	Corporation			•	-	-	110.000	tendering is yet to	Schedule (220/66 kV	220 kV Bays (8 Nos.) at	As per the grant
	Limited			1				be initiated	pooling station + 220	Tumkur (Pavagada) PS	of regulatory
1								Ph-2: Sept'18	kV line) will be ready	for interconnection with	approval,
								(1000 MW)	by Sept 17	Solar project**	transmission
						:		(1000 10100)	Ph-2:	**4 nos. 220 kV bays for	charges shall be
									Tender is not	Phase-I (1000 MW) and	applicable till COD (to be borne
									finalized by NTPC.	balance 4 nos.	by the applicant).
							:		Sept'18	bays for Phase-II (1000	by the applicanty.
<u> </u>					ļ				(1000 MW)	MVV)	
											Representative
		and the same of th									informed that
						1					land
											corresponding to 160 MW has
										At 230 kV level	been acquired.
										through Mytrah	Award for internal
	Mytrah	Ì						Mar'18 (may vary for		wind farms – Tirunelveli PS 230kV	infrastructure is
5		75	30	0	45	0	Nil	4-5 months	Jun'18	D/c line with zebra	expected to be
	Ltd			_		_		depending on SECI	0411.70	conductor, along with	placed in 10-15
								LOA)		2 nos. of 230kV line	days.
						1				bays at the Tirunelveli	As per the grant
										PS	of regulatory approval,
											transmission
											charges shall be
											applicable till
	<u>L</u>										COD.
								Page 6 of 18			

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Minutes of 19th JCC Meeting of generation projects granted LTA in SR

_	Minutes or ישנה JCC Meeting or generation projects granted LTA in SR												
7	Suzion Power Infrastructure Ltd. Chandragiri Wind Farm	75	0	0	40	35	Nil	(Sent vide letter dated 18.03.2017) 75 MW - FY 18-19 75 MW - FY 19-20 75 MW - FY 20-21 75 MW - FY 21-22	250 MW – Mar'18 Balance 50 MW – Jun'18.	Suzion Power Infrastructure Ltd.(Chandragiri wind farm)-Tirunelveli P.S.(New) 230 kV D/c Line including line bays at both ends – in 15 th JCC developer informed that Work will start by 1 st week of April 17	Representative informed that land ~10-12 acres at 20-25 locations purchased. (~50 MW).		
8	M/s Suzion Power Infrastructure Ltd. Kumarapuram Wind Farm	75	0	0	40	35	Nil	(Sent vide letter dated 18.03.2017) 75 MW - FY 18-19 75 MW - FY 19-20 75 MW - FY 20-21 75 MW - FY 21-22	250 MW – Oct 18 50 MW – Mar 19	Suzion Power Infrastructure Ltd. (Kumarapuram wind farm)-Tirunelveli PS(New) 230 kV D/c Line including line bays at both ends — in 15 th JCC developer informed that Work will start by 1 st week of April 17	Representative informed that Connectivity is not expected to		
9	M/s Suzlon Power Infrastructure Ltd. Kadambur Wind Farm	75	0	0	40	35	Nil	(Sent vide letter dated 18.03.2017) 75 MW - FY 18-19 75 MW - FY 19-20 75 MW - FY 20-21 75 MW - FY 21-22	250 MW – Mar'19 50 MW – Sep'19	M/s Suzlon Power Infrastructure Ltd. (Kadambur wind farm)-Tirunelveli P.S. (New) 230 kV D/c Line including line bays at both ends — in 15 th JCC developer informed that Work will start by 1 st week of April'17	required in the current financial year.		

Generation Projects granted only Connectivity →

SI. No.	Connectivity Applicant	Connectivity Quantum (MW)	Comm. Schedule (TA/Intimation)	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Dedicated / Connectivity line & Status	Remarks
1	VSF Projects Ltd. (1x350 MW)	350	After establishment of Nellore PS, likely by Sept 14	Not attended Dec'18 (status as per 15 th JCC)	Not attended	Generation switchyard – Nellore PS 400kV D/c line – Sept'18	Representative repetitively not attending JCCs, accordingly it may be referred to Connectivity/ LTA committee of SR constituents for review.

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

SI. No.	Connectivity Applicant	Connectivity Quantum (MW)	Comm. Schedule (TA/Intimation)	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Dedicated / Connectivity line & Status	Remarks
2	Surana Power Ltd. (2x210 MW)	350	After establishment of Raichur (New), likely by Jan, 14	Not attended	Not attended	Generation switchyard – Raichur 400 kV D/c line	Representative repetitively not attending JCCs, accordingly it may be referred to Connectivity/ LTA committee of SR constituents for review.
3	M/s REGEN Wind Farms (Vagarai) Pvt. Ltd.	600	Phase-1 31.03.17 Phase-2 30.09.17 Phase-3 31.03.18 Phase-4 30.09.18 Phase-5 31.03.19	Phase-1 31.12.17 Phase-2 30.06.18 Phase-3 30.09.18 Phase-4 31.12.18 Phase-5 28.02.19	Phase-1 31.12.17 Phase-2 30.06.18 Phase-3 30.09.18 Phase-4 31.12.18 Phase-5 28.02.19	M/s REGEN Wind Farms (Vagarai) Pvt. Ltd. Regen PS — Pugalur 230 kV D/c (Twin Moose) line (including line bays at both the ends): Dec'17	Representative stated that bay construction – agreement signed. Connection agreement likely to be signed by next week. 700 acres of land (~400 MW) (financial sanction schedule to be sent on mail)
4	M/s Samalkot Power Limited	2214	Feb-2017	Not attended Feb'17 (status as per 17 th JCC)	Feb'17	Samalkot-Vemagiri-II (PG) 400 kV D/c Quad line (including line bays at both ends) 1x125 MVAR bus reactor at generation switchyard	No progress on the issue of allocation. (The representative in the earlier JCC stated that the commissioning schedule shall be informed based on Gas policy of Govt. of India which is awaited.)
5	M/s Inox Wind Infrastructure Services Ltd. (Aynaruthu Wind Farm)	500	Sept-2017	150 MW – Mar'19 150 MW – Jun'19 150 MW – Sep'19 50 MW – Oct'19	150 MW – Mar'19 150 MW – Jun'19 150 MW – Sep'19 50 MW – Oct'19	Inox PS-Tirunelveli PS 230 kV D/c (Single Moose) line (including line bays at both the ends)	12 hectares land acquired (~ 8 locations or 15-20 MW)
6	Renew Power Ventures Pvt. Ltd.	400 (NR – 200MW ER – 150MW WR – 50MW)	Phase-1 31.03.18 Phase-2 30.09.18 Phase-3 31.03.19 Phase-4 30.09.19	(Sent through mail) 100 MW – Sep'18 100 MW – Mar'19 100 MW – Sep'19 100 MW – Mar'20	100 MW - Sep'18 100 MW - Mar'19 100 MW - Sep'19 100 MW - Mar'20	Renew Power Ventures Pvt. Ltd-Pugalur 230kV D/c line along with bays at Pugalur & Generation switchyard	Letter for bay extension received. sale deed of 30 locations has been done.
7	Orange Sironj Wind Power Pvt. Ltd.	200	Phase-1 31.03.19 Phase-2 31.12.19	U-1: Mar'19 U-2: Dec'19	U-1: Nov'18 U-2: Feb'19	line along with bays at both ends	No action has been taken towards implementation of wind farm.
8	Regen Wind Farm (TN) Pvt. Ltd	384	Phase-1 01.03.18 Phase-2 01.05.18 Phase-3 01.07.18 Phase-4 01.03.19	Phase -1-01.03.18 Phase -2-01.05.18 Phase -3-01.07.18 Phase -4-01.03.19	Phase -1-01.03.18 Phase -2-01.05.18 Phase -3-01.07.18 Phase -4-01.03.19	lirunelveli PS 230kV D/c line along with bays at	Within one week bay extension agreement to be executed. 20 acres substation land purchased.

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

SI. No.	Connectivity Applicant	Connectivity Quantum (MW)	Comm. Schedule (TA/Intimation)	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Dedicated / Connectivity line & Status	Remarks
							Additional 7.5 acres for machines.
9	Ostro Alpha Wind Pvt. Ltd.	400	Phase-1 31.03.19 Phase-2 30.09.19 Phase-3 31.03.20 Phase-4 30.09.20	Not attended	No schedule submitted.	Ostro Alpha Wind — Tirunelveli PS 230kV D/c line along with bays at both ends	No action has been taken towards implementation of wind farm.
10	BLP Energy Pvt. Ltd.	250	Phase-1 31.08.18 Phase-2 20.12.18	Ph-l: 100 MW: Dec'18 Ph-ll: 150 MW: Mar'19	Ph-I: 100 MW: Dec'18 Ph-II: 150 MW: Mar'19		No action has been taken towards implementation of wind farm.
11	Greenmint Power Pvt. Ltd.	200	June'18	Not attended	No schedule submitted.	Greenmint Power – Tirunelveli PS 230kV S/c line along with bays at both ends	No action has been taken towards implementation of wind farm.
12	Gamesa Renewable Pvt. Ltd.	400	30 Sept-2019	Mar'19	Not attended Mar'19 (Sent through mail)	Gamesa Renewable – Tirunelveli PS 230kV D/c line along with bays at both ends : preliminary survey under progress	Acquired 15% of the land.
13	Green Infra Wind Energy Ltd.	250	31 Mar-2018	-	Mar'18	Green Infra Wind Energy Ltd.(250MW) - Pugalur	No action has been taken towards implementation of wind farm.



