CERC Staff Paper of September, 2014 on Transmission Planning, Connectivity, Long /Medium Term Open Access and Other Related Issues

APP Comments/Suggestions

1. At the outset, wewould like to compliment the Hon'ble Commission for taking-up the issue of Transmission Planning and Network Access at this juncture when the lack of transmission infrastructure has emerged as a major bottleneck preventing merit order dispatch of electricity from cost effective generating stations to demand regions.

2. The Staff paper, in para 1-6, elaborates on considerations, experiences, suggestions and their analysis of the issues. Proposed formulations and mechanisms are detailed in para 7-9. Questionnaire is in para 11.Following two alternatives have been proposed:

Alternative –I	To continuewith the present LTA regime with choice to applicant for seeking from three types of products viz**. TYPE-A**: Connectivity plus Full Network Access; **TYPE-B**: Connectivity Access and **TYPE-C**: Connectivity plus Injection Access
Alternative –II	Methodology based on GNA concept

   In our view, methodology based on GNA concept proposed by CEA seems to be a better option. However, the formulation suggested by CEA needs substantial changes to address many of the issues that have been flagged. Proposal in staff paper would address a few of the issues but it would still need some more changes to address important issues. Our suggestions in this regard are included in this response.

3. Comments/response on the issues our replies to the questionnaire are given as follows.

4. LTA as per present methodology vis-à-vis GNA

The present methodology of attributing **entire** ISTS transmission expansion to generator and not to beneficiaries till long-term PPA, and the proposed continuation as per Alternative 1, puts entire responsibility of development of ISTS system on generators and ISTS transmission providers. The load serving utilities remain free from any obligation towards development of ISTS system. Experience has shown that utilities not only defer purchase of

long-term generation capacities but also leave out substantial gap for medium-term and short-term purchases. In the process, utilities pay transmission charges only after using the already developed/being developed network and nothing towards developmental commitments. In the absence of their commitment in ISTS system, development of STU network also suffers because firstly, it does not get coordinated properly and secondly, implementation of even whatever is planned in STU system lags behind ISTS system and keeps on getting delayed. As a result, we have been witnessing that while older substations keep on getting over-loaded, utilisation of new ISTS substation capacities is extremely poor to the extent that even the overall average utilisation of ISTS substation capacities is very much on lower side.

There is a need to correct this at the earliest.

5. GNA methodology:

5.1. GNA methodology seems to be a better option. However, to address many of the issues that have been flagged, it would be necessary to incorporate changes and detailing so as to arrive at an efficiently workable solution. The following observation/suggestions may be looked into:

5.2. For optimal network planning drawal GNA need not match to 100% of injection GNA

From the staff paper (para 7.4.2, 7.4.3,7.4.4 & 7.4.5) it is seen that possibility of developing over capacity system is being visualized taking that if injection GNA is 10000Mw and drawal GNA is 7000Mw, system corresponding to 10000MW injection and 10000MW drawal will be developed with additional 3000MW drawal GNA liability on generators. In this context, it is to point out that ISTS system planned for 10000MW injection GNA and 10000MW drawal GNA, even while having over capacity at drawl end, may be inadequate for meeting requirement of 10000MW injection GNA and 7000MW drawal GNA. The following example will illustrate this:

Example: Let us take a 3 zone system with following GNA requirement

Figures in MW

	EW-zone	N-zone	S-zone	Total
Injection GNA	5000	2500	2500	10000
Drawal GNA	1000	3000	3000	7000

EW Zone is having low cost generation resources where as N-zone and S-zone are load centric.

If drawal GNA is proportionally increased to match to 10000MW, the system may get planned for following capacities:

	EW-zone	N-zone	S-zone	Total
Evacuation system in vicinity of generating stations	5000	2500	2500	10000
Demand serving substations	1400	4300	4300	10000
Transmission Corridors	EW-N corridor		EW-S corridor	
	1800		1800	

On the other hand, if the system requirement is assessed corresponding to injection GNA of 10000 MW and drawal GNA of 7700 MW (7000 + 10%), and two 7700 MW generation dispatch scenarios are studied as per (1) EW: 5000, N: 700 and S:2000 and (2) EW: 5000, N: 2000 and S: 2000, it would work out as following:

	EW-zone	N-zone	S-zone	Total
Evacuation system in vicinity of generating stations	5000	2500	2500	10000
Demand serving substations	1100	3300	3300	7700
Transmission Corridors	EW-N corridor		EW-S corridor	
	2600		2600	

The above shows that the system evolved by increasing drawal GNA to match injection GNA of 10000 MW may not provide adequate capacity in transmission corridors to support merit order dispatch. And the over provision in demand serving substations will not serve any purpose.

