

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Subject: THE REPORT OF THE COMMITTEE ON RELINQUISHMENT OF LTA

The Commission vide order dated 28.8.2015 in Petition No. 92/MP/2015 had constituted a Committee under the Chairmanship of Shri Pravinbhai Patel, Ex-Chairperson, GERC with the terms of reference to identify the events/circumstances which are likely to result in relinquishment of long term access rights by a LTA Customer, suggest methodologies for assessment/determination of standard capacity in case of relinquishment of long term access by a long term customer, and the manner and mode of recovery of relinquishment charges.

2. The Committee has submitted the report through the Member Secretary to the Commission in July, 2016. The report is posted on the website for information of the stakeholders, specifically, the parties in the Petitions which are pending before the Commission for relinquishment of LTA.

3. The Commission has not examined the report of the Committee including the recommendations, opinion and views expressed therein. The Commission will take a view on the report while dealing the petitions pending before the Commission regarding relinquishment of LTA.

sd/-
(Shubha Sarma)
Secretary
26.9.2016

**Report of Committee on
Assessment/Determination
of Stranded Transmission
Capacity and
Relinquishment charges**

July, 2016

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**Report of the Committee constituted by the CERC for Assessment/
Determination of Stranded Transmission Capacity and
Relinquishment charges**

1. Background

- 1.1. In terms of Regulation 9(II) of CERC (Open Access in inter-State Transmission) Regulations 2004, Long Term Access could be granted to generating company only if injection and drawal points were mentioned in the application. Drawal points were difficult to identify at the initial stage of the project. Noting this problem and to provide Long Term Access to the generating companies whose beneficiaries were not identified, the POWERGRID requested the Central Electricity Regulatory Commission [hereinafter 'CERC'] to allow Long Term Access to a generating company on the basis of Target region under CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in Inter-State Transmission and related matters) Regulations, 2009 [hereinafter 'Connectivity Regulations'].
- 1.2. On 25.01.2008, the CERC notified the CERC (Open Access in inter-state transmission) Regulations 2008, which came into effect on 01.04.2008.
- 1.3. On 19.01.2009, the CERC notified the CERC (Terms & Conditions of Tariff) Regulations, 2009. Regulation 33 of which specify the manner for calculating the regional transmission charges payable by the users of the regional transmission system.
- 1.4. On 07.08.2009, the CERC notified the Connectivity Regulations. The requirement to specify the beneficiary for grant of Long Term Access was done away with [Regulation 8(1), (3) & (6)] and various provisions of CERC (Open Access in inter-State Transmission) Regulations, 2004 including Regulation 9 and 16(i) were repealed.
- 1.5. On 15.06.2010, the CERC (Sharing of inter-State Transmission charges and losses) Regulations 2010 [hereinafter 'Sharing Regulations'] were notified, which came into effect on 01.07.2011 repealing Regulation 33 of the Tariff Regulations, 2009 and Regulation 16(1) and (2) of the CERC (Open Access in inter-State Transmission) Regulations, 2008.

- 1.6. The Sharing Regulations came into force on 01.07.2011, providing for a change in methodology for payment of transmission charges, namely sharing of transmission charges on Point of Connection (PoC) basis. The Sharing Regulations were amended w.e.f 24.11.2011 providing for payment of point of injection charges by long term access customers where the beneficiaries are not identified.
- 1.7. Kerala State Electricity Board Limited (KSEBL) filed a petition before the CERC being Petition No. 92/MP/2014 challenging the denial of medium term open access by the Central Transmission Utility [hereinafter 'CTU'] for which the applications on behalf of KSEBL were made by NVVN Limited and PTC India Limited. Many other petitions were filed by various inter-State transmission users before the CERC desiring relinquishment of long term access rights due to various reasons.
- 1.8. The CERC after hearing all the stake holders passed an Order dated 16.2.2015 in Petition No. 92/MP/2014. The CERC in its Order observed that as per the Regulation-18 of the Connectivity Regulations, LTA can be relinquished by paying the compensation for the stranded capacity. CTU has expressed difficulty in assessing stranded capacity on account of the meshed network of the inter-State transmission system. According to the CTU whenever a LTA customer seeks change of region, there is a corresponding reduction in the LTA in the region from which change is sought. The issue remains as to how the stranded capacity shall be assessed. The CERC further observed that since CTU has expressed difficulty in deciding the stranded capacity on account surrender of LTA or reduction of LTA on account of change in region, Central Electricity Authority [hereinafter 'CEA'] was asked to suggest methodology to work out stranded capacity and the formula for calculating corresponding relinquishment charges of LTA keeping in view the load generation scenario and power flows considered at the time of planning and changes subsequent to proposed relinquishment. Till a decision is taken based on the recommendations of CEA, CTU shall continue to take the relinquishment charges in accordance with Regulation 18 of the Connectivity Regulations.
- 1.9. Subsequently, CTU filed petition No. 92/MP/2015 bringing to the notice of the CERC certain difficulties encountered by the CTU to implement the directions of the CERC in petition no. 92/MP/2014. One of the difficulties flagged by the CTU was regarding relinquishment charges. As per CTU the

identification of utilization/non-utilization of the transmission elements in a meshed network for a long period is not possible except for dedicated transmission lines, as utilization/non-utilization of various elements of the grid would depend on a large number of factors like generation despatches, seasonal load variation, market mechanism etc. Accordingly the determination of elements in a meshed network which are likely to get stranded and to the extent they may get stranded cannot be known. CTU in its petition added that if there is a change in the target region pursuant to the signing of long term PPA, then it can be said with certainty that power drawal to the extent of the change shall be less than what was considered while granting LTA and to that extent the meshed network shall remain unutilized and can be considered for determination of relinquishment charges. CTU in its submission before the CERC also suggested following formula for calculating relinquishment charges as 66% of NPV of PoC charges (PoC for Inj point+ PoC of drawal point) for 12 years. PoC charges to be calculated at prevalent rate for the quarter in which DIC relinquish the LTA. On the directions of CERC, CTU also impleaded 19 generators who are likely to be affected by the Relinquishment of LTA. Of 19 generators impleaded in the matter, 8 filed their submissions.

- 1.10. The crux of the submission made by generators was that there should not be any relinquishment charges in a meshed network as there would be no unutilized or stranded capacity. If at all there has to be some charge on relinquishment of LTA, it should be based only if there is positive determination of stranded capacity. The regulation 18 contemplates relinquishment charges as compensatory mechanism. However suggestion of CTU would change these relinquishment charges into penalty.
- 1.11. The Commission after considering the submissions of the parties passed an order dated 28.8.2015 constituting a Committee to, inter alia, suggest the methodology for assessment/determination of the stranded capacity in case of relinquishment of LTA right and alternative method to compute relinquishment charges and mode of recovery of such charges and to suggest, if any, required to be made to the existing provisions of Connectivity Regulations to make process of relinquishment of LTA right and calculation of compensation simple, fair and equitable keeping in view the need for expansion of ISTS network. The Committee constituted by the Commission comprised of the following members:

- i. Shri Pravinbhai Patel, Former Chairperson, GERC
- ii. Shri V J Talwar, Former Member Technical, APTEL
- iii. Shri Ashok Khurana, Director General, APP
- iv. Shri Mrutyunjay Sahoo, Ex-Additional Chief Secretary, GoAP
- v. Shri S K Soonee, CEO, POSOCO
- vi. Shri Ajay Talegaonkar, SE, NRPC
- vii. Representative of CTU (Ms. Seema Gupta, COO (CTU-plg), POWERGRID)
- viii. Representative of CEA (Shri Pardeep Jindal, Director, CEA)
- ix. Shri Akhil Kumar Gupta, Joint Chief (Engg), CERC, Convenor and Member Secretary of the Committee

1.12. The terms of reference for the Committee are as under:

- a) Identify the events/circumstances which are likely to result in relinquishment of long term access right by an LTA customer in terms of the provisions of the Connectivity Regulations.
- b) Suggest the methodology(ies) for assessment/determination of the stranded capacity in case of relinquishment of long term access right by a long term customer, keeping in view the meshed network of the inter-State transmission system.
- c) Alternative methodology for computation of relinquishment charges.
- d) The manner and mode of recovery of the relinquishment charges
- e) Any other suggestion that the Committee considers appropriate in the light of the suggested terms of reference by the parties.
- f) Suggest changes, if any, required to be made to the existing provisions of the Connectivity Regulations to make the process of relinquishment of long term access right and calculation of compensation therefor simple, fair and equitable keeping in view the need for expansion of ISTS network.

1.13. CTU nominated Ms Seema Gupta, COO (CTU-Plg), POWERGRID as Member to the Committee. CEA nominated Shri Pardeep Jindal, Director (PSP), CEA as Member to the Committee. On 1st January, 2016 Shri Pardeep Jindal has taken over as Chief Engineer (PSP) in CEA.

1.14. The Committee held 4 meetings. First meeting was held on 28.9.2015 and thereafter 3 more meeting were taken place on 26.10.2015, 02.12.2015 and 03.02.2016 respectively. The deliberations taken place during the meetings are detailed in the following paragraphs

2. Some Relevant Statutory provisions which have been referred in the meetings

(A) Regulation 18

18. Relinquishment of access rights

(1) A long-term customer may relinquish the long-term access rights fully or partly before the expiry of the full term of long-term access, by making payment of compensation for stranded capacity as follows:-

(a) Long-term customer who has availed access rights for at least 12 years

(i) Notice of one (1) year - If such a customer submits an application to the Central Transmission Utility at least 1 (one) year prior to the date from which such customer desires to relinquish the access rights, there shall be no charges.

(ii) Notice of less than one (1) year - If such a customer submits an application to the Central Transmission Utility at any time lesser than a period of 1 (one) year prior to the date from which such customer desires to relinquish the access rights, such customer shall pay an amount equal to 66% of the estimated transmission charges (net present value) for the stranded transmission capacity for the period falling short of a notice period of one (1) year.

(b) Long-term customer who has not availed access rights for at least 12 (twelve) years - such customer shall pay an amount equal to

66% of the estimated transmission charges (net present value) for the stranded transmission capacity for the period falling short of 12 (twelve) years of access rights:

Provided that such a customer shall submit an application to the Central Transmission Utility at least 1 (one) year prior to the date from which such customer desires to relinquish the access rights;

Provided further that in case a customer submits an application for relinquishment of long-term access rights at any time at a notice period of less than one year, then such customer shall pay an amount equal to 66% of the estimated transmission charges (net present value) for the period falling short of a notice period of one (1) year, in addition to 66% of the estimated transmission charges (net present value) for the stranded transmission capacity for the period falling short of 12 (twelve) years of access rights.

(B) Definition of Stranded Capacity as defined in Regulation 2(v)

(v) ‘Stranded transmission capacity’ means the transmission capacity in the inter-State Transmission system which is likely to remain unutilized due to relinquishment of access rights by a long-term customer in accordance with Regulation 16.