Table T1

<u>List of generation projects commissioned along with the dedicated/connectivity lines and further coordination not required</u>

HIGH CAPACITY TRANSMISSION CORRIDOR – VI (Transmission System Associated with IPPs in Krishnapatnam Area, Andhra Pradesh)

SI.	LTOA/LTA	LTOA	Target	Benefi	ciaries	Firm	Last updated status	Dedicated /	Remarks
No.	Applicant	Quantu m (MW)	SR	WR	NR	beneficiary		Connectivity line & Status	
1	Simhapuri Energy Private Limited (4x150 MW)	546	411	135	0	NIL	Commissioned (as per 12 th JCC)	SEPL/MEPL-Nellore 400kV quad D/c line & commissioned	
2	Thermal Powertech Corpn. India Ltd (2x660 MW)	1240	1125	115	0	Andhra Pradesh : 230.55 MW Telangana : 839.45 MW	U-1: Mar'15 (COD) U-2: Sep'15 (COD) (as per 13 th JCC)	TPCIL-Nellore PS 400kV quad D/c line by POWERGRID & commissioned	

HIGH CAPACITY TRANSMISSION CORRIDOR - VII (Transmission System Associated with IPP projects in Tuticorin Area, Tamil Nadu)

SI. No.	LTOA / LTA Applicant	LTOA	Target	Benefi	ciaries	Firm	Last updated status	Dedicated /	Remarks
		Quantu m (MW)	SR	WR	NR	beneficiary		Connectivity line & Status	
1	Coastal Energen Private Limited (2x600 MW)	1100	820	280	0	Tamil Nadu : 558 MW	(U1 & 2: Commissioned)	CEPL-Tuticorin PS 400kV quad D/c line (27km) - Oct 16	

HIGH CAPACITY TRANSMISSION CORRIDOR – XI (Transmission System Associated with IPP projects in Nagapattinam / Cuddalore Area, TN)

SI. No.	LTOA / LTA	LTOA	Target	Benefi	ciaries	Firm	Last updated status	Dedicated /	Remarks	
	NO.	Applicant	Quantu m (MW)	SR	WR	NR	beneficiary		Connectivity line & Status	
	1	PEL Power Limited (3x350 MW)	987	700	0	287	NIL	Project uncertain.	PEL-Nagapattinam PS 400kV guad D/c	CERC has pronounced

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

									choration projects granted ETA in SIC
								line	315/MP/2013 filed by PELPL wherein CERC has inter alia declined the relief under force majeure clause of BPTA to PELPL and has held that PELPL may seek relinquishment of LTA which shall be effective from 26.7.2013 and subject to relinquishment charges as per decision in CERC Petition No. 92/MP/2015. PEL has filed appeal against order of CERC in APTEL.
2	IL & FS Tamil Nadu Power Company Limited (2x600 MW)	1150 1080	575	575 505	0	Tamil Nadu: 540 MW	U-1: Sep'15 (COD) U-2: Apr'16 (COD)	IL&FS-Nagapattinam PS 400kV quad D/c line Commissioned	

Other Generation Projects – Granted Connectivity & LTA

SI. No.	LTOA / LTA Applicant	LTOA Quantum (MW)	Target Beneficiaries			ries	1 :	Latest updated		Remarks
			WR	NR	ER	SR	beneficiary	status	Connectivity line & Status	
1	Telangana State Southern Power Distribution Company Ltd. (TSSPDCL)	2000	2000	0	0	0	Telangana - 2000	Not attended		400 kV Ex-bus at Marwa Thermal Power plant connected to Chhattisgarh STU(for 1000MW)

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

Status of the Associated Transmission System →

HIGH CAPACITY TRANSMISSION CORRIDOR – VI (Transmission System Associated with IPPs in Krishnapatnam Area, Andhra Pradesh)

 Common System Associated With ISGS Projects in Krishnapatnam Area of Andhra Pradesh: All elements have been commissioned. The details of elements are as below:

SI. No.	Scope of Transmission System
1	Establishment of 765/400 kV, 2x1500 MVA pooling station at Nellore by LILO of Simhapuri-Nellore 400 kV D/c quad line
2	Nellore Pooling station – Kurnool 765 kV D/c line
3	Kurnool – Raichur 2 nd 765 kV S/c line
4	Associated 765 kV & 400 kV bays at Nellore Pooling station, Kurnool and Raichur stations

HIGH CAPACITY TRANSMISSION CORRIDOR – VII (Transmission System Associated with IPP projects in Tuticorin Area, Tamil Nadu)

 Common system associated with Coastal Energen Pvt. Ltd.(CEPL) and Ind-Bharat Power (Madras) Ltd. LTOA generation projects in Tuticorin Area – Part-A: All elements of Part-A have been commissioned. The details of elements are as below:

SI. No.	Scope of Transmission System
1	Establishment of 765 kV pooling station in Tuticorin (Initially charged at 400 kV) including 1x80 MVAR bus reactor
2	LILO of both circuits of Tuticorin JV – Madurai 400 kV D/c (quad) line at Tuticorin Pooling Station

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

 Common system associated with Coastal Energen Pvt Ltd.(CEPL) and Ind-Bharat Power (Madras) Ltd. LTOA generation projects in Tuticorin Area – Part-B

SI. No.	Scope of Transmission System	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Remarks
1	Establishment of 765/400 kV Pooling Station at Salem (Initially charged at 400 kV).	Commissioned	Commissioned	
2	Tuticorin Pooling station – Salem Pooling station 765 kV D/c line initially charged at 400 kV.	Commissioned	Commissioned	
3	Interconnection of Salem pooling station with existing Salem 400/230 kV substation through 400 kV D/c (quad) line.	Commissioned	Commissioned	
4	Salem pooling station – Madhugiri pooling station 765 kV S/c initially charged at 400 kV.	June'17	Dec'17	Anticipated commissioning Dec'17

HIGH CAPACITY TRANSMISSION CORRIDOR – VIII (Transmission System Associated with IPP projects in Srikakulam Area, Andhra Pradesh)

 Common System Associated With East Coast Energy Private Limited And NCC Power Projects Limited LTOA Generation Projects In Srikakulam Area – Part-A&C

SI. No.	Scope of Transmission System	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Remarks
1	Establishment of 765/400 kV Pooling Station at Srikakulam with 2x1500 MVA transformation capacity	Commissioned	Commissioned	
2	Srikakulam Pooling Station - Angul 765 kV D/c line	Commissioned	Commissioned	

 Common System Associated With East Coast Energy Private Limited And NCC Power Projects Limited LTOA Generation Projects In Srikakulam Area – Part-B

SI. Scope of Transmission System	Comm. schedule	Comm. schedule	Remarks
No.	(18 th JCC)	(19 th JCC)	

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

1	2 nd Angul – Jharsuguda 765 kV D/c line	June'17	Dec'17	
2	2 nd Jharsuguda – Dharamjaigarh 765 kV D/c line	June'17	Dec'17	
3	Associated 400kV & 765 kV bays at Angul, Jharsuguda & Dharamjaigarh substations.	June'17	Dec'17	

HIGH CAPACITY TRANSMISSION CORRIDOR – XI (Transmission System Associated with IPP projects in Nagapattinam / Cuddalore Area, Tamil Nadu)

Common Transmission System Associated with ISGS Projects in Nagapattinam/Cuddalore Area of Tamil Nadu - Part-A1(a):
 All elements of Part-A1(a) have been commissioned. The details of elements are as below:

SI. No.	Scope of Transmission System
1	Establishment of 765/400kV GIS Pooling station at Nagapattinam with 4x1500 MVA transformer(initially charged at 400 kV)
2	LILO of Neyveli – Trichy 400kV S/c line at Nagapattinam Pooling Station for interim arrangement which later shall be bypassed

<u>Transmission System under the Scope of Private Sector</u>:

SI. No.	Scope of Transmission System	Comm. schedule (18 th JCC)	Comm. schedule (19 th JCC)	Remarks
1	Nagapattinam Pooling Station – Salem 765kV D/c line	Commissioned	Commissioned	
2	Salem – Madhugiri 765 kV S/c line (TBCB)	Mar'18	Mar'18	

Status of other Transmission System associated with LTA customers

SI. No	LTA Applicant	Transmission System	Status (as per 18 th JCC)	Status (as per 19 th JCC)	Remarks
1	Neyveli Lignite	LILO of Neyveli – Pondicherry at NNTPS	April'18	April'18	
	Corporation Limited (Replacement)	NNTPS switchyard –Ariyalur (Villupuram) 400kV D/c line	April'19	April'19	

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

SI. No	LTA Applicant	Transmission System	Status	Status	Remarks
	The state of the s	Ariyalur (Villupuram) 400kV S/S 2x500 MVA	(as per 18 th JCC) April'19	(as per 19 th JCC) April'19	Under TANTRANSCO scope
	Andhra Pradesh Solar Power Corporation Pvt Ltd	Phase-I (250 MW) Establishment of 3x500 MVA, 400/220KV Substation at NP Kunta Pooling Station LILO of 400KV Kadapa(Cuddapah) - Kolar S/c line at NP Kunta Pooling Station 2 nos. 220kV line bays at NP Kunta Pooling Station 1x125 MVAR Bus Reactor at NP Kunta Pooling Station ±100 MVAR STATCOM at 400kV NP Kunta Pooling Station Phase-II (750 MW) LILO of Kadapa(Cuddapah) - Hindupur 400kV D/c (Quad) line at NP Kunta Pooling Station 6 nos. 220kV line bays at NP Kunta Pooling Station Phase-III(500 MW) Augmentation of transformation capacity at NP Kunta station with 4th, 1x500 MVA, 400/220kV transformer 4 nos. 220kV line bays at NP Kunta Pooling Station	Commissioned Commissioned Commissioned Commissioned May'17 Progressively from Oct'17 matching with generation. Oct'17 (on best effort basis) matching with generation.	Commissioned Commissioned Commissioned Commissioned - Oct'17/Nov'17 Nov'17	
3	Karnataka Solar Power Development Corporation Limited	Phase-I (1000 MW) a.Tumkur (Pavagada) Pooling station-Hiriyur 400 kV D/c (as part of Tumkur(Pavagada) Pooling station — Mysore line) b.LILO of 400kV Bellary Pool — Tumkur (Vasantnarsapur) D/c (Quad)(both circuits)[KPTCL line] at Tumkur Pooling station* c.Augmentation of 2x500 MVA, 400/220 kV transformer at Tumkur (Pavagada) Pooling	Progressively from Sep'17 (on best effort basis)	Progressively from Sep'17 (on best effort basis)	

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Minutes of 19th JCC Meeting of generation projects granted LTA in SR