5.3. Need for clarification on change of region under GNA mechanism:

On reading the GNA concept in the Staff Paper it is understood that GNA will provide access to a generator to supply power from aapecified point to any drawee entity, in any region. It is also stated in para 7.4.1 that declaration of target region shall be optional. It is therefore requested to clarify as to why situation for indicating "*change of region*" arises under GNA regime as mentioned under para 7.4.10.2.

6. Connectivity as separate product in GNA methodology:

6.1. In GNA methodology, 'Connectivity' has been proposed as a part of the GNA parcel and not a separate product. However, there are considerations which suggest treatment of 'Connectivity' as a separate product. GNA for the generating station would be for the quantum corresponding to installed capacity and as such, this would be changing (increasing) as per commissioning program of units as given by the generator in its

application (or as per revised program intimated in advance as per regulation in this regard). On the other hand, connectivity system has to come–up ahead of commissioning of generating units and phased according to transmission elements. In view of this, time lines for tie-up and project execution and also for levy of transmission charges on generator for 'Connectivity' and GNA would be different.

6.2. Connectivity system up to pooling point is exclusively utilized by the respective generating station(s). For the connectivity system developed by CTU, it would be justified to have recovery of transmission charges for this system through 'Connectivity' charges and not as pooled system. BG corresponding to NPV of connectivity charges for 12 year may be justified for connectivity system only.

6.3. Our intent is not to suggest that generators may be allowed to apply/avail connectivity only and defer/delay GNA as allowed under present connectivity/LTA system. What we are suggesting is that the two have different considerations and keeping the two as separate products would facilitate design. To ensure that generators do not delay GNA/LTA application, there should be specific the stipulation that both 'Connectivity' as well as 'GNA' will be required even for test synchronization of units.

6.4. It also seems logical and in line with National Policy and Tariff Policy, that transmission charges for the network in power evacuation corridors from pooling point onwards up to one or two next grid stations (shallow connection ahead of first connectivity lines) that is injection side system developed for specific generating stations/units,is recovered from those specific generators for whom it is build. Transmission charges for such systems, if pooled ahead of commissioning of the specific stations/units corresponding to the transmission capacity of these corridors, would unduly overload the pooled transmission tariff. As such, till the time of incidence of GNA for full capacity, it may be better to treat these elements as part of connectivity system and transmission tariff recoveredfrom specific generators in proportion to their respective connection capacities, as a part of connectivity charges. After the incidence of GNA for full capacity, these elements could be transferred from connectivity system to pooled system.

7. Transmission Planning

7.1. Before submitting the comments/suggestions on transmission planning, we would like to request to consider the following broad principles for development of a robust transmission network not only at the Inter-State level but also up to the consumer end.

- Coordinated and integrated transmission planning, both for Inter-State and Intra-State transmission system with approval from a committee formed under the guidance of CEA
- Transmission to be treated as a Service and GOI may be requested to consider development of at least some important transmission corridors that facilitate power flow between different regions of the country without any congestion. This shall be analogous to the development of national highways
- Apart from Planning and developing sufficient evacuation/transmission facilities in ISTS, adequate investment in transmission, sub-transmission and distribution network of state utilities is also a must so as to have the required network enabling the flow of electricity to the end consumer.
- CTU to be ring-fenced from transmission planning to avoid discrimination between various transmission licensees.
- Regulatory provision specifying parameters and procedural compliance would be desirable. The emphasis should be on ensuring development of a robust and optimal system.

7.2. Experience has shown that with the network expansion based on N-1 or N-1-1 planning criteria adopted so far, has not helped to develop required ISTS. For development of robust network, planning criteria of N-1-1 needs to be up-graded. The following may to be considered:

(a) N-2-1 for all critical corridors carrying large quantum of power say 2000MW or more.
(b) N-2-1 or N-1(Tower)-1 for corridors those having multi circuit lines.
(c) N-2-1 for corridors emanating from large generation complex say 3000MW or more.
(d) N-2-1 for inter-regional corridors.
(e) Insisting N-1-1 for radial connections may not be necessary.