(c) Regulation 16A of Connectivity regulations 2009

*16A. On receiving the intimation regarding termination of Power Purchase Agreement, or surrender of long term access in accordance with the provisions of Regulation 15A of these regulations and **after considering the applications for long-term access and medium-term open access, if any, as mentioned therein, the nodal agency shall inform the Regional Load Despatch Centre and State Despatch Centre concerned to consider the remaining capacity** for processing the request for short term open access in accordance with the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008, as amended from time to time, till*

long term access or medium term open access is granted to some other applicant

3. Deliberations of the meetings of the Committee.

3.1. The Committee held its first meeting on 28.9.2015. The discussions in this meeting were centered around following aspects:

- i. **Whether the relinquishment charges are of compensatory in nature or as a penalty.**

Majority of members stated that the term used in Regulation 18 is compensation and accordingly it should be compensatory charges.

- ii. **Whether the Stranded capacity in a meshed network for a long period could be determined using Power Flow Analysis.**

CTU reiterated their stand that it is unclear as to how to determine the extent to which a transmission line element can get stranded in a meshed network, but also insisted that since the lines were constructed on the basis of LTA, any relinquishment of LTA should be compensated by the withdrawing entity. The representative of CTU further stated that for determination of stranded capacity, there should not be any subjectivity rather a uniform yardstick for everyone, otherwise there will be a long litigation process. It is very difficult to make load-generation balance scenarios. The selection of swing-bus and taking values of generation and loads are very subjective and may change the results, small changes in reactive power may also change the results, and we need to remove this subjectivity. Capacity has been created by CTU for a particular DIC and same DIC wants to quit, it has to pay for the asset created for him. If 12 year period is too long it may be limited to 5-7 years. The representative of CEA stated that the main concern of the Committee is to determine “how to calculate stranded capacity and whom should it be applied?” He submitted that the aspect of stranded capacity was introduced in the Regulations prior to PoC mechanism, when there were sub-pools, wherein it was envisaged that transmission system is being built for a particular generator or for a set of generators and they will bear the transmission charges. In case of relinquishment, transmission capacity to that extent will remain stranded. He further submitted that post PoC era, generators are given connectivity at a point and are now seeking relinquishment. In the present circumstances, the transmission charges payable by the generators seeking relinquishment should be equal to capacity in MW to be relinquished by the generator multiplied by related PoC rates. He also

mentioned about the SoR of Connectivity Regulations, 2009 wherein the Commission has provided incentive to long term customers for surrendering transmission capacity by payment of an amount equal to 66% of the estimated transmission charges (net present value) for the stranded transmission capacity in response to the comments of the stakeholders that if CTU finds another customer, the money should be returned to original customer. He further stated that intent of Regulations is not to determination of stranded capacity rather to apply relinquishment charges by the MW quantum to be relinquished by the generator multiplied by related transmission charges or PoC rates. On the other hand the representative of NRPC and Mr V J Talwar suggested that the Stranded capacity can be determined through Power Flow Analysis. They suggested that two sets of studies may be carried out, one with the said generation in service and second without the said generation in service. The difference in power flows would be Stranded Capacity.

iii. **Whether The Relinquishment Charges are payable even if no network has been created by CTU for the concerned DIC?**

APP representative suggested that there should be no relinquishment charges where CTU has not created any asset for the concerned DIC. On the other hand CTU representative stated that even in cases where no additional capacity has been created for a particular DIC and LTA right has been approved on the basis of margins available in the system such DIC has to pay as the capacity has been booked by him and but for him the capacity available in the system could not be allocated to any subsequent DIC applicant. Additional capacity would have to be created for such subsequent applicant.

3.2. The Committee formed a study group comprising of representatives of CEA, CTU, CERC and POSOCO to work out different scenarios for power flow analysis.

3.2.1 The Committee held its 2nd meeting on 26th October 2015. In this meeting the results of some system studies carried out by the Study Group were presented by the representatives of the CTU and CERC. The presentations were appreciated by the Committee and suggested some fine tuning. It was suggested that where a DIC desires to relinquish its LTA right, pending applications for LTA rights for the same corridor should be considered and then Stranded Capacity should be evaluated. Shri S. K. Soonee, POSOCO representative submitted that assessment of Stranded Capacity is a governance issue rather than a technical issue which has arisen due to deficiencies in the

existing Regulations. However, the Committee is trying to solve governance issues with technical means. The Connectivity Regulations provide for free connectivity to the generators and therefore, the generator remains connected with the grid. According to POSOCO the provision of free connectivity is the root cause of all these problems. The word stranded refers to either under-utilization or over-utilization. If a generator is connected to radial network then after relinquishment that much capacity is stranded; however, in a meshed network like the Indian Grid, each and every elements of the Grid is utilized in one way or the other. Therefore, meshed network would be used in any case and to say that any system is 100% stranded is not possible. Shri Mrutyunjay Sahoo stated that Shri S. K. Soonee has raised many fundamental issues which are not in the scope of the Committee. He added that since transmission system has been erected at the request of generation developers, the investment made must be repaid. But, if we do anything other than net loss reimbursement then we may run into many types of problems. He further stated that since LTA granted is based on target region therefore, changes in region sought by LTA customers should be treated as relinquishment of long term access. He added that the assumption taken for determination of stranded capacity should be made as close to the period when LTA was granted to generation developers.

3.2.2 Shri S K Soonee stated that if generation developers are allowed to relinquish the LTA without any charges, only distribution companies will suffer. He also stated that whatever methodology suggested by the Committee for determination of stranded capacity and corresponding relinquishment charges, there will be disputes. Shri Mrutyunjay Sahoo clarified that nothing is dispute free and don't expect a day when disputes are not there. But we need to be logical and Committee needs to come out with some suitable methodology for determination of stranded capacity and corresponding relinquishment charges to compensate the actual loss, which is logical.

3.3. The Committee Held its 3rd meeting on 2nd December 2015.

3.3.1. In 3rd meeting Shri V.J. Talwar presented his views through a power point presentation. The highlights of his presentation are as under:

- (a) Term used by the Commission in the Regulation 18 of the Connectivity Regulations, 2009 is compensation. However, some members of the Committee felt that it is penalty and when a long term customer relinquishes LTA he should be penalized or

punished. He requested the Committee to settle this issue. Compensation is payable only when someone suffers loss. It is to be seen as to whether any loss is suffered by any entity upon relinquishment of LTA by any generator.

- (b) The PoC mechanism is based on power flow analysis. Power flow changes only when there is change in nodal injection or withdrawal. If there is no change in either of the two, there will not be any change in power flow pattern. Consequently there would not be any change in nodal PoC charges. There could be some variation in slab PoC charges due to approximations in deciding 9 slabs for purpose of PoC charges.
- (c) Regulation 15A of the Connectivity Regulations, 2009 provides that in the event of mutual termination of PPA or non-utilization of LTA by the LTA customer for a period exceeding one year from the scheduled date of commencement of LTA, CTU may ask such long term customer to surrender the long term access after being satisfied that because of such long term access, any other generation project, which has applied for long-term access, is likely to get stranded. Further, Regulation 16A of the Connectivity Regulations, 2009 provides that on receiving the intimation regarding termination of PPA, or surrender of LTA in accordance with the provisions of Regulation 15A of the Connectivity Regulations and after considering the applications for long-term access and medium-term open access, if any, the nodal agency shall inform the RLDC and SLDCs to consider the remaining capacity for processing the request for STOA till LTA or MTOA is granted to some other applicant.
- (d) Conjoint reading of Regulation 15A and 16A would establish that nodal agency is required to consider the applications for LTA or MTOA and allocate the corridor which has been released by surrender of LTA rights by a LTA consumer and balance capacity may be utilized for STOA till it is also allocated to another LTA applicant.
- (e) The Commission in its Order dated 22.2.2014 has already held that there would not be any relinquishment charges where the CTU has not made any investment in providing LTA.
- (f) The Commission in its Order dated 31.5.2010 approving investment for 9 High Capacity Transmission Corridors has recognized the fact that when a planned generator did not fructify, the resultant

additional margins available in the transmission capacity would lead to greater reliability of the grid.

- (g) The CTU in its submission before the Commission in petition no. 233/2009 had claimed that the proposed corridors are only skeleton network and would be justified even if only 50% of the generation gets materialized. Shri Talwar also submitted that as per data submitted by CTU and data available from CTU website, against 40000 MW of capacity which has been granted connectivity in WR alone, only 16000 MW have been granted LTA.

CTU submitted in their comments that this statement gives a wrong conclusion that against grant of connectivity of 40,000 MW LTA has been granted only for 16000 MW. But the fact should be placed in the right perspective that IPPs are misusing the spirit of the regulation permitting IPP to seek Connectivity without availing any LTA. The Statement of reasons for Regulations amply clarified that Connectivity should be precursor to the eventual LTA. In the instant it is not that CTU had granted less quantum for LTA as against the Connectivity. Rather it is the other way round IPPs sought Connectivity for 40,000 MW but sought LTA for only 16,000 MW i.e. against LTA of 16,000 MW about 24000 MW are free riders.

3.3.2. Ms. Seema Gupta, COO, CTU stated that the presentation given by Shri V.J. Talwar is very comprehensive and CTU would present a detailed reply to it during the next meeting. She further stated that Shri Talwar has rightly pointed out that commercial interest of all transmission licensees including POWERGRID has been protected by PoC mechanism. As transmission lines are built only for LTA and not for MTOA or STOA which are accommodated only in margins available in transmission system, if such LTA customers relinquish LTA right for any reason - genuine or gaming and are allowed to relinquish freely, as PoC charges have not changed or burden on other DICs has not changed, such LTA customers can, after relinquishing LTA right, request for STOA and sell power on short term basis. She further added that the Committee needs to take a decision that when an LTA customer relinquishes its LTA right, no relinquishment charges will be applicable and in such an event, LTA customer should not be allowed to sell power through short term.

3.3.3. Shri Ajay Talegaonkar stated that observations in petition No. 233/2009 "if some generators relinquish LTA right, reliability of system increases" cannot be said to be 100% correct as reliability after certain extent becomes a luxury.