SI. No	LTA Applicant	Transmission System	Status (as per 18 th JCC)	Status (as per 19 th JCC)	Remarks
		station *KPTCL would complete Bellary pooling station -Tumkur (Vasantnarsapur) line D/c(Quad) by December- 2016 Phase-II (1000 MW) a.Hiriyur - Mysore 400 kV D/c line \$ b. Fixed series capacitor (40%) on 400kV Tumkur (Pavagada) - Tumkur (Vasantnarsapura) D/c (Quad) line at Tumkur(Pavagada) PS end c.Augmentation of 2x500 MVA, 400/220KV transformer at Tumkur (Pavagada) Pooling station d.1x125MVAR bus reactor (2nd) at Tumkur (Pavagada) Pooling Station e.Third 400/220 kV, 1x500 MVA transformer at Tumkur (Vasantnarsapur) f.1x80 MVAR switchable Line reactor at Mysore end of Hiriyur- Mysore D/c line for each circuit \$ (after completion of this line, one circuit of this line would be connected with one ckt of Tumkur-Hiriyur line so as to makeTumkur-Mysore direct line) **For additional ATS for Tumkur(Pavagada): 400kV Tumkur (Pavagada) - Devanhalli D/c (Quad) line with some portion on multi-circuit towers was agreed.	Progressively from Sep'18	Progressively from Sep'18	
4	Mytrah Energy(India) Ltd	Establishment of 2x500 MVA, 400/230 kV (GIS) S/s at Tirunelveli Pooling Station.	Mar'18	Mar'18	
		Tirunelveli pooling station-Tuticorin pooling station 400 kV 2xD/c (Quad) lines	Mar'18	Mar'18	
		2x125 MVAR Bus Reactors at 400kV Tirunelveli Pooling Station	Mar'18	Mar'18	

Minutes of 19th JCC Meeting of generation projects granted LTA in SR

Annexure-l

List of Participants in the 19th Joint Co-ordination Committee meeting of Generation projects granted LTA in SR held on 16.06.2017

SI. No.	Name	Designation	Organization	E-mail
1.	Prabhat Gujral	Consultant	Sembcorp Gayatri Power Project	prabhatgujral@gmail.com
2.	Anil Asthana	Advisor	Smalkot Power Ltd.	Sameer.ku.gupta@relianceada.com
3.	Pavan Gupta	Asst. Manager	Orange Sironj Wind Power Pvt. Ltd.	pavangupta@orangerenewable.net
4.	R. Srinivasan	Vice President (Corp.)	East Coast Energy Pvt. Ltd.	srinivasan.r@eastcoastenergy.in sherrysrini@gmail.com
5.	Kiran V	GM	Mytrah Energy (India) Ltd	v.kiran@mytrah.com
6.	D Basava Raju	CEO	KSPDCL	ceokspldcl@gmail.com
7.	R. Senthil Kumar	AGM	NLC India Ltd.	senthilkumar.r@nlcindia.com
8.	Swaroop lyer	Manager	BLP Energy Pvt. Ltd.	swaroop.iyer@enel.com
9.	Dheeraj Jain	AGM _ regulatory Affairs	Regen Wind Farms (Vagarai) Pvt. Ltd.	<u>Dheeraj j@regenpowertech.com</u>
10.	Awnish Pandey	Deputy Manager	Inox Wind Infrastructure Services Ltd	awnish.pandey@inoxwind.com
11.	Alok Gupta	GM-PE	Inox Wind Infrastructure Services Ltd	alok@inoxwind.com
12.	Kapil Kasolia	VP-Business Development	Sembcorp Green Infra Ltd	kapil.kasolia@sembcorp.com
13.	Manoj Sharma	AGM	Sembcorp Green Infra Ltd.	manoj.sharma@sembcorp.com
14.	Rakesh Rathore	DGM	Green Infra Wind Energy Ltd.	rakesh.rathore@gmail.com
15.	S. Vinod	AVP	Renew Power Ventures Pvt. Ltd.	vinod@renewpower.in
16.	Suveen Vyas	DGM (PP & M)	NTPC Ltd.	suveenvyas@ntpc.co.in
17.	G. Rama Krishna	S.B	AP Genco	rk-ntpc@yahoo.co.in
18.	Vinay Garg	DGM	NTPC Ltd.	vinaygarg@ntpc.co.in

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Minutes of 19th	JCC Meeting of gen	eration omiects an	anted ITA in SR

	Minutes of 19th JCC Meeting of generation projects granted LTA in SR				
SI. No.	Name	Designation	Organization	E-mail	
19.	SR Singhal	Sr. EM	WWIL	srsinghal223@gmail.com	
20.	K.A. Vishwanath	Head P.M	Ostro Alpha Wind Pvt. Ltd.	k.vishwanath@ostro.in	
21.	NSM Rao	Advisor	Suzion Power Infra Ltd.	Nsm.rao@suzlon.com	
22.	Naresh Panchal	VP	Suzion Power Infra Ltd.	pnaresh@suzlon.com	
23.	Mohan B	Sr. Engineer	Greenmint Power Pvt. Ltd.	projects@greenmintpower.com	
24.	Deepak Kumar	Engineer (BDD)	Power Grid Corporation of India Ltd.	Kumar.deepak@powergridindia.com	
25.	Sandeep Kumar	Deputy Manager (SG)	Power Grid Corporation of India Ltd.	sandeepk@powergridindia.com	
26.	B P Kundu	AGM (BDD)	Power Grid Corporation of India Ltd.	bpkundu@powergridindia.com	
27.	D N Rozekar	AGM (CTU-Plg.)	Power Grid Corporation of India Ltd.	drozekar@powergridindia.com	
28.	Mukesh Khanna	AGM (CTU-Plg.)	Power Grid Corporation of India Ltd.	mkhanna@powergridindia.com	
29.	V Thiagrajan	DGM (CTU-Plg)	Power Grid Corporation of India Ltd.	vthiagarajan@powergridindia.com	
30.	Jyoti Prasad	DGM (CTU-Plg.)	Power Grid Corporation of India Ltd.	nishantjyoti@yahoo.com	
31.	Rajesh Verma	CDE (CTU-Plg.)	Power Grid Corporation of India Ltd.	rverma@powergridindia.com	
32.	Kamal Kumar Jain	Chief Manager (Commercial)	Power Grid Corporation of India Ltd.	kkjain@powergridindia.com	
33.	Anil Kumar Meena	CDE (CTU-Plg.)	Power Grid Corporation of India Ltd.	anilsehra@powergridindia.com	
34.	Laxmi Kant	Manager (CTU-Plg)	Power Grid Corporation of India Ltd.	laxmikant@powergridindia.com	
35.	Vms Prakash Yerubandi	Deputy Manager (CTU-Plg)	Power Grid Corporation of India Ltd.	yvmsprakash@powergridindia.com	
36.	Swapnil Verma	Officer (Law)	Power Grid Corporation of India Ltd.	swapnilverma@powergridindia.com	
37.	Dwaipayen Sen	Engineer (CTU - Plg.)	Power Grid Corporation of India Ltd	dwaipayen@powergridindia.com	
38.	Himanshi	Engineer (CTU - Plg.)	Power Grid Corporation of India Ltd	himanshi@powergridindia.com	

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Annexure-2

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***************************************		ST	ATUS OF GENERATION PE	ROJECTS:		
Name 🧲	ithe Applicant & A	Address: M/s.SUZLON PO	WER INFRASTRUCTURE LIMITED-PUNE	*		
Sl.No:	tem				Status / Information	
1	Generation location	on:		CHANDRAGIRI		
	Location of power	project (Name of the Vill	lage/town/District/State)	Valasamuthiram /	Valasamuthiram / Ottapidaram / Tuticorin	
		o of the project site on to projects in the Vicinity	po sheets to gather relative locations of	**************************************		
	attitude and Long	gitude of the project site	:	44 P 181784 9849	16	
2	Land:	· · · · · · · · · · · · · · · · · · ·				
SI.No:		Govt Land	Pvt.Land	Forest Land	Total Land	
1	Total Land		YES		720 acres (approx.)	
2	Acquired		YES		240 Acres Acquired	
3	Possessed		YES		160 Acres in posession	
	Status of Land to be acquired like date of notification for and date of aquisition etc., (Attach a copy of deed of sale agreement for Private land & Agreement to sale for Govt.Land)			Not Applicable - Private Land - No. Negotiation required		
3	Fuel:			Not Applicable as	per TNEB Norms	
	Type of Fuel (Gas/	domestic coal/imported	coal/Hydro)	Not applicable		
	Staus of fuel tie-up for total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage (Attach c copy of fuel supply agreement. In case of coal mine allotted its development status)					
4	Water:		**************************************	Not applicable		
			ned State irrigation department (Attach a /central water commission and Ministry of			
5	Environment Clearance :			Not applicable as	per TNEB Norms	
	Status of in principle approval from concerned administrative authority respon for according final approval in the central/State govt as the case may be. (Atta copy of Environement clearance from MoEF)		State govt as the case may be. (Attach a			
6	MoEF CRZ Clerano	e (If Applicable-Attach a	separate copy from MoEF)	Not applicable		
7	Equity Infusion:					
	Board resolution of promoting company / companies to infuse equity (Attach a copy)			Not applicable		



Item Forest clearance:	Status / Information
forest clearance:	
	Not Applicable as per TNEB Norms
Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF)	
Pollution Clearance:	Not Applicable as per TNEB Norms
CFE (Consent for establishment from State pollution control Board) (Attach a copy)	
Clearance from Ministry of Defense (Attach a copy)	Not Applicable as per TNEB Norms
Clearance from Archeological Deptt. (Attach a copy)	Not Applicable as per TNEB Norms
Civil Aviation clearance from Chimney Height (Attach a copy)	Not Applicable as per TNEB Norms
EPC Contract Status:	
Source/Manufacturer of Main plant (BTG)	SS Lnd procured. SS Plot Survey and Soil ivestigation completed. Vendor finalisation completed. Windfarm
Date of placement of contract for main plant (Attach Acknowledgement copy of LOA)	substation civil work will start in 1st week of October. 15 Foundations completed. Another 10 foundations will be completed by end of this month.
Date of NTP issued	
Status of PPA with benificiaries including case-1 bids if applied for	v v
Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank)	
Expected Unit wise proposed commissioning schedule: a)Unit-I: b)Unit-II: c)Unit-III d)Unit-IV:	a)75 MW - FY 17-18 b)75 MW - FY 17-18 c)75MW- FY 18-19 d)75MW- FY 18-19
Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any	75MW
Status of dedicated tranmission line, if any	22.4 Kms - 83 towers - 230 KV line Route Survey completed. Tower Schedule and Route Profile was submitted to Chief Engineer Power System Planning & Appraisal II division for approval of laying the transmission line under section 68 of Electricity Act 2003. EHV line contrctor is finalized and at present check survey Is under progress. For 33 KV, Railway crossing, discussed with Railway authorities (Addl Dev. Engr). Site visit completed. Proposal is being submitted.
	Pollution Clearance: CFE (Consent for establishment from State pollution control Board) (Attach a copy) Clearance from Ministry of Defense (Attach a copy) Clearance from Archeological Deptt. (Attach a copy) Civil Aviation clearance from Chimney Height (Attach a copy) EPC Contract Status: Source/Manufacturer of Main plant (BTG) Date of placement of contract for main plant (Attach Acknowledgement copy of LOA) Date of NTP issued Status of PPA with benificiaries including case-1 bids if applied for Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank) Expected Unit wise proposed commissioning schedule: a)Unit-III d)Unit-IV: Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any