8. Transmission Planning under GNA methodology

8.1. Network expansion planned based on both injection and drawal points as per generators LTA applications even for those cases where sale is not tied-up at the time of LTA application and drawl point/region is tentative, does not cater to situation when actual sale tie-up is in a different region. In case of transmission planning under GNA methodology too, as illustrated in the example given in para 5.2, if we artificially jack-up drawl GNA to match with injection GNA, we may again end up with similar situation of deficiencies in planned transmission system.

8.2. In our view, to arrive at a transmission system having adequate capacities to cater to GNA requirement with reliability, network expansion planning should be done by considering load Demand scenarios based on withdrawal GNA sought by Drawal customers and Generation scenarios as per injection GNA sought by Generation/ injection customers. Load generation balance for the study scenarios can be arrived at irrespective of injection GNA >,= or<drawal GNA as per following:

(i) Peak demands higher than those corresponding to drawal GNA so as to account for possible variation in forecasted figures based on which utilities would have sought their GNA. A fixed percentage say 10% may be prescribed for this purpose. System planned on this basis would also facilitate the utilities to avail some extra power when available at competitive rates in the market.

(ii) In the prevailing scenario, it is expected that drawal GNA plus 10% (or the specified percentage) would be less than injection GNA. However, if for any planning period it does happen that drawal GNA plus specified percentage exceeds the injection GNA, peak demands should be restricted to those corresponding to injection GNA so as to avoid developing over capacity ISTS.

(iii) Off peak load as per demands corresponding to drawal GNA.

(iv) Generation scenarios by maximizing or minimizing generation in pockets so as to arrive at LGB corresponding to maximized power flows along the transmission corridors and also for minimized power flows in corridors to plan reactive components in the system.

(v) While arriving at scenarios in (iv) above, maximized generations would be as per injection GNA of applicant generators and minimized generation would be as low as just sufficient to meets the LGB. In off-peak scenario, minimized generation may even be zero in some pockets.

(vi) No additional network to cater to non-backing down of generation under load crash conditions.

8.3. The above methodology would obviate need of seeking or assuming any target beneficiary regions. There would also be no need for asking generators to bear GNA responsibility for withdrawals. Studies based on above LGB methodology would give a cost effective solution for network expansion catering to 100% evacuation with nearly 360 degree system under all operating conditions except under load crash. Considering demands corresponding to higher than drawal GNA, besides taking care of some forecasting errors/omissions and enabling better LGB for studies, would also provide margins for short term power market.Commitment of Drawee utilities towards their

drawal GNA would not only facilitate ISTS but also help to stream line development of corresponding STU system.

9. Bank Guarantee

9.1. Bank Guarantee equivalent to NPV of 12 year transmission charges amounts to developing entire ISTS at the generator. However, if generator fails due to any reason or is not successful in tying-up the PPA within the target region, he is to loseall his rights and get no return on the money that will go out on enchasing of BG. If this proposal is accepted, it would compel the generator to defer and delay both connectivity as well as LTA/GNA process till firming-up of beneficiaries and signing of PPAs. Further, since access is proposed only for full capacity, it would create a situation in which PPAs for part capacity may start losingviability. With the requirement of seeking connectivity along with LTA/GNA, generator may delay even the connectivity application process. The net result would be that entire process of transmission development would get delayed and suffer.

9.2. The proposal, if implemented within the existing regime in which connectivity can be obtained without LTA, has potential for killing entire development of generation projects for Case-1/merchant capacity market. The only option with which non-case-2 generators will be left with would be to seek connectivity only and operate through STOA. This will not only discourage the generators who are now well aware of the consequence of such a situation but also completely derail the ISTS process as well as generation development.Deferring the entire system for want of BG would be greater loss as compared to a little bit of un-utilized or less utilized system (stranded assets) that may become necessary if some generator fails after paying initial BG of Rs 5 lakh per MW

9.3. We would request that before considering any increase in BG, an assessment based on past 5 year experience, of the amount of investment in stranded assets, if any,that may have got created on account of generation developers vanishing or failing to pay transmission charges, may be done and increase in bank guarantee amount may be considered only if such loss is found to substantial enough. We would also like to submit the following for consideration:

a) Responsibility for construction of connectivity lines up to pooling station / grid connection point should be with the generation developer.
b) Bays for connectivity lines at pooling/ grid station should be constructed on deposit work basis after getting payment from generator.

c) Beyond pooling/grid point development should be done in a coordinated/phased manner matching with progress of generation project to the extent possible.
d) Risk of stranded system in case of generation project failing to get commissioned or post commissioning failing to operate due to any reason, should be address by planning utilization of system for other generation projects that may come up.