- 3.3.4. Referring to the point made by Shri Talwar in his presentation that power flow pattern may not change in case of change of target region, Shri S.R. Narasimhan of POSOCO stated that direction of power flow may change and some reinforcement of system may be required at certain places and additional investment may be required. He also stated that as per Regulation 33 of the Tariff Regulations, 2009, it is very clear that if anybody relinquishes LTA, then there is loss but in PoC mechanism, it is not very evident. The PoC mechanism involves some budget balancing to arrive at a charge payable to ensure that entire YTC is recovered. He suggested that some exercises on PoC charges can be carried out to verify the contentions raised by Mr. Talwar. POSOCO in its comments clarified that the reference of Tariff Regulations was basically to the Regulation 33 of the Terms and Conditions of Tariff Regulations, 2009 of CERC wherein if LTA was relinquished, the transmission charges of other customers went up as the sum of all LTAs appeared in the denominator. So the loss to other beneficiaries (other than the part surrendering LTA) was evident.
- 3.3.5. The main question raised by Shri Talwar through his presentation was as to whether any loss is suffered by any other DIC upon relinquishment under prevalent PoC regime. If there is no loss then there would not be any question of any compensation to be paid by the DIC who desires to relinquish his LTA rights.
- 3.3.6. CERC representative on behalf of study group informed the Committee that as an alternative methodology, system studies were carried out along with CEA, CTU and with the logistic support of POSOCO using TLTG module of PSS/e software. Representative of CERC presented the second methodology to compute stranded capacity. Results of four cases, two for relinquishment and two for change of target region were presented.
- 3.3.7. Shri Talwar observed that the TLTG method may not give correct results to determine the stranded capacity. He pointed out that the huge variation in calculated stranded capacity in the two studies carried out by the Group wherein generation and loads were varied in the target region one by one supports his view point.
- 3.3.8. CERC representative stated that for any studies whether it is power flow studies, studies for planning, studies for PoC mechanism, computation of TTC/ATC, certain methodology is used and certain assumptions are used. If we want to use scientific method to compute stranded capacity, we need to make certain assumptions for the base case. If we adopt a simple methodology which can cater to different scenarios then stranded capacity can perhaps be zero or to the full quantum of relinquishment sought. By using scientific methodology we may compute the stranded capacity which is any

value from zero to the quantum of relinquishment sought. If the Committee decides to have simple methodology, the Committee can recommend it to the Commission for the future cases. For present cases, the Committee may finalise methodology using system studies for computation of stranded capacity.

3.4. The Committee held its fourth and last meeting on 2nd February 2016.

3.4.1. Shri V J Talwar circulated detailed notes giving his analysis on the issues raised in the meetings after every meeting. The notes circulated by Shri Talwar along with written submissions made by other Members of the Committee are discussed in the subsequent paragraphs. In the fourth Meeting held on 2.2.2016, 3rd Comprehensive Note circulated by Shri Talwar was discussed in detail. Shri V. J. Talwar in his Note also suggested methodology for recovery of relinquishment charges detailed as under:

- (a) Inter-regional transfer of LTA be allowed without levy of any relinquishment charges, However to pre-empt any possibilities of gaming, LTA granted on Target Region be allowed to be transferred to any other region only if the LTA Applicant has a definitive long Term PPA with any beneficiary located in that region.
- (b) For the cases where grant of LTA does not involve any network strengthening by CTU (neither ISTS strengthening nor construction of a dedicated connectivity line from the generation project to the pooling station), then absolute relinquishment of granted LTA (in part or full) for any reasons OR postponing of LTA commensurate to delay in commissioning of generation project to be allowed without levy of any relinquishment charges.
- (c) For the cases where grant of LTA involves network strengthening by CTU (either ISTS strengthening or construction of a dedicated connectivity line from the generation project to the pooling station or both), and such end to end system strengthening (i.e. both dedicated connectivity line and ISTS strengthening) has been completed and the system has been made operational by CTU then:
 - i. In event of delay in commissioning of generation project, the Generator (LTA Applicant) may be allowed to postpone LTA rights in commensuration with commissioning of generation project subject to payment of applicable transmission charges for the transmission system so augmented.
 - ii. In event of absolute relinquishment of LTA due to various reasons like abandonment of generation project, non-availability

of fuel, termination of PPA etc., such cases to be dealt on case to case basis by the Commission based on their respective merits.

- (d) Method for STOA charges should be modified and effective STOA charges must be made equal to or higher than LTOA/MTOA charges, to avoid any gaming.

3.4.2. CTU representative Ms. Seema Gupta stated that the comprehensive note of Shri V.J. Talwar is very thorough and some of the views are quite good but some of his observations need further deliberations. She reiterated that it is difficult to determine the stranded capacity through system studies as with change in scenario, the result will be different for the same generator. She made a presentation with reference to the comprehensive note circulated by Shri V.J. Talwar. The highlights of the presentation made on behalf of CTU are as under:

- (a) The total Transmission Charges of all transmission licensees forms the numerator and the total LTA+MTOA forms the denominator.
- (b) Relinquishment by DICs shall mean: Reduction in total MWs used in the Denominator keeping the Numerator same and shall result in increase of Rs. /MW for the remaining DICs as the Transmission Charges of Licensees have to be recovered fully and exactly. Therefore, it shall not be correct to conclude that there shall not be any loss to the remaining DICs.
- (c) Regardless of the nomenclature (penalty/compensation), the manner of levy of relinquishment charges should not be such that it becomes a 'penalty' for a third party (remaining DICs).
- (d) Regulations 15A & 16A have been relied upon at several instances. However, the reliance placed is of a very 'generic' nature, as if to cover 'all situations of relinquishment of LTA'. This is not correct as these Regulations apply only where entire or part of PPA is terminated either through court intervention or mutually. The provisions cited above are not applicable where relinquishment is sought on account of non-finalization of PPA/Non availability of fuels, delay in generation projects, other force majeure etc. and the relinquishment has been sought so as to evade the liability of payment of transmission charges.
- (e) Shri V.J. Talwar in his note has also not suggested any alternative method for computing the stranded capacity Therefore, this establishes CTU contention that estimation of stranded capacity through studies in the meshed network cannot be made. It is felt that this conclusion should be made emphatically in the Report.

- (f) Generator may be allowed to postpone LTA rights in commensuration with generation schedule subject to payment of transmission system so augmented. This would require the transmission charges for system augmentation to be levied separately from National Pool. In case of common transmission strengthening for a number of generations, implementation of this shall not be feasible.

- 3.4.3. Shri S.K. Soonee, CEO, POSOCO, stated that it should be made clear that there should be certain relinquishment charges in case of relinquishment of LTA right and the relinquishment charges to be paid by generators should be for the quantum equal to the quantum relinquished, known upfront and easy to calculate.
- 3.4.4. Shri Pardeep Jindal, Chief Engineer (SP&PA), CEA stated that if a generator relinquishes LTA then asset(s) becomes stranded irrespective of the fact that whether any application for LTA is pending or not; as it may be utilized for granting LTA after 6 months or 1 year or 5 years, therefore we may say that relinquished quantum is the stranded transmission capacity for payment of relinquishment charges. He stated that CEA has already expressed its opinion in this matter while responding in Petition no. 76/MP/2014. He also resubmitted a copy of the CEA letter no 26/2/SP&PA-2014/90 dated 12-01-2015 addressed to Secretary, CERC, for benefit of the Committee. He further said that, however, based on discussion during meetings of this committee, we are attempting computing of stranded capacity using system studies.
- 3.4.5. Shri Akhil Gupta presented the results of the system studies with new base case and need to further carry out System Studies with new base case to find out the stranded capacity. He further stated that after computing the stranded capacity, issue remains that how to calculate the relinquishment charges. He suggested that there are two ways to calculate relinquishment charges either by using nodal charges as per POC software or by using charges which are arrived by dividing all India YTC with total LTA plus MTOA.
- 3.4.6. Chairperson of the Committee stated that during the four meetings of the Committee, views and suggestions made by the participants have been deliberated in detail by all the members. He emphasized that the Committee has tried to converge on the issues and to reach the final conclusion. He requested all the members to send their final recommendations and suggestions by 10th March, 2016 so that draft report could be prepared and circulated.

4. **Commission's earlier Orders on the issue.** Shri V J Talwar in his Notes circulated after every meeting has quoted extensively from the following orders of the Commission on the subject matter. Shri Talwar emphasized in his oral as well as written submissions that these orders have not been challenged in the higher courts and accordingly have attained finality and accordingly the findings of these orders of the Commission would be binding on the Commission itself. It is, therefore, felt desirable to reproduce the relevant extracts of these Orders as below:

4.1. **Commission's Order dated 25.2.2010 in Petition no. 233 of 2009 in matter of investment approval for execution of evacuation system required in connection of grant of long term open access to a group of developers (approval of Nine High Capacity Power Transmission Corridors - HCPTC).** In this case CTU requested the Commission for approval of 9 HCPTC for identified generation projects. In this case the CTU has submitted before the Commission that the proposed corridors are only skeleton network and would be justified even if 50% of the identified projects get materialized. Relevant extracts of the Commission's order are quoted below:

37. In order to ensure that no capacity either in generation or in transmission remains idle, there is an imperative necessity for both to come up simultaneously. However, transmission system elements can come up only as lumped elements and cannot be exactly matched with the generating unit capacity, MW to MW. Therefore, there are bound to be periods of some underutilization of the transmission systems, which can be mitigated by phasing the implementation of the transmission systems as far as possible to match with the commercial operation of the generation projects. Till the time a new IPP comes up, the additional margins in transmission capacity would lead to greater reliability of the grid. Also, interim arrangements like Loop in Loop out (LILO) should be adopted by the CTU to the extent possible {Emphasis Mine}

4.2. **Commission's Order dated 21.2.2014 in petition no. 63/MP/2013 in the matter of Lanko Kondapalli Power Limited.** In this case the petitioner had prayed for relinquishment of LTA of 250 MW to Nil without payment of any relinquishment charges. The Commission as per its order dated 21.2.2014 permitted the petitioner to relinquishment of LTA without any payment. The relevant extracts of the Commission's ruling are quoted below for ready reference:

“25. CTU has stated that taking into consideration the long term (25 years) usage of ISTS network by the petitioner, the uncertainty of regional power scenario and reluctance of existing DICs for reduction of LTA quantum, it is not possible to assess stranded capacity due to relinquishment of LTA of the petitioner.

26. It needs to be appreciated that provision of payment for stranded capacity was provided to ensure recovery of investment by the PGCIL. LTA applied by the petitioner did not entail any system stranding (a) capacity augmentation and no capital expenditure was incurred by CTU to meet its demand i.e. evacuation of power. Therefore, no asset would get stranded on account of the aforementioned reduction and there should not be any question of payment of compensation for stranded capacity....

27. ...

28. Since no system augmentation was done for Lanco, the existing (ISTS System) was erected based on the needs of the then existing beneficiaries with their consent to bear the costs thereof. Compensatory charges under Regulation 18 of the Connectivity Regulations are to be paid for the recovery of investment on the development of the inter-State transmission network to the extent of stranded capacity. Compensation is payable only for stranded transmission capacity caused on account of relinquishment and not merely on allocation/grant of LTOA. As such, it cannot be claimed that any stranded capacity is being rendered claimed in the ISTS due to reduction of long term open access granted to the petitioner. It is a well settled principle of law that no compensation is payable if there is no stranded capacity created on account of relinquishment. We, therefore, conclude that surrender of capacity by the petitioner neither render transmission capacity to be stranded nor does it affect the liability of others for payment of PoC charges.