EN Rayanja (2017)

N.RAMANI
(HEAD-TAMIL NADU & KERALA STATES)



STATUS OF GENERATION PROJECTS:

SI.No:	item		Status / Information			
ı.	Generation locati	on:		CHANDRAGIRI		
	Location of power	project (Name of the Vill	Valasamuthiram y	Valasamuthiram / Ottapidaram / Tuticorin		
		o of the project site on top projects in the Vicinity	Details enclosed 44 P 181784 984916			
:	Lattitude and Long	gitude of the project site				
2	Land:					
Sl.No:		Govt Land	Pvt.land	Forest Land	Total Land	
1	Total Land		YES		720 acres (approx.)	
2	Acquired		YES		240 Acres Acquired	
3	Possessed		YES	·	160 Acres in posession	
3.	Govt.Land)		Not Applicable - Private Land - No. Negotiation requir Not Applicable as per TNEB Norms			
	Type of Firel (Grei	domestic coal/imported	Not applicable			
	normative availab	p for total quantity of fue ility. Indicate status of mi ement. In case of coal m				
			·	1100 and 1440 and		
4	Water:			Not applicable		
	Water: Status of in princip		ned State Irrigation department (Attach a /central water commission and Ministry of			
	Water: Status of in princip copy of water sup	ply agreement with state			per TNEB Norms	
5	Water: Status of in princip copy of water sup water resources) Environment Clea Status of in princip for according final	ply agreement with state rance: ple approval from concern	central water commission and Ministry of Ministry of Ministry of Ministrative authority responsible State govt as the case may be. (Attach a		per TNEB Norms	
5	Water: Status of in princip copy of water sup water resources) Environment Clea Status of in princip for according final copy of Environen	ply agreement with state trance : ple approval from concert approval in the central/S nent clearance from MoE	central water commission and Ministry of Ministry of Ministry of Ministrative authority responsible State govt as the case may be. (Attach a		per TNEB Norms	

Sl.No:	Item	Status / Information
8	Forest clearance:	Not Applicable as per TNEB Norms
	Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF)	
9	Pollution Clearance:	Not Applicable as per TNEB Norms
	CFE (Consent for establishment from State pollution control Board) (Attach a copy)	
10	Clearance from Ministry of Defense (Attach a copy)	Not Applicable as per TNEB Norms
11	Clearance from Archeological Deptt. (Attach a copy)	Not Applicable as per TNEB Norms
12	Civil Aviation clearance from Chimney Height (Attach a copy)	Not Applicable as per TNEB Norms
13	EPC Contract Status:	:
	Source/Manufacturer of Main plant (BTG)	
	Date of placement of contract for main plant (Attach Acknowledgement copy of LOA)	SS land Procurement nearing completion, Vendor Finalisation is under Progress.
***************************************	Date of NTP issued	
14	Status of PPA with benificiaries including case-1 bids if applied for	
15	Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank)	
16	Expected Unit wise proposed commissioning schedule: a)Unit-I: b)Unit-II: c)Unit-III d)Unit-IV:	a)75 MW - FY 17-18 b)75 MW - FY 17-18 c)75MW- FY 18-19 d)75MW- FY 18-19
17	Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any	75MW
18	Status of dedicated tranmission line, if any	22 Kms - 82 towers - 230 KV line Route Survey Profile under progress. In the near near future it will be completed

N.RAMANI
[HEAD-TAMIL NADU & KERALA STATES]

STATUS OF GENERATION PROJECTS: Name ← the Applicant & Address: M/s.SUZLON POWER INFRASTRUCTURE LIMITED-PUNE Item Status / Information Generation location: KUMARAPURAM Location of power project (Name of the Village/town/District/State) Athanoor / Ottapidaram / Tuticorin Detail vicinity map of the project site on topo sheets to gather relative. locations of Details enclosed other generation projects in the Vicinity Lattitude and Longitude of the project site 44 P 179285 998002 SI.No: Govt Land Pvt.Land Forest Land **Total Land** 1 Total Land YES 720 acres (approx.) 2 Acquired YES Work in Progress 3 Possessed YES Work In Progress Status of Land to be acquired like date of notification for and date of aquisition etc., (Attach a copy of deed of sale agreement for Private land & Agreement to sale for Not Applicable - Private Land - No. Negotiation required Govt.Land) Fuel: Not Applicable as per TNEB Norms Type of Fuel (Gas/domestic coal/imported coal/Hydro) Not applicable Staus of fuel tie-up for total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage (Attach c copy of fuel supply agreement. In case of coal mine allotted its development status) Water: Not applicable Status of in principle approval from concerned State Irrigation department (Attach a copy of water supply agreement with state/central water commission and Ministry of water resources) **Environment Clearance:** Not applicable as per TNEB Norms Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF) MoEF CRZ Clerance (If Applicable-Attach a separate copy from MoEF) Not applicable **Equity Infusion:** Board resolution of promoting company / companies to infuse equity (Attach a copy) Not applicable

	STATUS OF GENERATION PR	OJECTS:
SI.No:	tem	Status / Information
8	Forest clearance:	Not Applicable
	Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF)	Not Applicable
9	Pollution Clearance:	Not Applicable
	CFE (Consent for establishment from State pollution control Board) (Attach a copy)	Not Applicable
10	Clearance from Ministry of Defense (Attach a copy)	Not Applicable
11	Clearance from Archeological Deptt. (Attach a copy)	Not Applicable
12	Civil Aviation clearance from Chimney Height (Attach a copy)	Not Applicable
13	EPC Contract Status:	
	Source/Manufacturer of Main plant (BTG)	
	Date of placement of contract for main plant (Attach Acknowledgement copy of LOA)	SS land Procurement nearing completion, Vendor Finalisation is under Progress.
	Date of NTP issued	
14	Status of PPA with benificiaries including case-1 bids if applied for	Not Applicable
15	Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank)	Not Applicable
16	Expected Unit wise proposed commissioning schedule: a)Unit-I: b)Unit-II: c)Unit-III d)Unit-IV:	a)75 MW - FY 2018 - 19 b)75 MW - FY 19-20 c)75MW- FY 20-21 d)75MW- FY 21-22
17	Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any	75MW
18	Status of dedicated tranmission line, if any	Survey work nearing completion - Route & Profile under finalisation

EN ROJANI

N.RAMANI

(HEAD TAMIL NADU & KERALA STATES)

Me for	Kumara	puram 230/33 KV Sub	Station	Cap	No	Village	Taluk	Substation
lo Loc.	No IS	F.No			1	Amidner	Ettalyapuram	Kumatapuram
1 Hew		9(P)	M/s. Shubh Realty (South) P		T	Athangor	Ottopidaram	Kumerapuram
2 New		53/2(P)	Mrs. Shubh Realty (South) P			Athoor	Otteolderent	Kumarapuram
3 New		6/6(P),7(P),8(P),9(P)	M/s. Shubh Realty (South)	2.3		Kemarachi	opur Ottopidacam	Kumarapuram
4 New	-	79/1 -	M/s. Suzion Engitech Ltd	1 2		[womerach)	yapuri Ottapidaram	Kumarapuram
		19/1(P),20/2(P)	M/s.Suzion Engitech Ltd	2.		Vellacom	Ottapidaram	Komarapuram
5 New	***************************************	30/2(P)	M/s. Suzion Engitech Ltd			Muthuram	alingar Ottapidaram.	Kumarapuram
BINEW		69/2:3(P)	H/S. Shubh Realty (South)		-	Princayart	hanem Kovilpatti	Kumarapuram
7 Hev		117/1(P)	IM/s. Shubh Realty (South)	4 - 4		Michiga M	sthukulottapidaram`	Kumarapuram
BJKMI		37/3A,30(P)	M/s. Shubh Realty (South)	<u>u - 2</u>	<u>1 1</u>	Irottamoar	amou lottapidaram	Kumarápurám
3 KM	_	184/2A(?),28(F)	M/s. Shubh Realty (South)	4 - 4	7 1	IVALIATION:	ambu Ottapidaram	Kumarapuram
10 Hz	-	295/2(P)	M/s. Shubh Realty (South)			(Veimarae)	tycour octapidarem	Krimatsbritam
11 Ne		17871A(P),1B(P)	N/s. Shubh Realty (South		131 1	Igungavor	thonam Ettatyapuram	Kumarapuram
12\Ne		385/1(P),A(P)	M/s. Shubh Realty (South		2.1	T Shung	ugapuri Ettalyapuram	Kumatapuram
13 Ne	14		M/s. Suzion Gujarat Wind			i la remand	kennatti Ottapidaram	LEGITATION OF THE PARTY OF THE
14 K)	16300	87/2A(P) 16/1C(P).18/5C(P)	IMA Surion Gularat Wind	20		* icabbam	maloural Vilabiliculam	Kumarapuram
	ME219	23/4(P),36/4(P)	Ture Straton Gularat Wind	1 20	-	· ISALicam	malpurativilathikusam	Kumarapuram
	MEZSS	123/4(1)430/4(1)	July Syrion Gularat Will	1 Pal		* Politerno	arambu (Ottapidaram	Kumarapuram
	ME301	274/1(P),Z(P)	eur Surion Gujarat Will	3 PO	-	1 Kattuna	Renparti Ottenidarem	1 TOUR CONTRACTOR
	HEZ54	[198/1(P)	lute Serton Gutarat Will	o rei	2.1	Chande	neirl Ottapidaram	1 Mariatabara
	ME215	111/4(P),5(P)	Links Currien Gularat Will	G Pal	2.1	Californ	rmaloural Vilothikularr	Kumarapuram
	CHEZ10	195/28(P): 382/6,7(P),384/1(P),2	CARL DATA Englon Guidrat MI	10. F-01	2:1	. Callen	nmaloural Vilathikulan	n Romana
	KME302	1382/6,/(٢),50-17-10-11-	I have Serrion Guinrat Will	IO PO	2.1	Calle	nonalouro i Vilethikular	n indianapar
	KME303	2/1(P)	leare Surion Gujarat Wi	10 10		Manta	indi Venice Ottapidorai	m - INUITED
	KME283	191/3(P)	large curion Gularat Wa	UO hal	2.1	Satrka	mmaloural Wiathikula	The Indicate of Indicate of the Indicate of In
	XME289	64/38(P),3D(P)	INTE STOTION GUISTEE WI	DO PA	2.1	a dicare	summitted lopeolanna	m Individual
25	KMEJ04	(375/38(P)	the state of the s	100 10	***************************************	1 P.Der	asamioura (Ottopidata)	1111
26	XME306	[598/1E(P)	Conton Guidelle W	ma ra	2.1	inther	Ottapidara	1513
27	KME67	Z26/5A(P) SB(C) 644	M/s. Suzion Gojarat W	Ind Pol	and the second services.	To Par	parettiaguri Kovlipatti	Kumarapuram
	KME28		Ture Surion Guiarat V	mo rai	2.1	1 Salek	ammaloura (Vilothikuli	em (Kumarapuram
29	KME30	168/1(P)	Truste Straigh Guistal V	ring rei	2,1	1 James	he-inden potti Vilethikul	am month
30	KME30	7 (314/1(P), 4(P)	into Corlon Gularat V	nno roi	2.1		or Mothered Ottapidar	The state of the s
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STATUS OF GENERATION PROJECTS: Name Othe Applicant & Address: M/s.SUZLON POWER INFRASTRUCTURE LIMITED-PUNE SI.No: Status / Information Generation location: **KADAMBUR** Location of power project (Name of the Village/town/District/State) Sundaresapuram / Kovilpatti / Tuticorin Detail vicinity map of the project site on topo sheets to gather relative locations of Details enclosed other generation projects in the Vicinity Lattitude and Longitude of the project site 43 P 813793 1002543 Land: Sl.No: Govt Land Pvt.Land **Forest Land Total Land** 1 Total Land YES 720 acres (approx.) 2 Acquired YES Work in Progress 3 Possessed YES Work in Progress Status of Land to be acquired like date of notification for and date of aquisition etc., (Attach a copy of deed of sale agreement for Private land & Agreement to sale for Not Applicable - Private Land - No. Negotiation required Govt.Land) Not Applicable as per TNEB Norms Type of Fuel (Gas/domestic coal/imported coal/Hydro) Not applicable Staus of fuel tie-up for total quantity of fuel required to generate full power at normative availability, indicate status of mine allocation or fuel linkage (Attach c copy of fuel supply agreement. In case of coal mine allotted its development status) Not applicable Status of in principle approval from concerned State irrigation department (Attach a copy of water supply agreement with state/central water commission and Ministry of water resources) **Environment Clearance:** Not applicable as per TNEB Norms Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF) MoEF CRZ Clerance (If Applicable-Attach a separate copy from MoEF) Not applicable **Equity Infusion:** Board resolution of promoting company / companies to infuse equity (Attach a copy) Not applicable