9.4. We would suggest that construction bank guarantee equal to NPV of estimated charges 12 years only for connectivity lines up to pooling point which are exclusively utilized by the respective generating station(s). For the system beyond pooling point, that is the system towards LTA or GNA, bank guarantee of Rs 5 lakhs per MW to be taken at the time of application approval, may be continued as such. However, in the Bank guarantee may need to be increased at the time of commissioning of units and start of actual access so as to cover the amount of exit charges. Thereafter, the Bank guarantee should progressively reduce as per reducing exit charges.

10. Provision relating to exit from LTA/GNA

10.1. Presently, in case a LTA holder does not use the system and wishes to exit before 12 years, he has to pay NPV of the estimated transmission charges for the period falling short of 12 years. We believe that it is only the connectivity lines which have the risk of becoming stranded. Transmission network beyond connectivity points would get commercially utilized for power evacuation/transmission giving loss reduction and reliability benefits from very beginning and utilization of higher capacity on account of growth in the next 4-5 years or even earlier. Spare capacity on account of exit would provide additional stability and grid reliability, which is very important.

10.2. We would suggest the following provision with regard to exit of LTA or GNA:
a) NPV of the estimated charges for the period falling short of 12 years, only for connectivity lines up to pooling point which is exclusively utilized by the respective generating station(s), may be charged.
b) With regard to LTA or GNA charges for the grid other than connectivity lines, exit charges should be reducing depending on time period after which the exit is sought. we would suggest the following:
- If exit is sought after 0-3 years of use, exit charges could be NPV equivalent to 4 years transmission charges (LTA or GNA for injection end only)
- If exit is sought after 3-6 years of use, exit charges could be NPV equivalent to 3 years transmission charges (LTA or GNA for injection end only)
- If exit is sought after 6-9 years of use, exit charges could be NPV equivalent to 2 years transmission charges (LTA or GNA for injection end only)

- If exit is sought after 9-11 years of use, exit charges could be NPV equivalent to 1 years transmission charges (LTA or GNA for injection end only)
- If exit is sought after 11 years of use, exit charges could be nil.

c) In all cases of exit, there should be a minimum notice period of six months during which GNA charges should continue to be payable by the applicant.

11. Provision relating to change over to GNA methodology and relating to cases of delay

We would request the following for consideration:

(i) If any mechanism, similar to GNA is implemented with provision that all existing LTAs shall automatically be converted to GNA, such treatment should also be extended to existing MTOA holders.

(ii) Transmission access approved but not commenced even after two years of scheduled date for which no network augmentation specific to that access alone, is carried out, may be cancelled and BG may be refunded back. Such users may be asked to apply again depending on revised schedule/requirement.

12. Aligning transmission tariff in GNA as per National Electricity Policy and Tariff Policy and addressing transmission pricing issues for Renewable Generation

12.1. National Electricity Policy and Tariff Policy state that transmission charges should be determined with the objective being to get the transmission users to share the total transmission cost in proportion to their respective utilization of the transmission system. In this context, it is rightly stated in the staff paper (para 5.9.15.2) that the transmission pricing based on contract or allocation is an old concept which is to be replaced with actual usage in accordance with the guidelines specified in the National Electricity Policy and Tariff Policy.

12.2. It is observed that under the existing LTA regulations as well as in the proposed GNA method or the proposed options under LTA, incidence of transmission charges as per LTA or GNA, transmission charges are applied on full quantum of LTA/GNA and not on utilization of the transmission system by the respective entity. In these design of tariff, there is no reduction in transmission charges in case of actual utilization being less than LTA/GNA contract. This is not in line with the stated policy. As a result, the system is not only not very conducive to development of transmission system for Renewable Generation (para 5.10.6 of staff paper) but also puts all Hydro Generations at a disadvantage due to their lower PLFs.