30. The petitioner has stated that the gas allocation to it was for a period of 5 years only. In the absence of long term fuel commitment for 25 years, it was unable to enter into long term contracts with any of the target beneficiaries in the Northern and Western Regions. Ministry of Power vide its letters dated 30.9.2011, 22.3.2012 and 26.9.2012

informed that natural gas from KG D6 basin will be supplied to it on the condition that the entire power will be supplied to the Andhra Pradesh Discoms. The petitioner has submitted that EGOM, in its decision dated 24.2.2012, decided that the existing and future allocation of NELP gas to power plants be subject to the condition that the entire electricity produced from the allocated gas shall only be sold to the distribution licensee at tariff determined or adopted by the tariff regulator of the generating station. According to the petitioner, the output of KG D6 basin gas has been reduced to 15% since August, 2011 and gas supply to the Lanco has stopped from 1.3.2013. Ministry of Power vide its notification dated 14.3.2013 advised all developers not to plan any new gas based generation till 2015. Therefore, under the present scenario of uncertainty of gas, the petitioner is not able to sell power in Northern Region and Western Region. It is a matter of common knowledge that due to overall shortage of gas, capacity of many gas based projects is presently grossly underutilized and new projects are unable to take off. Therefore, due to non-availability of gas, the petitioner is unable to utilize LTA which is beyond the control of the petitioner. In the facts and the circumstances of the present case, we allow the petitioner to relinquish the long-term access rights to the tune of 250 MW, without payment of any compensation from the date of its application dated 14.8.2012. The petitioner shall be at liberty to make a fresh application at any stage for grant of access and the application, as and when made, shall be considered by PGCIL in accordance with the applicable Regulations.” {Emphasis added}

- 4.3. The **Commission** in its recent order dated 16.10.2015 in Petition No. 210/MP/2014 and I.A. 47/2014 in the matter of AD Hydro Power Limited Vs CTU has observed as under:

“39. We have already held herein above that from the interconnection point, free power is the property of the Government of Himachal Pradesh from the date of commercial operation of the project. The commercial operation of the project occurred in the year 2010 and accordingly, the petitioner started supply of free power at interconnection point. We have come to the conclusion in response to Issue No. 1 that the petitioner is entitled to LTA for the quantum of installed capacity minus free power from the date of operationalization of LTA. It logically follows that the petitioner cannot be saddled with

the transmission charges for the quantum of free power. It is also pertinent to mention that Government of Himachal Pradesh has been selling the free power by availing short term open access. In other words, the capacity has been utilized by selling free power through short term open access and the charges so collected are disbursed to the DICs in proportion to their share in the ISTS.”

4.4. The principle findings of the Commission in these orders are as under:

- i. In case a generator does not come up and or surrenders its LTA rights, the additional margins in the transmission capacity would lead to greater reliability of the grid. Shri Ajay Talegaonkar during the Committee meeting stated that observations in petition No. 233/2009 “if some generators relinquish LTA right, reliability of system increases” cannot be said to be 100% correct as reliability after certain extent becomes a luxury.
- ii. There would not be any question of payment of relinquishment charges where no system strengthening has taken place to facilitate such LTA rights and/or where the LTA holder is unable to utilize LTA for the reasons beyond his control. These would include the projects which have been abandoned due to non-availability of fuel (gas or coal). These would also include the projects whose long term PPAs have been terminated and such termination has been held valid by the Commission/APTEL. It would also include cases where generator has indicated target region based on projected load generation scenario available at that time and the there has been material change in load generation scenario due to unpredictability of load development and generator desire change of target region. Shri Ajay Talegaonkar in its comments stated that there is no doubt that the issue of payment of compensation by Lanko Kondapalli Power Limited has reached finality as this order was not challenged in higher forum. However, the same cannot be said about principle laid down in the order that no compensation for surrender of LTA is payable if no system strengthening/augmentation of network was done for grant of LTA. In the light of fresh arguments and changed circumstances, Hon’ble Commission in its collective wisdom may come to different conclusion. CERC representative in its comments

stated that change of target region case is nowhere part of Order dated 21.2.2014 in petition no. 63/MP/2013.

- iii. The LTA is granted for long term use of 25 years and changes in power supply position cannot be predicted with certainty in the present era of high growth. Within few years only due to delay in generation projects in Southern region, scenario has completely reversed, Southern Region which is now facing huge deficit and the planned inter-regional links for export of power shall now be utilized for import of power. Thus, the transmission system planned under one scenario will be utilized under different scenario and there will not be any stranded capacity in such transmission system.
- iv. Where any DIC has surrendered his LTA rights and the surrendered corridor is utilized for transfer of power on Short Term open access, the charges so collected are disbursed to the DICs in proportion to their share in the ISTS. POSOCO in its comments stated that Himachal Pradesh has allocation from several projects of NHPC such as B-Siul, Chamera-I, II, III and Jhakri/Rampur projects of SJVNL. The entire allocation, which includes 12% free power, is being treated as LTA for HP and payments are being made by HP accordingly. CERC representative in its comment stated that the above order was given in totally different context.

4.5. POSOCO in its Note dated 28.03.2016 circulated to Chairperson of the Committee and the convenor had also quoted other orders in connection with surrender of LTA and payment of transmission charges. These relevant extracts of these Orders are reproduced as below:

- i. Order dated 31st Jan 2013 by CERC in petition no 43/MP/2012 filed by M/s Himachal Sorang seeking that no transmission charges as per Bulk Power Transmission Agreement (BPTA) needs to be levied on it till Sep 2012. The CERC held that billing of transmission charges wef 1st April 2012 by POWERGRID was in order. The petitioner continues to pay the transmission charges even though its power station is yet to be commissioned. The relevant extracts of the Commission's ruling are quoted below for ready reference:

“25. The above discussion leads us to the conclusion that the petitioner sought postponement of commencement of open access till the commissioning of the Karcham-Wangtoo transmission line. The respondent has agreed to the request of the petitioner and has started billing from April 2012 as the Karcham-Wangtoo transmission line was commissioned with effect from 1.4.2012. The claim of the petitioner for further postponement of commencement of open access cannot be considered, as no force majeure event has been brought to our notice which took place after April 2012 which had the impact of delaying the project. The petitioner’s project is being delayed on account of improper planning and execution of the works of the project and the respondent cannot be made to suffer for the failure on the part of the petitioner to execute the project in time. Therefore, no relief can be granted to the petitioner and the petitioner is liable to pay the transmission charges to the respondent from 1.4.2012”

- ii. Order dated 10th Oct 2013 by CERC in Review petition no 2/2013 in the above petition. Again no relief was granted to M/s Himachal Sorang by CERC.
- iii. Order dated 30th April 2015 by APTEL in Appeal no 54 of 2014 filed by M/s Himachal Sorang against the above two CERC orders. APTEL dismissed the appeal. M/s Himachal Sorang continues to be billed for transmission charges wef 1st April 2012.
- iv. Order dated 8th June 2013 by CERC in petition no 118/2012 filed by M/s Lanco Babandh. By a majority of 2:1, the CERC allowed the petitioner to surrender 800 MW LTA without need for paying any compensation.

4.6. POSOCO in their note dated 28.03.2016 has stated that the key lesson from the above orders is that the issue of stranded asset and compensation is a grey area for which no clear answer has emerged. The above orders would definitely be in the knowledge of the Commission staff but is reiterated as it has not found mention in all the discussions of the Committee so far.

5. Written Submissions made by the members:

5.1. Most of the members had submitted written notes of their views in the matter. Shri V J Talwar had circulated 4 Notes, one each after every meeting, Ms Seema Gupta of CTU had circulated 2 notes detailing views of CTU in the

matter. Shri Ashok Khurana also circulated one detailed note giving views of APP. POSOCO representatives also circulated copies of their letter(s) written to CERC earlier and a note giving views of POSOCO. Crux of these notes are discussed below:

5.2. **Notes of Shri V J Talwar.** Shri Talwar had circulated his view points on the issues raised during the meetings of the Committee. It is to be noted that Shri Talwar had circulated his first note on 20th Oct, 2015 which was based on the CTUs base note circulated along with the Commission's Order formulating the Committee. Shri Talwar's note contained few factual mistakes which were pointed out by the officers of CERC. There after Shri Talwar withdrew his note and circulated revised note correcting the mistakes. The crux of his notes are summarized below:

- i. The formula suggested by CTU and CEA for relinquishment charges would not be a correct method for the following reasons:
 - a. The Regulations 18 has used the word 'transmission charges'. The Commissions determine the transmission charges of every asset of ISTS as per the Tariff Regulations. PoC method is only for sharing the transmission charges as determined by the Commission.
 - b. PoC Charges are determined for every quarter of the year and vary substantially quarter to quarter. This may lead to gaming by a player who knows that PoC charges for the next quarter are going to be substantially reduced or increased.
 - c. A generator would stand benefitted by not surrendering his LTA rights and continue to use ISTS through STOA as LTA charges payable by a generator are adjustable against short term usage charges. This results in artificial congestion.
- ii. Regulation 15A and 16A requires CTU to request DIC, whose PPA has been terminated or is not utilizing it, to surrender his LTA rights so that the released corridor could be allocated to another DIC waiting in the queue.
- iii. The Commission is bound by its earlier Orders which are not challenged in the higher courts and have, thus, attained finality.
- iv. The Commission in its Oder dated 25.2.2010 has recognized the fact that in the event of non-commissioning or delay in commissioning of any generator, the transmission system created for such generator would enhance the reliability of transmission network till the corridor is utilized.

- v. The Commission in its Order dated 21.2.2014 has held that there would not be any question of levy of relinquishment charges where CTU has not created and additional asset for the said generator or where the said generator has no control over the circumstances which led to his not utilization of LTA rights.
- vi. The Commission in its recent Order dated 15.10.2015 has held that DICs are compensated when LTA is surrendered and power is transmitted using STOA.
- vii. The Commission in its order dated 21.2.2014 in petition no. 63/MP/2013 in the matter of Lanko Kondapalli Power Limited had observed that there would not be any question of payment of relinquishment charges where no system strengthening has taken place to facilitate such LTA rights and/or where the LTA holder is unable to utilize LTA for the reasons beyond his control.
- viii. The Commission has expressed similar view in the “Staff Paper on Transmission Planning, Connectivity, Long/medium Term Open Access and other related matter” dated September, 2014”. In para 7.1.3 of the Staff Paper the Commission has, interalia, suggested that for exit from LTA 12 year NPV of **transmission tariff of new assets** to be levied.
- ix. Which means that where no transmission asset has been added, there will not be any exit or relinquishment charges and where assets have been added transmission charges only for those assets will be considered in the event of exit from LTA. This philosophy is exactly in line with Commission’s order in Lanko Kondapalli case (supra). The approach of the Commission should be consistent and the same should be continued.
- x. System Studies carried out by the study team using TLTG module of PSS/e software suffers from many drawbacks and the results are not acceptable. The results of TLTG method would vary wildly depending upon the assumption used in the study which would lead to large scale litigation.
- xi. In line with the philosophy expressed by the Commission in Lanko Kondapalli case and the “Staff Paper”, it is suggested that in case of absolute relinquishment of LTA and where CTU has added system specifically for transfer of power from such generating station after getting due approval from the Commission, system studies may be carried out to find out the loadings on the transmission system so

added under both the conditions i.e. when generator is generating full power and when the generation is reduced by the amount of relinquishment. Any difference in flows on the system so added would be calculated and the same may be treated as stranded capacity.