	STATUS OF GENERATION PR	OJECTS:
SI.No:	Item	Status / Information
8	Forest clearance:	Not Applicable as per TNEB Norms
	Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF)	
9	Pollution Clearance:	Not Applicable as per TNEB Norms
	CFE (Consent for establishment from State pollution control Board) (Attach a copy)	
10	Clearance from Ministry of Defense (Attach a copy)	Not Applicable as per TNEB Norms
11	Clearance from Archeological Deptt. (Attach a copy)	Not Applicable as per TNEB Norms
12	Civil Aviation clearance from Chimney Height (Attach a copy)	Not Applicable as per TNEB Norms
13	EPC Contract Status:	
	Source/Manufacturer of Main plant (BTG)	
	Date of placement of contract for main plant (Attach Acknowledgement copy of LOA)	SS land Procurement nearing completion, Vendor Finalisation is under Progress.
	Date of NTP issued	
14	Status of PPA with benificiaries including case-1 bids if applied for	
15	Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank)	
16	Expected Unit wise proposed commissioning schedule: a)Unit-I: b)Unit-II: c)Unit-III d)Unit-IV:	a)75 MW - FY 2018 - 19 b)75 MW - FY 19-20 c)75MW- FY 20-21 d)75MW- FY 21-22
17	Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any	75MW
18	Status of dedicated tranmission line, if any	Survey work nearing completion - Route & Profile under finalisation

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(HEAD-TAMIL NADU & KERALA STATES)

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talis for Kada No Loc No	SF.No	Customer Name	Cap	No	Village	Taluk	Substation
1 New	62/1(P),2(P)	M/s. Shubh Realty (South) P	·			Ottepidarem	Kadamour
2 New		M/s. Shubh Realty (South) F			Sävarimangalam		Kadampur
3 New	46/28(P)	M/s. Shubh Realty (South) F	-			Ottapldaram	Kadampur
4 New	345/2(P),3(P),347/1(P)	M/s. Shuth Realty (South) F		1	Moramban	Ottapidaram	Kadampur
5 New	243(P)	M/s. Shubh Realty (South)				Ottabidaram	Kadamour
6 Hew	(101/1(P),2(P)	M/s. Shubh Realty (South) I			Venkateshiyaran	Ottapidaram	Kadampur
7 New	1692/1(2)	M/s. Shubh Realty (South) I	·		Savorimangalam	Ottepidaram	Kadampur
8 New	582/2(P),584/2(P),586/2(P)	Fl/s. Shubh Realty (South) I	2.1	1 1	Sangempatti	Ottapidaram	Kadampur
9 New	372/5(P),374(P)	M/s. Shubh Realty (South)		L	Sangemoatti	Ottapidarem	Kadampur
10 New	547(P),548(P),549(P),550(P)	M/s. Shubh Realty (South)	2.1	1	Sangampattl	Ottopidaram	Kadampur
11 New	17/13(P);14(P)	M/s. Shebh Realty (South)		ı ı	Keelamudiman	Ottapidaram.	Kadampur
12 New	440/1(2)	M/s. Shubh Realty (South)	2.	I L	Parivillikottal	Ottepidarem	Kadampur
13 New	495/1 62(P),498(P)	Jy/s.Suzion Engitech Ltd	2.	1 1	Muramban	Oltapidaram	Kadampur
14 New	128(P),129(P)	M/s. Shubh Realty (South)	2.	1 1	Savarimangalar	n Ottapidaratn	Kadampur
15 New	270(P)	IM/s. Suzion Engliech Ltd	1 2	1 1	Aralkulam	Ottapidaram	Kadampur
16 New	7.5/L(P),2	M/s. Shubh Realty (South)	L 2.	1 1	Araikulam	Ottapidaram	Kadampur
17 New	108(P)	M/s. Suzian Engitech Ltd	2.	1 1	" Duralsamlourar	olOttapidaram	Kadampur
18 New	109/3C2(P)	Ms. Suzion Engitech Ltd	2.	1 1	Meenakshipura	dOttapidaram	Kadampur
19 New	131/3(P)	M/s. Suzion Engitech Ltd	2.	1 1	Meenakshipura	Ottopidaram	Kadampur
20 new	(452(P)	M/s. Shubh Realty (South)	1 2	1 1	Maniyachi	Ottapidaram	Kadampur
21 New	275/1(P),4A(P),48(P)	H/s. Shubh Realty (South)	1 2	1 1	Paralkuttam	Ottapidaram	Kadampur
22 New	(633/2,4(P), 63¢(P)	M/s. Shooh Realty (South)	t 2	.1 1		Ottapidaram	Kadampur
23 New	[691(P)	M/s. Shubh Realty (South)				Ottasidaram	Kadampur
24 New	167/1(P),2(P)	M/s. Shubh Realty (South)	~~~	2 3			Kadampur
25 New		14/s. Shubh Realty (South)		1 1			Kadampur
26 New	2S/4(P),5(P),6(P)	M/s, Shubh Realty (South)	P 2	1 1	Arpikulam	Ottapidarem	Kadampur
27 New	51I(P)	M/s. Shubh Realty (South)		1		iOttapidaram	Kadampur
28 New	139(P)	M/s. Shubh Realty (South	U 2	.1	L Duraisamipura	m Ottapidaram	Kadampur
29 MAN074	320/3(P),4(P)	M/s, Shubh Realty (South		1		Ottapidaram	Kadampur
30 KUM100	[529/3A[P],3E(P)	M/s. Shubb Realty (South		.1	[Pasuvanthanal	Ottapidaram	Kadampur
31 OTA60	1/1(P),2/1(P)	M/s. Shubh Realty (South	u z	1	i láralkulam	Ottapldaram	Kadampur

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STATUS OF GENERATION PROJECTS: Name of the Applicant & Address: M/s.SUZLON POWER INFRASTRUCTURE LIMITED-PUNE Status / Information Generation location: KUMARAPURAM Location of power project (Name of the Village/town/District/State) Athanoor / Ottapidaram / Tuticorin Detail vicinity map of the project site on topo sheets to gather relative locations of Details enclosed other generation projects in the Vicinity Lattitude and Longitude of the project site 44 P 179285 998002 Land: SI.No: **Govt Land** Pvt.Land Forest Land **Total Land** 1 Total Land YES 720 acres (approx.) 2 Acquired YES Work In Progress 3 Possessed Work in Progress Status of Land to be acquired like date of notification for and date of aquisition etc., (Attach a copy of deed of sale agreement for Private land & Agreement to sale for Not Applicable - Private Land - No. Negotiation required Govt.Land) Fuel: Not Applicable as per TNEB Norms Type of Fuel (Gas/domestic coal/imported coal/Hydro) Not applicable Staus of fuel tie-up for total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage (Attach c copy of fuel supply agreement. In case of coal mine allotted its development status) Water: Not applicable Status of in principle approval from concerned State irrigation department (Attach a copy of water supply agreement with state/central water commission and Ministry of water resources) **Environment Clearance:** Not applicable as per TNEB Norms Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF) MoEF CRZ Clerance (If Applicable-Attach a separate copy from MoEF) Not applicable **Equity Infusion:**

Board resolution of promoting company / companies to infuse equity (Attach a copy) Not applicable