12.3. Although it has been stated in the CERC Staff Paper that transmission cost allocation should be based on actual usage, the paper is silent on the methodology, as to how the same would be implemented. The methodology of usage based changes needs to be decided upon for bringing prudency and transparency in the cost allocation process.

12.4. For a system facilitating appropriate transmission development, the responsibility of drawee entities must be firmed-up by way of regulations and appropriate tariff design. In case of actual drawalexceeding GNA beyond a pre-determined deviation level, the drawee entity must bemade liable for penalty. Similar provision should also apply on injecting entities. The regulatory design should work towards guiding all entities to project their transmission access requirement by adopting prudent practices.

12.5. It is proposed under para 7.4.10.4 that in case of drawee utilities, if demand is not realized to extent of GNA, the differential demand would be billed on such GNA holders based on average transmission charges computed for the country. In our view, there should be a uniform mechanism for computation and levy of charges ensuring recovery of full transmission charges factoring the GNA approved and access availed.

12.6. There is a need to address the above issues in a comprehensive manner. Tariff formulation as suggested below would address most of above issues:

a) Access charges on daily basis based on peak of gross excess.
b) Rebate of 50% on unutilized GNA. This could be 50% for Thermal Generation, 75% for Hydro Generation and 90% for Renewable Generation.
c) 50% Higher rate for access exceeding GNA up to 120% of GNA.
d) 100% Higher rate (that is double of base rate) for access exceeding 120% of GNA up to 150% of GNA.
e) Penal rate 300% higher (that is 4 time of base rate) for access exceeding 150% of GNA.
f) Over/under recovery on account of above rebate/higher rates to be adjusted in accounting for the next billing cycle.

12.7. The mechanism of rebate and higher/penal rates as suggested above would be a positive step towards aligning the tariff structure as per stated policy. It would also sent strong signals for seeking appropriate amount of GNA, and work as a trigger both for injectors as well as drawees. This mechanism of rebate, higher rate and penal rate as per above would also obviate the need of compulsorily seeking GNA for full capacity of generating station.

Reply to questionnaire in para 11 of Staff Paper:

Question	Reply
Question No 1: Whether connectivity should be retained as a separate product?	Yes and No. For a better design, connectivity should be treated as a separate product. Even in GNA methodology, connectivity should be designed as a separate product. However, generators may not be allowed to apply/avail connectivity only and defer/delay GNA as allowed under present connectivity/LTA system. To ensure that generators do not delay GNA/LTA application, there should be specific the stipulation that both 'Connectivity' as well as 'GNA' will be required even for test synchronization of units
Question No 2(a): If yes, what are in your opinion are the advantages of connectivity as a separate product ?	Please refer to para 6.1 to 6.4 of our submission.
Question No 2(b): If connectivity is retained as a separate product, then whether it should be free or transmission charges should be borne by generator or drawee entity which is applying for connectivity	Only specific connectivity network (shallow connection) should be charged. Investment in transmission system beyond shallow connection should be recovered through access tariff. Please also see para 6.4 of our submission.
Question No 2(c): Whether for connectivity, only transmission charges corresponding to connectivity transmission system should be charged or some part of Grid transmission charges (25% as proposed) should also be charged?	Only corresponding to connectivity network. However, till commissioning of all units corresponding to transmission capacity of the common network, some part of network beyond pooling point would also form part of connectivity network. Please also seen para 6.4 of our comments.
Question No 3: If no, what, in your opinion, are the disadvantages of connectivity as a separate product?	If generators are allowed to avail connectivity and access through STOA as under present connectivity/LTA system, generators may delay GNA/LTA resulting in inadequate planning/development of transmission system and leading to transmission congestion.