- xii. The apprehensions expressed by CTU representatives that the results of power flow analysis would widely vary with the assumption taken in the studies and would lead to litigation would also get eliminated with this method. No doubt Power flow on transmission elements would vary with change in assumption like generation dispatch etc., however, the differential between full generation and reduced/nil generation at a generating station would not vary much as demonstrated in the last note of Shri Talwar.

Shri Ajay Talegaonkar in its comments state that there is no doubt that the issue of payment of compensation by Lanko Kondapalli Power Limited has reached finality as this order was not challenged in higher forum. However, the same cannot be said about principle laid down in the order that no compensation for surrender of LTA is payable if no system strengthening/augmentation of network was done for grant of LTA. In the light of fresh arguments and changed circumstances, Hon'ble Commission in its collective wisdom may come to different conclusion. With regard to views in the "Staff Paper", they are clearly views of the staff and not that of the Hon'ble Commission.

5.3. The crux of two notes of Ms Seema Gupta, ED, CTU is given below:

Ms Seema Gupta, in her first note contested some of the point raised by Shri Talwar in his note which had been withdrawn. Therefore, the contention of Ms Seema in her note relating Shri Talwar's withdrawn note are not discussed here.

- i. The National Grid is operating as a meshed network and as such determination of Stranded Capacity in such a meshed network using power flow studies is difficult.
- ii. The current CERC regulations prescribe levy of relinquishment charges for a minimum period of 12 Yrs, however in the current dynamic and accelerated phase of capacity addition, it would be extremely difficult to predict the status of transmission network for such a long period of 12 Yrs.

- iii. The Note circulated by Sh. V.J. Talwar though suggests that the relinquishment charges should be levied for absolute relinquishment on account of reasons like project abandonment/delay by generators to act as a deterrent for non-serious players, but it openly advocates that the levy of relinquishment charges for change in target region of LTA is unwarranted and needs to be done away with. In this regard, if the transmission system gets unutilized/under-utilized on account of change of target region, then the major concern is who should be compensating for it? It emerges from the note that the same should go into the pool meaning thereby it to be paid by other existing DICs (States & LTA/MTOA customers). However the reasons why they should be paying for such an event have not been captured in the Note. This is a very serious issue as it is not only going to affect the States but it shall also lead to a casual approach by LTA applicants while seeking LTA without understanding that such an approach may result in lot of wasteful investment.
- iv. An objective, simple, fair and equitable methodology be evolved for levy of relinquishment charges. Such methodology would need to take into consideration various factors and scenarios for relinquishment of LTA.

5.4. APP's views expressed by Shri Ashok Khurana are summarized below:

- i. There should not be any relinquishment charges under following scenarios:
 - a. Change in target region
 - b. No system Strengthening is required
 - c. Where system strengthening is required but the works have not been started or completed.
 - d. Where system strengthening has been completed but quantum of remaining LTA after relinquishment is more than the added capacity.
- ii. Where system strengthening works have been completed but there are pending LTA application and the generator may be asked to pay transmission charges till the commencement of LTA by new customer.

- iii. Where system strengthening works have been completed and the LTA has been relinquished absolutely and there are no pending LTA applications, nominal compensation may be levied.

5.5. Shri Pardeep Jindal, Chief engineer, CEA circulated a letter dated 10.1.2015 from Secretary CEA to Secretary, CERC giving clarification of Stranded Capacity sought by CERC through its letter No. Petition No. 76/MP/2014 dated 24.10.2014. In para 6 of its letter CEA had clarified that additional margin to the extent of surrendered capacity would be available and would remain unutilized till allocated to other IPPS/generators in the future. In para 7 of the letter CEA has said that CTU as nodal agency should specify the stranded capacity that may be created due to such relinquishment. In para 8 of the letter CEA expressed its view that if a long term customer needs to pay compensation for relinquishment of LTA rights as per regulation 18, then the quantum of LTA relinquished may be used for calculation of compensation and in these calculations, the transmission charges based on POC mechanism, instead of earlier pool/sub-pool based mechanism for transmission charges may be used.

5.6. **Shri S K Soonee had circulated a letter dated 26.11.2015 to all members of the Committee. Shri S. K. Soonee had also circulated a note dated 28.03.2016 to Chairperson of the Committee and the convenor. The gist of his contention in the letter dated 26.11.2015 are given below:**

- i. The root cause of present set of issue is the provision of free connectivity in the CERC Regulations on Connectivity, LTA and MTOA and the CTU procedure based on this as well as its implementation.
- ii. No study report is available for each generator or group of generators granted connectivity/LTA/MTOA. So it is not clear as to which set of network upgrades are on account of generators or which elements are on account of system strengthening.
- iii. The Commission has introduced reliability charge with effect from 1.5.2015. However, since some of the generators are still connected to grid and supplying power on STOA, there is no such charge payable by them.
- iv. Commission's Order dated 21.2.2015 in Lanco Kondapalli case has opened floodgates and many generators have applied for relinquishment of LTA.

- v. A transmission system which is radial or a spur connected only can get stranded. A transmission system operating in a closed loop can never get 'stranded' it can at best become under-utilized.
- vi. In some cases the failure of a generator to commission may lead to overloading in certain other transmission corridors necessitating additional investment in transmission.
- vii. Stranded transmission would be rare event barring radial portion connecting generator to the grid.
- viii. A generator being allowed to relinquish LTA without any compensation would lead to a lack of seriousness in the whole process. It could lead to off-market trading by the player who knows that there is a queue waiting for LTA.
- ix. There are instances where PPAs of Central Sector PSUs have reached termination and DISCOMS are not willing to renew PPAs due to high variable costs. In such cases also transmission charges should be paid by CPSUs for the surrendered power till the same is reallocated to someone else.
- x. The process of relinquishment and the compensation must be decided quickly so that others in the LTA queue can be served quickly.
- xi. The relinquishment charges should not be on case to case basis
- xii. It should be known upfront ex-ante rather than post facto.
- xiii. There should be connectivity charge and reliability charge.

The gist of his contention in the letter dated 28.03.2016 are given below:

- i. The need for having Regulations on Transmission System Planning has now been felt and the CERC is working in this direction.
- ii. For determination of Total Transfer Capability (TTC) and Available Transfer Capability (ATC) in the operational planning horizon, the CERC has approved a procedure which is in operation since June 2010. The TTC/ATC studies by RLDCs/NLDC have undergone scrutiny at CEA as well as CERC level and now National Reliability Council for Electricity (NRCE) also exists. RLDCs are sharing the PSS/E data with SLDCs. Further, POWERGRID/POSOCO has engaged international consultants also for giving their independent recommendations on this process.

- iii. In contrast, the studies related to transmission charges sharing, could have become contentious. However, the CERC adopted an excellent strategy to ensure acceptability of the studies. After the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 was notified in June 2010, an Implementation Committee (IC) was immediately constituted comprising different stakeholders. On an ongoing basis, there is a Validation Committee headed by Chief Engineering, CERC which meets every quarter for validating the inputs that would go into the study. With this approach, stakeholders have accepted the studies and today the discussion is more on the Regulations than the studies per se. The entire power flow study data in the form of PSS/E files is placed on the public domain for the benefit of stakeholders.
- iv. A similar process is difficult to achieve, if we want to compute 'stranded capacity' through power flow studies. Such an activity would not be a periodic activity as applications for 'relinquishment' would flow in a random fashion. What should be the base case and how should the studies be carried out is extremely difficult to decide.
- v. For spur connections, payment security mechanism in the form of Bank Guarantees (BG) needs to be taken for nearly 100% of the cost of the spur line to the ISTS point (rather than the present Rs. 5 lakhs/MW maximum). This would avoid issues of computing the compensation. The BG could be encashed in case the generator abandons the project. Alternatively, as suggested by Shri V J Talwar, the responsibility for constructing the spur line needs to be that of the generator so that it has a stake in the entire process.
- vi. For LTA relinquishment, if we consider that there is no 'stranded' capacity (barring spur lines), there must be a method for determining compensation. Flow based methods would always be contentious.
- vii. It is clear that the relinquishment charges need to be at least more than that of MTOA relinquishment where one (1) month transmission charges are levied. But it certainly cannot be 'zero' on the premise that there is no stranded capacity. Else it would give a perverse incentive for market players to first apply for LTA, get transmission built and then relinquish or exit with zero charges. This would jeopardize transmission investment in the long run.

5.7. Shri Akhil Gupta, Joint Chief (Engg), CERC had made presentations in the meetings detailing the results of the power flow studies carried out by the Study team. He had also circulated detailed notes among the Members of the Committee.

6. The issues and discussions there on:

6.1. Based on the submissions made by the members, the Committee deliberated during the following issues;

- I. Whether the relinquishment charges are punitive or compensatory in nature?
- II. If compensatory, whether there is any loss suffered by any DIC in the event of relinquishment of LTA rights by and generator or IPP?
- III. Whether the compensation should be token compensation or exemplary compensation or just compensation for the loss?
- IV. Whether stranded capacity can be determined by the power flow analysis?
- V. Whether any relinquishment charges are payable when a generator seeks change of target region?
- VI. Whether any relinquishment charges are payable even where no system strengthening/augmentation of works have been carried out by CTU?
- VII. Whether any relinquishment charges are payable by a generator/IPP who desires to relinquish his LTA rights under the conditions which are beyond his control e.g. cancellation of captive coal blocks, termination of PPA held valid by higher courts etc.?
- VIII. What should be the basis of compensation where some system strengthening has been carried out by CTU for the said generator?
- IX. How to discourage Generators to transfer power on STOA by surrendering their LTA rights?
- X. Whether there should be any connectivity charge?