	STATUS OF GENERATION PR	OJECTS:
SI.No:	ten	Status / Information
8	Forest clearance:	Not Applicable
	Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF)	Not Applicable
9	Pollution Clearance:	Not Applicable
	CFE (Consent for establishment from State pollution control Board) (Attach a copy)	Not Applicable
10	Clearance from Ministry of Defense (Attach a copy)	Not Applicable
11	Clearance from Archeological Deptt. (Attach a copy)	Not Applicable
12	Civil Aviation clearance from Chimney Height (Attach a copy)	Not Applicable
13	EPC Contract Status:	
	Source/Manufacturer of Main plant (BTG)	
	Date of placement of contract for main plant (Attach Acknowledgement copy of LOA)	SS land Procurement nearing completion, Vendor Finalisation is under Progress.
	Date of NTP issued	
14	Status of PPA with benificiaries including case-1 bids if applied for	Not Applicable
15	Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank)	Not Applicable
16	Expected Unit wise proposed commissioning schedule: a)Unit-I: b)Unit-II: c)Unit-III d)Unit-IV:	a)75 MW - FY 2018 - 19 b)75 MW - FY 19-20 c)75MW- FY 20-21 d)75MW- FY 21-22
17	Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any	75MW
18	Status of dedicated tranmission line, if any	Survey work nearing completion - Route & Profile under finalisation

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No Village Village	13 KW Sub Station Cap No Village Coustomer Name Cap No Village Coustomer Name Castomb Castomb
Customer Name (Cap Ms. Shubh Realty (South) P 2.1 Ms. Shubh Realty (South) P 2.1 Ms. Suzion Englech Ltd 2. Ms. Suzion Englech Ltd 2. Ms. Shubh Realty (South) L 3. Ms. Suzion Gujarat Wind Pa. Ms. Suzion Gujarat Wind Pa.	1,230 33 KV Sub Station 1,45, Shubb 1,45, Shubb 1,45, Shubb 1,45, Shubb 1,45, Shubb 1,45, Suzion 1,45, Suzion



STATUS OF GENERATION PROJECTS:

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Type of Fuel (Gas/domestic coal/imported coal/Hydro) Staus of fuel tie-up for total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage (Attach c copy of fuel supply agreement. In case of coal mine allotted its development status)					ber reseasons		
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Status of in principle approval from concerned State irrigation department (Attach a copy of water supply agreement with state/central water commission and Ministry of water resources)							
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	STATUS OF GENERATION PR	OJECTS:
SI.No:	Цет	Status / Information
8	Forest clearance:	Not Applicable as per TNEB Norms
	Status of in principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. (Attach a copy of Environement clearance from MoEF)	
9	Pollution Clearance:	Not Applicable as per TNEB Norms
	CFE (Consent for establishment from State pollution control Board) (Attach a copy)	
10	Clearance from Ministry of Defense (Attach a copy)	Not Applicable as per TNEB Norms
11	Clearance from Archeological Deptt. (Attach a copy)	Not Applicable as per TNEB Norms
12	Civil Aviation clearance from Chimney Height (Attach a copy)	Not Applicable as per TNEB Norms
13	EPC Contract Status:	
	Source/Manufacturer of Main plant (BTG)	SS Lnd procured, SS Plot Survey and Soil ivestigation completed. Windfarm
	Date of placement of contract for main plant (Attach Acknowledgement copy of LOA)	substation civil work will start in 1st week of October. 15 Foundations completed. Another 10 foundations will be completed by end of this month.
	Date of NTP issued	
14	Status of PPA with benificiaries including case-1 bids if applied for	
15	Date of financial closure (Attach a copy of term sheet/accepted copy of application submitted to bank)	
16	Expected Unit wise proposed commissioning schedule: a)Unit-I: b)Unit-II: c)Unit-III d)Unit-IV;	a)75 MW - FY 17-18 b)75 MW - FY 17-18 c)75MW- FY 18-19 d)75MW- FY 18-19
17	Connectivity/LTOA Quantum Applied for & Target/actual benificiaries if any	75MW
18	Status of dedicated tranmission line, if any	22.4 Kms - 83 towers - 230 KV line Route Survey completed. Tower Schedule and Route Profile was submitted to Chief Engineer Power System Planning & Appraisal II division for approval of laying the transmission line under section 68 of Electricity Act 2003. EHV line contrctor is finalized and at present check survey is under progress. For 33 KV, Railway crossing, discussed with Railway authorities (Addl Dev. Engr). Site visit completed. Proposal is being submitted.

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(HEAD-TAMIL NADU & KERALA STATES)



Annexue-3

केन्द्रीय विद्युत विनियामक आयोग CENTRAL ELECTRICITY REGULATORY COMMISSION



No.1/14/2015-Reg.Aff.(FSDS-Proced.)/CERC

Dated: 3rd March, 2017

Shri. K. V. S. Baba Chief Executive Officer Power System Operation Corporation Ltd. B-9, Qutub Institutional Area, Katwaria Sarai New Delhi-110016

Sub: Approval of the 'Procedure for implementation of the Framework on Forecasting, Scheduling and Imbalance Handling for Renewable Energy (RE) Generating Stations including Power Parks based on Wind and Solar at Inter-State level'

Sir,

In accordance with provisions of the Regulation 6.5 (23) of Central Electricity Regulatory Commission (Indian Electricity Grid Code), Regulation, 2010 as amended from time to time, it is stated that the National Load Dispatch Centre (NLDC) shall prepare a detailed procedure for scheduling and forecasting of Renewable Generating Stations and submit the same for approval of the Commission.

- 2. Accordingly, NLDC in letter dated 21st October 2015 proposed Procedure for Implementation of the Framework on Forecasting, Scheduling and Imbalance Handling for Wind & Solar Generating Stations at interstate level, along with Detailed Procedure for scheduling, metering, energy accounting and operational and commercial responsibilities of solar power generators and solar park developers.
- 3. The proposed consolidated procedure was put up on Commission's website on 12.2.2016 for comments from stakeholders. The Commission has examined the comments and has incorporated necessary changes in the proposed procedure. The procedure as approved by the Commission is enclosed.
- 4. The Commission directs POSOCO to proceed with implementation of Procedure for implementation of the Framework on Forecasting, Scheduling and Imbalance Handling for Renewable Energy (RE) Generating Stations including Power Parks based on Wind and Solar at Inter-State level.
- Wide publicity be given to the above procedures for information and compliance of all concerned.

This is issued with approval of the Commission.

Encl: As Above

Yours faithfully,

(Shubha Sarma) Secretary

तीसरी मंजिल, चन्द्रलोक बिल्डिंग, 36, जनपथ, नई दिल्ली-110 001 Third Floor, Chanderlok Building, 36, Janpath, New Delhi-110 001 Phone: 91-11-2335 3503 Fax: 91-11-2375 3923 E-mail: info@cercind.gov.in

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PROCEDURE FOR IMPLEMENTATION OF THE FRAMEWORK ON

FORECASTING, SCHEDULING AND IMBALANCE HANDLING FOR RENEWABLE ENERGY (RE) GENERATING STATIONS INCLUDING POWER PARKS BASED ON WIND AND SOLAR

AT

INTER-STATE LEVEL

1. Preamble:

This Procedure is issued in compliance of Regulation 6.5 (23) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 and amendments thereof and Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2010 and amendments thereof herein after called the 'Procedure for implementation of the framework on Forecasting, Scheduling and Imbalance Handling for Renewable Energy (RE) Generating Stations including Power Parks based on wind and solar at Inter-State level'.

2. Scope:

This Procedure shall be followed by National Load Despatch Centre (NLDC), all Regional Load Despatch Centres (RLDCs), Regional Power Committees (RPCs), and State Load Despatch Centres (SLDCs), regional entity Wind / solar generating stations including power parks, Principal Generators, Lead Generator.

This procedure shall be implemented with effect from the date of its notification by the Commission.

3. Definitions:

3.1 Lead Generator: The lead Generator shall be as termed in the CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Amendment) Regulations, 2010 as follows:

One of the 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 or connecting at pooling substation within the Solar or Wind power park, termed as the Lead generator. Lead Generator shall formalize agreement/arrangement among all the associated generators 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, deviation charges, congestion and other charges etc.

3.2 Principal Generator: The Principal Generator, shall be as recognized in the CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Third Amendment) Regulations, 2013, as follows:

The existing generating station which agrees to act as the "Principal Generator" on behalf of the renewable energy generating station(s) which is seeking connectivity through the electrical system of the existing generating station and formalizes a written agreement/arrangement among them to undertake all operational

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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, deviation charges, congestion 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.

- 3.3 RE Generator means (i) the Wind or Solar generators who are regional entities and (ii) Solar generators with installed capacity of more than 50 MW within a Solar Power Park (iii) Renewable energy projects based on wind or solar resources having capacity of 500 MW and above
- **3.4 Connection Point:** A point at which Solar park, Renewable energy generating stations which are regional entities are connected to Inter-State/Intra-State system
- 3.5 Absolute Error shall mean the absolute value of the error in the actual generation of wind or solar generators which are regional entities with reference to the scheduled generation and the 'Available Capacity' (AvC), as calculated using the following formula for each 15 minute time block:

Error (%) = 100 X [Actual Generation- Scheduled Generation]/
(AvC)

'Available Capacity (AvC)' for wind or solar generators which are regional entities is the cumulative capacity rating of the wind turbines or solar inverters that are capable of generating power in a given time-block.

4. Applicability:

This procedure shall be applicable to:

- **a.** All RE Generators, which are regional entities as defined in Grid Code, are covered under the ambit of this procedure.
- **b.** RE Generators connected to JSTS and having aggregate generation capacity of 50 MW and above.
- c. Any renewable energy generating station of 5 MW capacity and above but less than 50 MW capacity developed by a generating company in its existing generating station in accordance with the CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Third Amendment) Regulations 2013, and connected to the existing connection point with inter-State Transmission System through the electrical system of the generating station.
- d. Lead Generator
- e. Principal Generator
- f. Solar Power Park Developer
- g. Wind Power Park Developer

5. Role of different entities

5.1 RE Generator

5.1.1. RE Generator or Lead Generator or Principal Generator or Solar Power Park Developer or Wind Power Park Developer shall submit one time details to concerned RLDC as per Annexure-I. Further, if there is any change in the information furnished, then the updated information shall be shared with the concerned RLDC not later than 7 working days of the change.