Question No 4: Bank Guarantee : What should be amount of sufficient construction bank guarantee to safe guard against the risk of stranded asset in case generating project fails to get commissioned? (a) Is existing construction bank guarantee amount (Rs.5 Lakh per MW) sufficient when transmission cost is about Rs.1 Cr per MW? (b) Is proposed bank guarantees equivalent to cost of transmission line is sufficient? (c) Is proposed bank guarantees are very high?	(a) Yes, the existing construction BG of Rs 5 laksh per MW is sufficient. (b) Proposed BG equivalent to cost of transmission line is much more than sufficient (c) Yes, the proposed BG are very high. Please also see our views as given in para 9.1 to 9.4
Question No 5: Bank Guarantee : What should be amount of sufficient construction bank guarantee to safe guard against the risk of stranded asset or transfer of liability to other consumer in case generating project wants to exit/downscale LTA after commissioning (Please give justification for your views) (a) NPV equivalent to 12 years transmission charges (b) NPV equivalent to 7 years transmission charges (c) X Rs. Per MW of installed capacity – One time charge (d) Five years average injection and withdrawal charges (e) Five years average injection charges only	Please see para 9.4 of our submission Construction bank guarantee of Rs 5 lakhs per MW taken at the time of approval of application would need to be increased at the time of commissioning of units and start of actual access. During operational phase, sufficient amount of Bank Guarantee to safe guard against risk of liability should be equivalent to amount of exit charges as proposed in para 10.2 of our suggestions.

Question No 6: **Delay in Commissioning** In case of delay in generating unit(s) / project (a) Date of LTA should be firm and no relaxation should be provided (b) If information of delay is provided sufficiently in advance some staggered relief can be granted (c) Issue should be decided mutually between generating company and transmission licensee subject to condition that no burden is transferred to other users	(a) No, date of LTA must not be firm. Regulations should provide certain relaxation margin for a period of say 3-6 months. For delay beyond the relaxation margin, the delay must be decided on case to case basis subject to force majeure conditions. (b) Yes, relief may be granted in such case. However, the relief may be granted on case to case basis after thorough analysis for maximum permissible delay. It would be desirable to have regulations in this regards which specify the manner in which such cases are to be dealt and relief is to be granted. (c) Yes, the issue may be decided mutually between the generator and transmission licensee. However, in case of any dispute, Hon'ble Commission may be approached.
Question No 7: **Shallow connection Vs Deep connection** (a) What is your views on shallow connection vs. deep connection (b) Shallow connection should be permitted to only Renewable generation or to both Renewable and conventional generators (c) Under Shallow connection system how transmission planning will be done and who shall bear the Grid level transmission charges	(a) Mere shallow connection may not be desirable as the same would have a tendency to restrict the network planning process leading to congestion. (b) Shallow Connection should be permitted only to the renewable generators, as the same could be accommodated in the grid margins. However, for conventional generation and even for larger quantum of renewable generation, there would generally be requirement of system strengthening at some critical segment of deep network. (c) It would be appropriate to recover the cost of shallow connection from GNA customer, if it is a point to point transmission element. In other cases, the same may be pooled. Please also see our suggestions in para 7 on Transmission Planning and para 8 on Transmission Planning under GNA methodology.

Question No 8: Whether you are a injecting entity or Drawee entity or both?	Both
Question No 9: GNA (a) What is your opinion on General Network Access (GNA) proposed by CEA (b) Whether it should be adopted for transmission access and transmission charges? (c) What should be bank guarantee and Exit Charges under GNA mechanism? (d) Whether it would be possible to plan transmission system to give assured access in all direction?	(a) It is a welcome step as methodology based on GNA concept seems to be a better option. However, the formulation suggested by CEA needs substantial changes to address many of the issues that have been flagged. Proposal in staff paper would address a few of the issues but it would still need some more changes to address important issues. Our suggestions in this regard are included in this response. (b) Our suggestions on aligning transmission tariff in GNA as per National Electricity Policy and Tariff Policy and addressing transmission pricing issues for Renewable Generation are in para 12. (c) CONSTRUCTION BANK GUARANTEE Rs 5 lakhs/MW for injection GNA Rs 5 lakhs/MW for drawal GNA of non-utilities Nil for drawal GNA of utilities OPERATIONAL TIME BANK GUARANTEE Sufficient to cover exist charges Nil for drawal GNA of utilities EXIT CHARGES : As per answer in Q-5 (d) Please refer to para 8.3 on Transmission Planning under GNA methodology.
Question No 10: **Transmission Planning:** (a) How Transmission planning in the country needs to be reviewed under present condition to take care of future	(a) Please refer to suggestions in para 7 on Transmission Planning and para 8 on Transmission Planning under GNA methodology.