Discussions held on each of the above issues are summarized below:

6.2. Issue No. I: Whether the relinquishment charges are punitive or compensatory in nature?

Some the Committee members were of the view that these charges are punitive in nature and should be exemplary. Shri Talwar in his presentation said that the Commission has power to impose penalty on any generator limited to Rs 1 lac only under Section 142 of the Act. Also the term used in Regulation 18 is Compensation. Even CEA in its letter dated 10.1.2015 has also used the term 'compensation'. **It was agreed by all that the charges are compensatory in nature.**

6.3. Issue No. II: If compensatory, whether there is any loss suffered by any DIC in the event of relinquishment of LTA rights by and generator?

Shri Talwar in his presentation made during 3rd meeting stated that the Connectivity Regulations were framed by CERC in 2009. At that time the transmission charges were being shared by the regional constituents under Regulation 33 of Tariff Regulations. Under this earlier regime there could be some loss to the regional beneficiaries when a generator relinquishes his LTA rights. However, the Commission has notified Sharing Regulations in 2010 effective from 1.7.2011. Under new Regulations transmission charges are shared based on power flow analysis. Power flows would change only when there is a change in nodal generation or load. Since the concerned generator would remain connected to the grid and would inject power into the grid under STOA resulting in to no change in power flows and consequently no change in PoC charges. Hence there would not be any loss to any of the DICs.

While accepting the above contentions relating to power flows (that there would not be any change in power flow) Ms Seema Gupta in her presentation contended that since total amount of LTA would get reduced there would be equivalent increase in PoC charges payable by the DICs. Further CTU in its comments stated that this argument is defying all logics. For a given YTC if instead of 50 DICs only 45 DICs share the transmission charges and still share of 45 DICs remain same is illogical, especially when there large number of LTA customers are opting out of LTA. Shri S. K. Soonee also stated on the similar lines in his note dated 26.11.2015. On the contrary, POSOCO representative present during 3rd meetings had stated that as per Regulation 33 of the Tariff Regulations, 2009, it is very clear that if anybody relinquishes LTA, then there is loss but in PoC mechanism, it is not very evident. The PoC mechanism involves some budget balancing to arrive at a charge payable to ensure that entire YTC is recovered. He suggested that some exercises on PoC charges can be carried out to verify the contentions raised by Mr. Talwar.

Shri Talwar in his last note countered that contentions raised by CTU and POSOCO stating that he had also made the similar statement during his presentation that there may be slight impact in average PoC charges. However, the slight impact may be offset in budget balancing for adjusting the nodal PoC charges into various Zones and 9 slabs.

The Committee noted that Shri Talwar had made this statement on 2nd December 2015 and POSOCO representative has suggested that some exercises on PoC charges could be carried out to verify the claim of Shri Talwar no such exercise has been carried out by CTU and/or POSOCO till date. The Commission may direct the CTU and/or POSOCO to carry out required exercise to determine as to whether there would be any change in the PoC charges payable by the beneficiaries in the event of surrender of LTA by any generator.

CTU in its comments stated that it is easier said than done. The Committee have already accepted that even construction of base case for determination of stranded capacity is very much contentious then the determination of PoC which has large dependency on base case considered shall be questionable. The apparent observation that fewer the DICs the more the share each DICs shall have to bear should be accepted rather than going through the entire exercise of studies for determination of effect of relinquishment on PoC charges. In any case, the fear of exodus of the LTA customers has proved to be true. As of today out of the 6080 MW of LTA originally granted associated with HCPTC - I (Odisha) corridor, only about 3200 MW LTA is left due to relinquishment and/or abandonment of generation project.

POSOCO in its comments stated that the Committee members may kindly appreciate that in case a DIC relinquishes LTA, the transmission charges payable by it would now have to be paid by other DICs. Let us assume that 1000 MW LTA is surrendered by a generator whose PoC charges is Rs 1,00,000/- per MW/month viz. Rs. 10 crores per month. If the total monthly transmission charge is 1000 crore per month, then in the POC computations, the charges of other DICs would go up by 1%. This increase of 1% would be on account of budget balancing exercise after load flow studies and determination of nodal and zonal POCs. It is entirely possible that if the generator is still connected, the power flows would not change but the increase of 1% would happen when we balance the budget (the entire MTC has to be recovered). This aspect is well known to the Commission Staff. It is a matter of plain common sense and no studies or exercise is required. This 1% may appear trivial; but if the relinquishment turns into a torrent, the Curse of Commons would set in. In the extreme case, if the entire LTA is surrendered, the entire MTC would have to be recovered from short term transactions and the entire ISTS would become essentially a merchant

transmission system. The members of the Committee may kindly appreciate the gravity of this situation and the future of the entire transmission sector.

CEA in its comments stated that the principle of relinquishment is, that if LTA was not sought or lesser LTA was sought (that is the same as after relinquishment), then corresponding investment into transmission infrastructure was not needed/or lesser investment would have needed. And as such this extra investment would not become recoverable from the other DICs (both the DISCOMS and other Generators). Thus, the extra investment, that is made for serving the original LTA, gets loaded to the other DICs, and therefore they must be compensated to that extent. Similar is the views of CERC in its SOR stated along with the Regulations -“The compensation paid by the long-term customer for the stranded transmission capacity shall be used for reducing transmission charges payable by other long-term customers and medium-term customers in the year in which such compensation payment is due in the ratio of transmission charges payable for that year by such long-term customers and medium-term customers.” (Please refer to Para 96 of the SoR of the 2009 CERC regulation on the subject.)

Shri Ajay Talegaonkar in its comments stated that issue “If compensatory, whether there is any loss suffered by any DIC in the event of relinquishment of LTA rights by generator?” is not relevant. In accordance with Regulations, the only test required for payment of compensation for LTA relinquishment is whether or not there is Stranded Transmission Capacity.

6.4. Issue No. III : Whether the compensation should be nominal compensation or exemplary/exceptional/punitive compensation or just compensation for the loss?

Ms Seema Gupta in her presentation made during 4th meeting of the Committee stated that as per law of Torts compensation could be of three types viz.

- **Nominal:** Very small damages awarded to show that the loss or harm suffered was technical rather than actual.
- **Exemplary/Exceptional/Punitive:** Very high damages which are levied in order to reform or deter the defendant and similar persons from pursuing a course of action such as that which caused the damage/loss/injury.
- **Actual/Restorative:** Damages awarded for actual loss, to place the party at loss in a position that it would have been had it not suffered the loss. The aim is to “make the injured party whole again”.

Shri Talwar, explained that in India practice is to follow the Statutory Law i.e. the Acts passed by the Parliament or the State Legislatures. Neither the Indian Parliament nor any of the State Legislature has passed any Act on the law of Torts. Therefore, principles of Tort are seldom followed in India. It is settled law that exemplary or exceptional compensation is provided only where some right of a person is invaded maliciously, violently, or recklessly disregard of social or civil obligations. All these elements are missing in the present case before the Committee, therefore, only the Nominal or Restorative compensation can be provided.

CTU in its comments stated that the purpose of explaining types of compensation was merely to highlight that even if compensation as against penalty is adopted by Committee then even such compensation can also have penal nature. CTU did not argue that Law of Torts should be applied in the instant case. In fact, the moot point made by CTU was that whatever is levied to customer seeking relinquishment should become “Penalty” for the balance DICs.

6.5. Issue No. IV: Whether stranded capacity can be determined by the power flow analysis?

The representatives of CTU and POSOCO were of the view that the Stranded capacity in a meshed network cannot be determined by Power Flow Analysis. Shri V. J. Talwar and Shri Ajay Talegaonkar expressed that it should be possible. A study group was constituted to carry-out the system studies. The results of the studies carried out by the study group using TLTG module of PSS/e software showed that there would be wide variation in the results depending upon the assumptions taken the studies. Studies also indicated that the stranded capacity would vary hugely depending upon the assumptions considered in the studies. Further, power flows in a meshed network fluctuates on minute to minute, hour to hour, day to day basis. Any change in load-generation balance would result in change in power flows. Therefore, it would not be possible to determine the capacity that would remain unutilized for a period of 12 years. Even the alternative method suggested by Shri Talwar in his last note would only indicate the unutilized capacity under certain sets of conditions and it cannot be said that the transmission capacity would remain unutilized for 12 years with any degree of certainty.

CTU in its comments stated that based on various studies carried out for determination of stranded capacity through, Sh. V. J. Talwar who earlier held contrary views, also concluded that Stranded capacity on account of relinquishment cannot be determined through studies.

CERC representative in its comments stated that there was no conclusion arrived during the deliberations of the Committee meetings that the stranded capacity cannot be determined through power flow studies; it was the opinion of few members only. In fact where other members pointed out importance of system studies, those points from minutes of meetings are not considered in the report. For any studies whether it is power flow studies, studies for planning, studies for PoC mechanism, computation of TTC/ATC, certain methodology is used and certain assumptions are used. If we want to use scientific method to compute stranded capacity, we need to make certain assumptions for the base case. If we adopt a simple methodology which can cater to different scenarios then stranded capacity can perhaps be zero or to the full quantum of relinquishment sought. By using scientific methodology we may compute the stranded capacity which is any value from zero to the quantum of relinquishment sought.

Shri Ajay Talegaonkar in its comments stated that as a primary objection to use of load flow analysis method, it was opined that determination of Stranded Transmission Capacity through load flow analysis will result in increased litigation as parties may question certain assumptions such as slack bus selection, load conditions and Load - Generation Balance etc. A plain reading of this statement may lead someone to believe that load flow study is unscientific tool. However, fact of the matter is that load flow Study as a tool has been in use and is being used for transmission planning, determination of PoC charges and determination of TTC/ATC not only in India but all over the world. Like many other studies in the field of engineering, economics or finance, load flow study is also sensitive to initial assumptions. However, this does not undermine utility of load flow study as tool for power system engineers. It only puts additional responsibility on the engineers to be careful while making assumptions. It is well known that determination of PoC charges is also based several sequential processes including AC load flow, which are also sensitive to assumptions. However, this aspect was taken care off in the relevant regulations by incorporating detailed methodology. It appears that no major questions were raised at that time except on the issue of method of truncation, which was clarified by the Hon'ble Commission. If Hon'ble Commission decides that load flow analysis is to be used for determination of Stranded Transmission Capacity, a detailed procedure can be laid down similar to that in case of PoC charges so that a transparent and non-discriminatory procedure for load flow analysis is applied in all cases. Determination of Stranded Transmission capacity and consequent compensation by use of well-established engineering tool like load flow analysis is more likely to withstand judicial scrutiny than arbitrary percentage of LTA capacity. One of the difficulties expressed for carrying out load flow studies was that it is difficult to anticipate network configuration and load

generation balance beyond a period of about three years. This difficulty can be overcome by carrying out load flow studies for period of (say) three years and assess the Stranded Transmission Capacity beyond three years by extrapolating the results.