- 5.1.2 RE Generator or Lead Generator or Principal Generator shall undertake the following activities.
 - **a.** Provide available capacity, Day ahead forecast (based on their own forecast or on the forecast done by RLDC) and Schedule as per Annexure-II through web based application maintained by RLDCs.
 - **b.** Provide real time availability (at turbine/inverter level) and generation data (at pooling station level) as per Annexure-III
 - **c.** Provide Monthly data transfer (as per Annexure IV):
 - For wind plants, at the turbine level- average wind speed,
 average power generation at 15-min time block level
 - For solar plants, for all inverters* >= 1 MW- average solar irradiation, average power generation at 15-min time block level
 - * if a solar plant uses only smaller string inverters, then data may be provided at the plant level
 - **d.** Be Responsible for metering and data collection, transmission and co-ordination with RLDC, SLDC RPC, CTU and other agencies as per IEGC and extant CERC Regulations.
 - **e.** Undertake commercial settlement of all deviation-settlement charges as per applicable CERC Regulations

- f. Submit a copy of the agreement to concerned RLDC wherein it is mentioned that RE Generator or Lead Generator or Principal Generator shall undertake all operational and commercial responsibilities on behalf of generating stations as per the prevalent CERC Regulations. Further, RE Generator or Lead Generator or Principal Generator shall also submit the application for connectivity which was submitted to CTU to the respective RLDC in whose control area it is located.
- **g.** Use Automatic meter reading technologies for transfer, analysis and processing of interface meter data.
- h. Perform commercial settlement beyond the connection point (Depooling arrangement) and technical coordination amongst the generators within the pooling station and upto the connection point as the case may be.
- i. Shall furnish the PPA rates on notarized affidavit for the purpose of Deviation charge account preparation to respective RPC supported by copy of the PPA.
- j. Keep each of the RLDCs indemnified at all times and shall undertake to indemnify, defend and save the SLDCs/RLDCs harmless from any and all damages, losses including commercial losses due to forecasting error, claims and actions including those relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the transactions undertaken by the Generators.

5.2 RLDC

- 5.2.1 The concerned RLDC shall be responsible for scheduling, communication, coordination with RE Generators or Lead Generator or Principal Generator. Forecasting of the renewable energy generation shall be done by the RLDCs and the forecast will be available on the website of the concerned RLDC. The generation forecast shall be done on the basis of the weather data provided by IMD or on the basis of other methods used by the Forecasting Agency whose service may be availed by NLDC/RLDC. However, the forecast by the concerned RLDC shall be with the objective of ensuring secure grid operation.
- 5.2.2 The concerned RLDC will be responsible for processing the interface meter data and computing the net injections by each RE Generator or Lead Generator or Principal Generator or Solar Power Park or Wind Power Park as specified in Annexure- V.
- 5.2.3 RLDC may, appoint additional manpower for carrying out the additional responsibility assigned in these Procedures, if required.

6 Forecasting

- Regional forecasting shall be done by the concerned RLDC to facilitate secure grid operation. The concerned RLDC may engage a forecasting agency to undertake forecasting for RE Generators/solar parks /wind parks which are regional entities.
- 6.2 RE generator shall provide the forecast to the concerned RLDC which may be based on their own forecast or RLDC's forecast as per Annexure-II. In case a generator is utilizing service of RLDC for

its forecasting, necessary fees shall be paid by generator to RLDC as approved by CERC.

- 6.3 The concerned RLDC shall consolidate and forecast based on various parameters as mentioned in the enclosed Annexures and weather data obtained from IMD or from any other forecast service provider (which could be different from that provided by generator)
- RE Generators or Lead Generator or Principal Generator may prepare their schedule based on the forecast done by RLDC or their own forecast. Any commercial impact on account of deviation from schedule based on the forecast chosen by the wind and solar generator shall be borne by the respective generator.

7 Connectivity

- 7.1 The application for connectivity shall be made in accordance with the provisions of 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 as amended from time to time.
- 7.2 The Solar Power Park Developer (SPPD) or Wind Power Park Developer (WPPD) shall apply for Connectivity on behalf of Generators within the park. The SPPD / WPPD shall be responsible for registering the Solar Power Park with the respective RLDC/ SLDC as applicable as a User and shall submit Appendix-IV of CERC (Fees and Charges of Regional Load Despatch Centres and related matters) Regulations, 2015 before getting connected at the Connection point with the ISTS for the first time. SPPD /WPPD shall be responsible for complying with all the provisions of CEA

standards for Grid Connectivity and other relevant CERC or CEA regulations. The SPPD /WPPD shall act as the nodal and accountable entity at the connection point. SPPD / WPPD shall be responsible for sending the SCADA data to the RLDC and to the Renewable Energy Management Centre (REMC).

7.3 In a solar /wind power park, Lead Generator shall undertake all operational and commercial responsibilities for the solar energy generating station(s) for less than 50 MW aggregating to 50MW and above 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, DSM charges, congestion and other charges etc., and submit a copy of the agreement and authorization documents to the respective RLDC in whose control area it is located

The RE generators, lead generator, principal generator, SPPD, WPPD shall keep each of the RLDCs indemnified at all times and shall undertake to indemnify, defend and save the SLDCs/RLDCs harmless from any and all damages, losses, claims and actions including those relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the transactions undertaken by the Generators in the Solar power Park.

7.4 The commercial settlement within the solar park /wind park and between generators shall be as detailed in Annexure-IV

7.5 All the technical coordination amongst the generators, within the solar /Wind Park and upto the connection point shall be done by the Lead generator or Principal generator or the RLDC as the case maybe.

8 Scheduling and Despatch

- 8.1 Following alternatives exist for Scheduling and Despatch for Generators within Solar / Wind Power parks due to multiple generation developers within the Park injecting at various points with in the park and ultimately injecting at interface with ISTS,
 - Case-1: The concerned RLDC shall be responsible for the scheduling, communication, coordination with RE Generators of 50 MW and above and connected to Inter State Transmission System (ISTS).
 - Case-2: Lead generator or Principal generator shall be responsible for the coordination and communication with RLDC, SLDC, RPC and other agencies for scheduling of RE Generators individually having less than 50 MW, but collectively having an aggregate installed capacity of 50 MW and above and connected within the solar park.
- 8.2 A representative sketch showing the scheduling of RE generator power for both cases is attached as Annexure-IV.
- 8.3 RE generator or lead generator or principal generator, as the case may be, shall provide the schedule to the concerned RLDC, which may be based on their own forecast or RLDC's forecast as per Annexure-II.
- 8.4 RE Generators or lead generator or principal generator shall be responsible for coordinating with RLDC. It shall undertake various



activities associated with scheduling, commercial settlement, communication, data consolidation and management and coordination etc.

- 8.5 RLDC shall upload day ahead schedules of energy generation with an interval of 15 minutes for the 24 hours period commencing at 00:00 hrs. on the website of the concerned RLDC as per regulation 6.5 of the IEGC.
- 8.6 The schedule by RE generators or lead generator or principal generator may be revised by giving advance notice to the concerned RLDC, as the case may be. Such revisions shall be effective from 4th time block, the first being the time-block in which notice was given. There may be one revision for each time slot of one and half hours starting from 00:00 hours of a particular day subject to maximum of 16 revisions during the day.
- 8.7 Revision in schedules by RE Generator or lead generator or principal generator selling power through collective transactions shall not be allowed.
- 8.8 The scheduling jurisdiction (as provided in Regulation 6.4 of IEGC 2010), metering, energy accounting and deviation charges would be as per relevant CERC Regulations, as amended from time to time.
- 8.9 In the event of contingencies, transmission constraints, congestion in the network, threat to system security, the transactions of RE Generators already scheduled by RLDC may be curtailed as per provisions of IEGC for ensuring secure and reliable system operation.

9 Metering

- 9.1 Interface Energy Meters at interstate level shall be installed by the Central Transmission Utility as per CEA Metering Regulations, 2006 and amendments thereof.
- 9.2 Interface Energy Meters at intra state level shall be installed by the State Transmission Utility / SPPD /WPPD as per CEA Metering Regulations, 2006 and amendments thereof.
- 9.3 Interface Energy Meters with unique serial numbers and as per standard specification, would have to be placed in accordance with CEA Metering Regulations to facilitate boundary metering, accounting and settlement for RE Generators. Automated meter reading (AMR) system shall be used for communicating interface meter data at RLDCs. Internal Clock of the interface meter shall be time synchronized with GPS.
- 9.4 RE Generator or lead generator or principal generator shall provide data telemetry at the turbine/inverter level to the concerned RLDC and shall ensure the correctness of the real-time data and undertake the corrective actions, if required. Frequency of real-time data updation to be shared with concerned RLDC shall be 10 second or less as per prevailing practice followed by RLDCs. Further, turbine/inverter outage plan shall also be forwarded to the concerned RLDC. The suggested data telemetry requirement for RE Generators is enclosed at Annexure-III. Further, NLDC/RLDCs shall publish the requisite list of information in due course of time.
- 10 Role of RPC: Energy Accounting of Wind or Solar generating Stations

Energy Accounting related to the RE Generators irrespective of the size, shall be prepared by RPC on a weekly basis and shall be uploaded on the website of the respective RPC.

11. Treatment of RECs

11.1. Deviations by all RE Generators shall first be netted off by concerned RPC for the entire pool on a monthly basis and if Actual Generation is more than schedule generation, Notional RECs shall be credited to the respective Regional DSM Pool on Monthly Basis and carried forward for settlement in future. If after netting off, including any carried forwarded notional RECs, the remaining shortfall in renewable energy generation shall be balanced through purchase of equivalent solar and non-solar Renewable Energy Certificates (RECs) through Power Exchanges by RLDC/ NLDC by utilising funds from the respective Pool Account at the end of the financial year within three months of finalization of accounts by concerned RPC.

12. Commercial Settlement

12.1. The wind or solar generators which are regional entities shall be paid as per schedule In the event of deviation of actual generation from schedule, deviation charges shall be payable/receivable by such wind or solar generator to/from the Regional DSM Pool as per the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015 or amendment thereof. The deviation would be computed for each fifteen minute time interval on the basis of implemented schedule and energy meter recording at interface point. From 01.11.2015 the deviation settlement shall be done as per the DSM Regulations (second amendment) 2015 or amendment thereof.

- 12.2. All the commercial settlement among the generators beyond the connection point shall be done by the RLDC/SLDC/RE Generators or lead generator or principal generator as the case may be.
- 12.3. All the transactions shall be through ECS only.

13. Application of Losses and Charges

Transmission charges and losses for ISTS shall be applicable as per the IEGC and CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and amendments thereof.