need of robust transmission system? (b) Whether there is need for a separate Regulation for transmission planning to make it more participative?	(b) Yes, there is aneed to cover the transmission planning under separate Regulations. POWERGRID, as a transmission licensee, must be ring-fenced from the function of system planning and related activities to avoid any conflict of interest. It is also important that transmission capacities as taken at the time of planning are utilized to their full extent in system operation. We would suggest that POSOCO, the agency responsible for system operation, should also be the agency to carry out transmission planning under guidance of CEA . It must also be the responsibility of such agency (POSOCO) to do billing, collection and related activities to avoid any conflict of interest.
(c) Whether transmission planning should mandatorily make margins available for short term power market?	(c) If transmission planning under GNA methodology is adopted as per our suggestions in para 8, required transmission capacities for short-term market would inherently get built in the system.
(d) Whether transmission system planned by CEA/CTU need to be adequately explained from cost benefit point of view?	(d) Every investment is made to arrive at certain benefits, may it be in cash or kind. If adequate/appropriate benefits are not realized, the investment could be considered as a failure. In a country like India, where cost of power has an impact on sufficing the daily needs of people, some checks and balances for prudent planning are always recommended so that the end consumer is not burdened for improper planning and stranded assets.
(e) Is there requirement of making submission of information related to transmission planning legally binding?	(e) Definitely. Based on a plan identified by CEA, submission of true and authentic information must be made mandatory for not only transmission planning process but also in relation to operational utilization of planned transmission capacities.

Question No 11: Utilization of Congestion charges (a) Whether proposal of using congestion charges to reduce the long term ISTS transmission charges acceptable ? Or (b) Whether Congestion charges are to be utilized for creation of specific transmission assets for relieving the congestion? How should this be treated as equity loan or grant?	(a) Yes, The same is acceptable from the view that ISTS charges are pooled and distributed based on the system usage. (b) If congestion charges are used for creation of specific transmission assets, questions regarding on which specific assets, under what funding arrangement and to whom – why not to private transmission developers, etc. would arise. In any case, development of all transmission assets has to be ensured and as per the tariff design, all investments are on equal footing with respect to return on investment. It is not that financial viability of any particular transmission asset is less or more. As the basic purpose of the idea of using this as a grant or soft loan would be to reduce the incidence of transmission tariff, best is to utilize it directly for transmission tariff reduction by way of adjusting within the pooled transmission charges.
Question No 12: Transmission corridor allocation for Power market: (a) Whether participants of Power exchanges should be allowed to participate in e-bidding for transmission corridor? Or	(a) No. Transmission corridors should not be allowed to be blocked by clients of Power Exchange by participating in e-bidding of transmission corridors for advance reservation. The proposed methodology on booking of transmission corridor by the clients of PXs in advance and utilizing the same on Day Ahead Market, would create a preferential treatment leading to market distortion and thwarting of competition and level playing field in the market. As per the present Regulations the transmission corridor under short term Open Access is booked only after the seller and buyer of the power is finalized. The Day Ahead Collective transactions cater to the last minute sale / purchase of power and hence, should be given only the due emphasis and not any preferential treatment. Collective transactions already get priority over day-ahead bilateral transactions, due to which, substantial quantum has got shifted to Exchange. It has been observed that a good quantum of

	transmission corridor is made available for collective transactions even on the corridors which are fully booked. In last so many instances including initial days of October 2014, we have experienced that there is no corridor available on ER – NR corridor under Advance / FCFS transactions resulting in rejection on STOA applications. However, it is seen that no congestion is being faced on Power Exchange transactions. The above shows that Power Exchange is already getting more than due advantage in terms of corridor availability as compared to bilateral transactions. We would therefore suggest that the present methodology may be continued and Power Exchange participants not be allowed to participate in e-bidding of transmission corridors.
(b) For power market development, certain quantum of corridor may be reserved for power market with all participants of Power Exchange sharing the transmission charges of reserved corridor.	(b) No. No corridor may be reserved for power market. Reservation of capacity for any particular segment is discriminatory. Further, encouraging power exchange volumes to increase certain limit may lead to States not tying up even their base load requirements through firm contracts. In any case, as GNA based transmission system is expected to have redundancy, Power Exchange volumes may not face constraint/congestion.