Shri Mrutyunjay Sahoo in its dissent note stated that during the initial stage of the discussion of the committee it was agreed that though determination of stranded or unused capacity due to non-use by a power producer may not be a straight forward and easy calculation, a team of officers of CEA, CTU and CERC's internal members would make effort to determine by building different scenarios with some assumptions which may not be exact and the accurate. It was clearly understood that it is better to have some framework with some imperfection instead of none at all. As long as the degree of approximation is understood associated with the different models it would be helpful in arriving at some meaningful decision. Though such an exercise was started with all seriousness it has been subsequently abandoned and therefore there is no scope left for its use in the report. A nonexistent perfect model has vanquished a slightly imperfect framework. Now therefore the committee report does not clearly state what should be the logical liability of the Defaulter who initially sought the use of the network and subsequently fails to use it.

6.6. Issue No. V: Whether any relinquishment charges are payable when a generator seeks change of target region?

Shri Talwar in his presentation had argued that when a generator remained connected to grid and continue to inject power in to the grid the power flows would not change so long the load-generation balance remains unchanged. He contended that the power flows as per Kirchhoff's laws of electricity and not the Commission's Regulations on Open Access. It would be immaterial whether an IPP has LTA for Northern Region or Southern Region. The electrons generated by the machine would follow the same path of least reactance irrespective of LTA. In the case of change in target region there would not be any change in total LTA as such. Thus there cannot be any change in PoC charges. Therefore, there should not be any relinquishment charges in cases where change in Target Region has been sought.

Shri Talwar in his 4th note has stated that allocation from unallocated quota in CPSUs is being treated as deemed allocation and is transferred as LTA and is allowed without levy of relinquishment charges. The Committee need to appreciate that the Act provides for non-discriminatory open access in transmission. Therefore, change in target region by an IPP should be treated in same manner as the change in region for unallocated power from a CPSU.

POSOCO in its comments stated that unallocated quota from Central sector station is a legacy being continued. It is only 15% of the Central sector capacity and allocated amongst the same set of beneficiaries. Over a period of time, the changes in allocation from unallocated quota have become negligible, reflecting the market developments.

Shri Khurana also expressed that it needs to be appreciated that change in Target Region of LTA is a forced decision by IPPs in view of prevailing limited power tie-up opportunities in the market. Further, the LTA sought by IPPs on Target Region basis years back was based on the demand supply projections made by statutory agencies like CEA etc. and as such change in current demand scenario vis-à-vis these projections are not to be attributed to IPPs. Therefore no relinquishment charges on account of inter-regional transfer of LTA are to be levied.

CEA in its comments stated that CEA also projected that 88.5 GW would be added during 2012-17. However, the likely capacity addition would be about 102 GW (88 - 19(slipped) +34 GW new which was outside the projections). This 34 GW might have invested about 1700 Billion Rs (@50B Rs per GW), and it would be quite strange if we assume that such huge investment is made without carrying out any market survey. I hope that this is not true, especially when the Generation is de-licensed as per the Act.

CEA representative was of the view that in the present context, PoC rate would be the only method for determination of compensation amount, because sharing of transmission charges through pool based mechanism has been replaced by CERC by the PoC mechanism in 2011.

CERC representative in its comments stated that as per the order dated 16.02.2015 in petition no. 92/MP/2014 of the Commission, it is clarified that in case of change of target region, LTA applicant first relinquish the capacity and pay the relinquishment charges for the stranded capacity and then has to apply fresh for LTA in new region.

POSOCO in its comments stated that relinquishment charges need to be at least more than that of MTOA relinquishment where one (1) month transmission charges are levied. But it certainly cannot be 'zero' on the premise that there is no stranded capacity. Else it would give a perverse incentive for market players to first apply for LTA, get transmission built and then relinquish or exit with zero charges. This would jeopardize transmission investment in the long run.

Shri Mrutyunjay Sahoo in its comments stated that it is observed in the report that change of target region or interregional change by a power producer should not be considered an act of relinquishment. This observation or

recommendation can only be made presupposing existence of unlimited transmission capacity across regions of the country as well as different part of the states for power flow without appreciating the fact the capacity is limited at any specific point of time and fresh money is required to create or augment capacity which alone can allow long term flow of power on a sustained basis.

6.7. **Issue No. VI: Whether any relinquishment charges are payable even where no system strengthening/augmentation of works have been carried out in ISTS (by CTU or by other TSPs)?**

CEA in its comments stated that the transmission system is not tailor made, i.e. If LTA is 231 MW then transmission cannot be designed precisely for 231 MW, and if LTA is 247 MW then for 247 MW. The transmission is lumpy in nature and some margins get created. If these margins are used to serve LTA sought by another applicant(say X), then additional system would have to be created to serve next applicant(say Y). But if, 'X' relinquishes its LTA, then additional system might not have been needed to serve 'Y'. Therefore, the relinquishment of LTA would cause additional investment in many cases, which is then loaded to other DICs (both the DISCOMs and other Generators).

It may happen that LTA is relinquished prior to the ISTS addition (which is required to be built to serve the sought LTA) is yet to be completed/commissioned. Here, two scenarios would emerge - (i) if no investment has been committed/made, and we can review/cancel the planned transmission addition, then no compensation, (ii) if it is not possible to cancel the investment/drop the planned system, then there should be compensation.

CTU in its comments stated that even the relinquishment of STOA or MTOA that are to be granted based on the margins available in the transmission system also attracts some relinquishment charges. The logic for same is that when one customer had availed the MTOA/STOA actually eats up the margin and therefore denies other user from using the same capacity, hence, there should be deterrent for the same. In this backdrop the LTA which are much more certain than STAO/MTOA should have some relinquishment charges which may be slightly higher than MTOA.

6.8. **Issue No. VII: Whether any relinquishment charges are payable by a generator/IPP who desires to relinquish his LTA rights under the conditions which are beyond his control e.g. cancellation of captive coal blocks, termination of PPA held valid by higher courts etc.?**

Shri V. J. Talwar submitted through its notes that the Commission has already addressed these two issues in its Order dated 21.2.2014 wherein it has categorical held that there would not be any question of payment of

relinquishment charges where no system strengthening has taken place to facilitate such LTA rights and/or where the LTA holder is unable to utilize LTA for the reasons beyond his control. **Commission may take view in this matter.**

6.9. Issue VIII: What should be the basis of compensation where some system strengthening has been carried out by CTU for the said generator?

Once it is contended by some of the members that the Stranded Capacity in a meshed network cannot be determined using power flow analysis then the question arises that how to work out the relinquishment charges. The representatives of CEA and CTU were of the opinion that 100% of the relinquished capacity should be considered as the stranded capacity. However, Shri Talwar expressed that if that be so the Commission would have used the term 'relinquished capacity' instead of 'stranded capacity' in Regulation 18. Since the Commission has used the term 'stranded capacity' and not the 'relinquished capacity', the stranded capacity in Regulation 18 cannot be taken as 100% of relinquished capacity.

Shri Talwar had also pointed out that the Commission in its order dated 25.2.2010 itself has recognized that till the time a new IPP comes up, the additional margins in transmission capacity would lead to greater reliability of the grid. Shri Pardeep Jindal has a view that reliability is to be as per the Transmission Planning Criteria. Any increase in reliability due to relinquishment is clearly a sign of excess capacity in the system caused by relinquishment.

CEA in para 7 of its letter referred above has suggested that the capacity surrendered would remain stranded till it is reallocated to somebody else. In other words CEA also accepted that the transmission capacity cannot remain stranded for all times to come. And when it happens, there would be added number of DICs who would share the transmission charges. And, if it does not happen, then compensation amount charged from the relinquishing entity would reduce transmission charges for other DICs. This uncertainty inter-alia gets taken care by the Commission by charging only 66% of the transmission charges and not 100%.

Shri Khurana suggested that there should not be any relinquishment charges involving the corridor which is congested and there are pending LTA applications for that corridor.

The alternative method suggested by Shri Talwar for determining stranded capacity in his last note suggested that in case of absolute relinquishment of LTA and where CTU has added system specifically for transfer of power from such generating station after getting due approval from the Commission,

system studies may be carried out to find out the loadings on the transmission system so added under both the conditions i.e. when generator is generating full power and when the generation is reduced by the amount of relinquishment. Any difference in flows on the system so added would be calculated and the same may be treated as stranded capacity.

There has not been any consensus between the Members on this issue.

6.10. Issue No. IX. How to discourage Generators to transfer power on STOA by surrendering their LTA rights?

As per the provisions of the Sharing Regulations, 2009 the annual transmission charges of the CTU and other transmission licensees are fully recovered. Their concerns revolve around the apprehensions that this would open floodgates and many developers are sitting on fence ready to relinquish their LTA rights and opt for short term open access to evacuate power from their generating stations. This would hamper economic development of network and would also pose serious system security issues. The concerns expressed by the CTU and POSOCO are valid concerns and should not be brushed aside. However, solution to these concerns will have to be found within available legal frame work.

It would be desirable to understand as to why a developer who has been granted LTA, a long term assurance for evacuation of his power, would like to shift to short term open access where he would not have any assurance of power evacuation. In this context one also have to keep in mind that the existing Regulations already provide enough flexibility for offsetting of LTA granted on “Target Region” against MTOA/ STOA availed for any other region. Presently Indian Power System is heavily congested and release of few hundreds of MW of LTA here and there would decongest the system and increase the reliability. As such allowing inter-regional LTA transfer without levy of would only help in un-locking the existing transmission congestion and would result in more optimal utilization of the existing transmission assets and more realistic demand-supply projections for further network up-gradation/strengthening. However, the concerns regarding the prospective gaming expressed by CTU and POSOCO are required to be addressed.

The Committee deliberated on this issue extensively. Majority view was that STOA charges should also be on per MW basis instead of present per unit basis. The Representatives of CEA and CTU expressed that in case the Commission felt necessary to keep STOA charges in per unit basis then these charges should be determined at 15-25% load factor. In other words STOA charges should be enhanced by 4 to 6 times.

The Committee accordingly opined that the method for STOA charges should be modified and effective STOA charges must be made higher than LTOA/MTOA charges to avoid any gaming.

6.11. Issue X: Whether there should be any connectivity charge?

This issue, although raised by Shri Soone in the second meeting, has not been discussed by the Committee for the reason that the Commission has constituted another Committee under Chairmanship of Shri Mata Prasad on Transmission Planning and related matters. The issue is being addressed by that Committee.

6.12. CTU in its comments stated that as per the terms of reference of the Committee one of the terms was to “Identify the events/circumstances which are likely to result in relinquishment of long term access right by an LTA customer in terms of the provisions of the Connectivity Regulations.” Though the events to the knowledge of CTU had been submitted in the first meetings itself but there had been not a single comment on two events which are also important and having bearing for some of the petitions before CERC like Relinquishment of LTA to account for auxiliary consumptions, the relinquishment on account of change in State Policy regarding home State quota (Chattisgarh case). It would have been prudent that esteemed members had pondered over these issues also and gave their valuable recommendations.