14. RLDC Fees and Charges

- 14.1. RE Generators or lead generator or principal generator shall be registered as User with the respective Regional/State Load Despatch Centre responsible for scheduling, metering and energy accounting.
- 14.2. RE Generators or lead generator or principal generator shall pay RLDC fees and charges as per Hon'ble CERC's Regulation "Fees and charges of Regional Load Despatch Centre and other related matters", Regulation 2015 and further amendment thereof after getting registered with respective RLDCs as a User of RLDC.

15. Removal of Difficulties

- 15.1. In case of any difficulty in implementation of this procedure, NLDC may approach the Commission for review or revision.
- 15.2. Notwithstanding anything contained in this Procedure, NLDC/RLDCs may take appropriate decisions in the interest of System Operation. Such decisions shall be taken under intimation to CERC and the procedure shall be modified /amended, as necessary.

Annexure-I

Details to be submitted by the Wind/Solar generating	g stations which are regional entities/ lead generator,
principal generator	
Type: Wind/Solar Generator	
Individual / on Behalf of Group of generators	
If on Behalf of Group of generators group of then details of agreement to be attached	
Total Installed Capacity of Generating Station	
Total Number of Units with details	
Physical Address of the RE Generating Station	
Whether any PPA has been signed: (Y/N)	If yes ,then attach details
Connectivity Details	Location/Voltage Level
Metering Details	Meter No. 1: Main 2. Check
Connectivity Diagram	(Please Enclose)
Static data	As per attached sheet
Contact Details of the Nodal Person	Name: Designation: Number: Landline Number, Mobile Number, Fax Number E - Mail Address:
Contact Details of the Alternate Nodal Person	Name: Designation: Number: Landline Number, Mobile Number, Fax Number E - Mail Address:



Data to be submitted by the RE Generator / lead generator, principal generator (Suggested List)

For Wind turbine generating plants

S No	Particulars
1	Туре
2	Manufacturer
3	Make
4	Model
5	Capacity
6	commissioned date
7	Hub height
8	total height
9	RPM range
10	Rated wind speed
11	Performance Parameter
12	Rated electrical power at Rated wind speed
13	Cut in speed
14	Cut out Speed
15	Survival speed (Max wind speed)
16	Ambient temperature for out of operation
17	Ambient temperature for in operation
18	survival temperature
19	Low Voltage Ride Through (LVRT) setting
20	High Voltage Ride Through (HVRT) setting
21	lightning strength (KA & in coulombs)
22	Noise power level (db)
23	Rotor



24	Hub type
25	Rotor diameter
26	Number of blades
27	Area swept by blades
28	Rated rotational speed
29	Rotational Direction
30	Coning angle
31	Tilting angle
32	Design tip speed ratio
33	Blade
34	Length
35	Diameter
36	Material
37	Twist angle
38	Generator
39	Generator Type
40	Generator no of poles
41	Generator speed
42	Winding type
43	Rated Gen. Voltage
44	Rated Gen. frequency
45	Generator current
46	Rated Temperature of generator
47	Generator cooling
48	Generator power factor
49	KW/MW @ Rated Wind speed
50	KW/MW @ peak continuous
51	Frequency Converter
·	



T=5	Τ
52	Filter generator side
53	Filter grid side
54	Transformer
55	Transformer capacity
56	Transformer cooling type
57	Voltage
58	Winding configuration
59	Weight
60	Rotor weight
61	Nacelle weight
62	Tower weight
63	Over speed Protection
64	Design Life
65	Design Standard
66	Latitude
67	Longitude
68	COD Details
69	Past Generation History from the COD to the date on which DAS facility provided at RLDC, if applicable
70	Distance above mean sea level

For Solar generating Plants

Static data points:

- 1. Latitude
- 2. Longitude
- 3. Turbine Power Curve
- 4. Elevation and orientation angles of arrays or concentrators
- 5. The generation capacity of the Generating Facility
- 6. Distance above mean sea level etc.
- 7. COD details
- 8. Rated voltage
- 9. Details of Type of Mounting: (Tracking Technology If used, single axis or dual axis, auto or manual)
- 10. Manufacturer and Model (of Important Components, Such as Turbine, Concentrators, Inverter, Cable, PV Module, Transformer, Cables)
- 11. DC installed Capacity
- 12. Module Cell Technology
- 13. I-V Characteristic of the Module
- 14. Inverter Rating at different temperature
- 15. Inverter Efficiency Curve
- 16. Transformer Capacity & Rating, evacuation voltage, distance form injection point

Annexure-II

Forecast and Schedule Data to be submitted by Wind/Solar plants/ Lead generator, Principal generator

FORMAT: A (to be submitted a day in advance)

15 Min time block (96 Block in a day)	TIME	Available Capacity (MW) - Day Ahead	Day Ahead Forecast (MW)	Day Ahead Schedule (MW)
1	00:00-00:15			
2	00:15-00:30			
3	00:30-00:45	4.4		
4	00:45-01:00			
•		46.1		
94				
95				
96				

Note: The forecast should ideally factor forecasting errors. As such schedule should ordinarily be same as forecast.



FORMAT: B (to be submitted on the day of actual generation, revision of availability and schedule, if any, shall be done as per CERC(IEGC) Regulations.

15 Min time block (96 Block in a day)	TIME	Day ahead schedule (MW)	Current Available Capacity (MW)	Revised Schedule (MW)
1	00:00-00:15			
2	00:15-00:30			
3	00:30-00:45			
4	00:45-01:00			
94				
95				
96				

Annexure-III

Real-time Data Telemetry requirement (Suggested List)

Wind turbine generating plants

- 1. Turbine Generation (MW/MVAR)
- 2. Wind Speed(meter/second)
- 3. Generator Status (on/off-line)-this is required for calculation of availability of the WTG
- 4. Wind Direction (degrees from true north)
- 5. Voltage(Volt)
- 6. Ambient air temperature (°C)
- 7. Barometric pressure (Pascal)
- 8. Relative humidity(in percent)
- 9. Air Density (kg/m³)

For Solar generating Plants

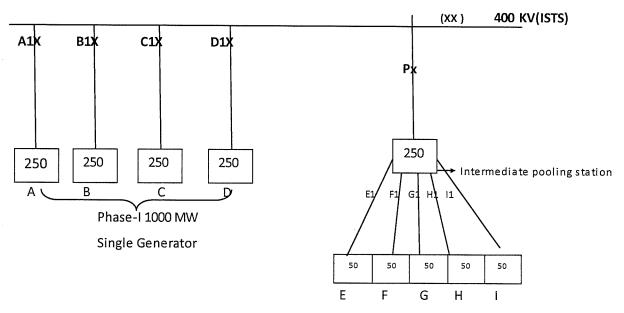
- 1. Solar Generation unit/ Inverter-wise (MW and MVAR)
- 2. Voltage at interconnection point (Volt)
- 3. Generator/Inverter Status (on/off-line)
- 4. Global horizontal irradiance (GHI)- Watt per meter square
- 5. Ambient temperature (°C)
- 6. Diffuse Irradiance- Watt per meter square
- 7. Direct Irradiance- Watt per meter square
- 8. Sun-rise and sunset timings
- 9. Cloud cover-(Okta)
- 10. Rainfall (mm)
- 11. Relative humidity (%)
- 12. Performance Ratio-

ANNEXURE-IV

Sample for understanding the scheduling /forecasting procedure.

Block Diagram showing the case wise Scheduling and Forecasting considering a sample case

Case-I: 50 MW and above (Phase-I &II)



Multiple generators (phase-II- 250 MW)

Phase-I - 1000 MW,

A single generator of 1000 MW capacity is developing the generating station in phase-1 in four blocks namely A,B,C & D of 250 MW capacity each and is directly connected to point A1,B1,C1& D1 respectively at ISTS. At the interface point scheduling and forecasting will be done by RLDC / SLDC (in case full share is allocated to host state as per IEGC).

Phase-II- 500 MW (Separate Generator/Entities)

Let multiple generators of 50 MW each aggregating to 250 MW (5 Nos. Multiple Generator of 50 Mw each (as separate entities), be connected to inter mediate pooling stations.

In this case Solar generating station may be developed by single or Multiple generators. Here we have considered as multiple generators namely E, F, G, H & I each having the capacity of 50 MW each ,the RE generators are connected to interface point E1, F1, G1, H1& I1 and thereby connected to ISTS at XX point.

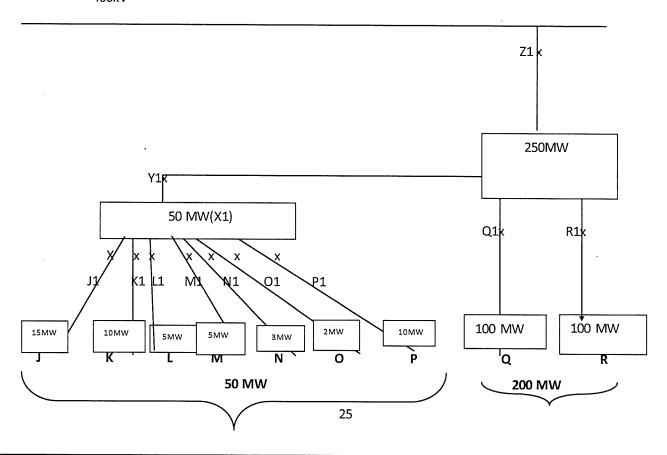
In such a case scheduling, accounting, forecasting for these generators needs to be segregated at point E1, F1,G1, H1, I1. Scheduling shall be done at point P and shall be segregated at E1,F1,G1,H1,I1 by RLDC.

Further there may be case where multiple generators less than 50MW (<50MW) capacity are connected to the intermediate pooling station are stated as under:-

Case-II Below 50 MW

Phase-II(250 MW)

400kV



For remaining 250 MW of Phase-II, let us consider, multiple generators of 7 Nos (J,K,L,M,N,O&P) each having capacity less than 50 MW but collectively having an aggregate installed capacity of 50 MW or more. Further Generators Q & R each of 100 MW are connected at Q1 & R1. All these generators are connected to ISTS at point Z1.

Scheduling and forecasting for the generators J,K,L,M,N,O& P shall be done at Point Z1, but need to segregated at Point J1, K1,L1, M1, N1,O1&P1 and for generators Q & R needs to be segregated at Q1 and R1. In this case, RLDC shall schedule at point Z1 and segregate at Y1,Q1&R1. The lead generator shall provide aggregated schedule to RLDC at Y1. Further the lead generator shall do segregation of schedules and other operational & commercial activities for generators J,K,L,M,N,O,P at points J1, K1,L1, M1, N1,O1&P1.