6.13. Shri Ajay Talegaonkar in its comments stated that the fundamental task assigned to the Committee was to suggest method for determination of Stranded Transmission Capacity due to surrender of LTA. In his view, the method for determination of Stranded Capacity should be consistent with the Regulations and should be fair to generators surrendering LTA as well as DICs, which may have to bear burden of under-utilized assets consequent to surrender of LTA. It is clear that transmission charges recoverable by transmission licensees remain unaltered and hence are not affected due to surrender of LTA. It is clear that unutilized capacity will be different in different cases of surrender depending on location of the generator and load generation balance at the relevant point of time. Therefore, any straight jacket approach, such as taking a fixed percentage of surrendered LTA capacity as Stranded Transmission Capacity will not be consistent with the existing Regulations. A uniform charge gives hint of penal nature, which is definitely not the intention of the Regulations as clear from use of word “compensation” in Regulation 18 (1). It may be desirable to apply a minimum charge to discourage players, who did not carry out due diligence before opting for LTA or non-serious players; but this will require amendment to existing regulations.

6.14. Shri Mrutyunjay Sahoo in its dissent note stated that in any case, not collecting any relinquishment charge on the ground that in the meshed network segmenting the stranded capacity ascribable to any individual power producer is a technical difficulty and therefore not be collected is not an option in a system running on commercial model. If adopted, it is sure to create moral hazards in the power sector decision making system which will be shunned by the lenders and investors going ahead. The consequence would be either drying up of investment into the transmission sector or the regulatory regime has to allow the loading up of the investment charge on the Distribution companies in some surreptitious manner without latter's clear understanding and express consent. As the first outcome would be undesirable and the second one would be unfair and iniquitous, the CERC should go by the straight forward commercial logic of making every Promisor pay when it fails to deliver on his end of the promise to prevent a situation of recklessness and non-accountability. No other extraneous point or factor should enter into this arena.

7. Recommendations

The oral and written submissions made by Committee members as detailed above have been comprehensively reviewed and the following recommendations in the larger interest of the sector, balancing the interests of the stake holders and honouring the existing Regulations, are hereby made for the consideration of the Commission.

Note : Some members observed that some of the recommendations were not discussed in the meetings, and some of the members disagreed with some recommendations. Their views are recorded under each of the recommendations. Shri Mrutyunjay Sahoo in his dissent note stated that the circulated report neither reflects the views of all the members nor does it address the core issue of TOR given to the committee. Contents of his dissent note are appended to this section.

- a. **Inter-Regional transfer of LTA may be allowed without any relinquishment charges. However to pre-empt any possibilities of gaming, such Inter-Regional transfer of LTA should be made permissible only if the LTA Applicant has a long term PPA with any beneficiary located in that Region.**
 - CEA is of the view that in this case relinquishment charges can be only 33% instead of 66% of the estimated transmission charges, because the generator side PoC is still there.

- POSOCO is of the view that for any relinquishment, the charges payable should be at least more than the one month charges payable for relinquishing MTOA.
 - Shri Ajay Talegaonkar is of the view that if load flow analysis is used for determination of Stranded Transmission Capacity, no special treatment is required for change of target region as impact, if any, would be captured by the studies.
 - CERC representative is of the view that as per the order dated 16.02.2015 in petition no. 92/MP/2014 of the Commission, it is clarified that in case of change of target region, LTA applicant first relinquish the capacity and pay the relinquishment charges for the stranded capacity and then has to apply fresh for LTA in new region.
- b. For the cases where grant of LTA does not involve any network strengthening by CTU and/ or Private Transmission Licensee(s) (*i.e. Neither ISTS strengthening nor construction of a dedicated connectivity line from the generation project to the pooling station*), then absolute relinquishment of granted LTA (*in part of full*) or delay in operationalization of LTA commensurate with delay in commissioning of generation project may be allowed without any relinquishment charges, since such margins in the system, in any case are being used to grant of MTOA/STOA.
- POSOCO is of the view that above recommendation is inconsistent with POSOCO's note dated 28.03.2016 and for any relinquishment, the charges payable should be at least more than the one month charges payable for relinquishing MTOA.
 - CEA is of the view that for the cases where there is delay in operationalization of LTA and commensurate delay in commissioning of generation project, no relinquishment charges may be taken for period up to operationalization of LTA.
 - Shri Ajay Talegaonkar is of the view that power flow studies to be used for determination of Stranded Transmission Capacity and the consequent relinquishment charges.
 - CERC representative is of the view that above recommendation is not part of any terms of reference of the Committee and also that it is not in line with the existing regulations of the Commission. Deferment of LTA is not allowed under prevailing Regulations of CERC and

deferral of transmission charges is not related to the relinquishment charges.

- c. For the cases where grant of LTA involves network strengthening by CTU (*Either ISTS strengthening or construction of a dedicated connectivity line from the generation project to the pooling station or both*), and such end to end system strengthening (*i.e. both dedicated connectivity line and ISTS strengthening*) has been completed and the system has been made operational by CTU then case-wise treatment may be made as under:

- (i) Case-I: When there are other LTA Applications in queue seeking LTA for the same region for which LTA is being relinquished:

The LTA Applicant may be required to pay the associated transmission charges (*after discounting revenues accrued from collections on account of MTOA/STOA granted from the same associated system*) for the period from commissioning of the end to end associated transmission system till commencement of LTA by new customer, subject to a maximum term of, say, 2 Yrs.

- CEA is of the view that the LTA Applicant may be required to pay relinquishment charges (as per regulation 18) (Note: This 2 year thing was not discussed. In fact, the Committee, as per its ToR (no. (a) - (d)) is to give the recommendations as per the existing Regulations. The existing regulations say to take estimated transmission charges for 12 years and not 2 years. 2 years thing is arbitrary. However, under ToR (e & f), the committee may suggest changes to the Regulations).
- CERC representative is of the view that the above recommendation is ambiguous and not implementable since there is no methodology to calculate the revenue collection from MTOA/STOA for a particular transmission system.

(ii) **Case-II: When there are No pending LTA applications for the same region for which LTA is being relinquished:**

Such cases of absolute relinquishment of LTA may be on account of various reasons like abandonment of generation project, non-availability of fuel, termination of PPA etc. Hence, such cases may be dealt on case to case basis by the Commission based on their respective merits.

- CEA is of the view that for the case of termination of PPA, it should be as per the provisions of regulation 15A of the main Regulations.
- CERC representative is of the view that above case is actually the main task of the Committee, and the report at the end leaves that job for the Commission.

(iii) **Case-III: Delay in Operationalization of granted LTA:**

Delay in Operationalization of granted LTA (*on account of delay in commissioning of generation project*) may be allowed subject to payment of transmission charges (*after discounting revenues accrued from collections on account of MTOA/STOA granted from the same associated system*) for a maximum period of, say, 2Yrs reckoned from the date from which the entire end to end associated transmission system (*i.e. both dedicated line and ISTS*) has been commissioned and made operational by CTU. Similarly, if availability of the transmission system is delayed by the CTU resulting in bottling up of power from the generator, the Generator may be appropriately compensated by the CTU limited to fixed charges only of the generator for such delayed period.

- CTU expressed its reservation for this provision. As per CTU this recommendation was never given even in any of the submission before the Committee meeting. The Committee members must be aware that in the TBCB era, role of CTU

had been left only to plan. The bidding for planned system is carried out by one agency, TSAs are signed by 2nd agency(ies), constructed by third agency and the monitoring is done by fourth agency. Under such situation, holding the CTU, who merely planned the system, responsible (leaving out the agencies who are responsible for bidding, constructing & monitoring) seems to be ill-logical. Plus such a recommendation or discussion was never the mandate of committee.

- CEA is not in agreement of the above recommendation but suggested that if availability of the transmission system is delayed by the CTU resulting in bottling up of power from the generator, the Generator may be appropriately compensated by the CTU limited to fixed charges only of the generator for such delayed period.
- Shri Ajay Talegaonkar is of the view that categorization of cases is not required, if power flow analysis is used for determination of Stranded Transmission capacity.
- Shri Ashok Khurana in its comments stated that another case in the above recommendation should be added as: "Case-IV: Where the quantum of LTA granted on strengthened system is more than capacity of the strengthened system: In such cases, there will be no stranded capacity if quantum of LTA granted after relinquishment is still more than the capacity of the strengthened system. Therefore no relinquishment charges should be applicable in this case."
- CERC representative is of the view that above case is also nowhere related to terms of reference of the Committee and never discussed in any of the meetings. The fixed charges are usually 4 to 10 times of transmission charges. As per Tariff Regulations, if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned.

d. For the cases requiring system strengthening by CTU/ Private Transmission Licensee(s), but the construction of such system has not commenced, relinquishment of LTA may be allowed without any relinquishment charges.

- POSOCO is of the view that for any relinquishment, the charges payable should be at least more than the one month charges payable for relinquishing MTOA.
 - CEA is of the view that relinquishment of LTA may be allowed without any relinquishment charges, if the sought LTA cannot be operationalized.
 - Shri Ajay Talegaonkar is of the view that even if actual construction has not commenced, the transmission licensee might have incurred expenses in preparatory activities and in worst case might have placed the order. This aspect need to be considered.
- e. **Method for STOA charges should be modified and effective STOA charges should be made higher than LTOA/MTOA charges to avoid any gaming.**
- CEA and CTU are of the view that STOA charges should be enhanced by 4 to 6 times.
 - Shri Ajay Talegaonkar is of the view that this issue was only briefly discussed in the Committee meetings. The issue of gaming requires elaborate discussion and perhaps is more in the scope of separate Committee constituted by the Hon'ble Commission to "Review Transmission Planning, connectivity, Long Term Access, Medium Term Open Access and other related issues".

Dissent note of Shri Mrutyunjay Sahoo :

Shri Mrutyunjay Sahoo in his dissent note suggested the following method to determine the relinquishment charge:

- (1) The relinquishment charge to be collected from every power producer who fails to use the transmission network after having made the commitment to use should be the putative investment allocable to the capacity booked and not used later. This can be derived by taking the ratio of capacity booked by the relinquisher to the total capacity of the concerned region\’s multiplied by the total depreciated value of the historical investment made by the CTU and other investors in the relevant region\’s. As the above data is the basis for calculating the transmission charge, it should be possible to have the number to arrive at the figure.
- (2) Alternatively Relinquishment charge to be collected can be 5 years’ transmission charge which the power producer would have paid if

the power would have been injected by him as promised. The rationale for 5 years comes from the present practice of making transmission plan for each plan period and it is presumed that any idle capacity arising at any point of time would be factored into the next round of new investment when the same is planned.