## Central Electricity Authority System Planning & Project Appraisal Division

No. 200 / 12 / 2013-SP&PA /

Subject: Draft Procedure for coordinated transmission planning through the Regional Standing Committees for Power System Planning - **Draft procedure inviting comments** 

Date: 09-October-2013

The inter-state transmission system (ISTS) and intra-state transmission system (Intra-STS) are interconnected and together constitute the electricity grid. The Central Transmission Utility (CTU), u/S 38 of the Electricity Act 2003, is responsible for planning an efficient, coordinated and economical ISTS. Similarly, the State Transmission Utility (STU), u/S 39 of the Electricity Act 2003, is responsible for planning an efficient, co-ordinated and economical Intra-STS. Optimum development of transmission system plan requires coordinated planning of the inter State and intra-State grid systems. The Central Electricity Authority(CEA) is responsible for formulate short-term and perspective plans for development of the electricity system and co- ordinate the activities of the planning agencies for the optimal utilisation of resources as provided under Section 73(a) of the Electricity Act 2003.

As per the Electricity Act 2003, role of CTU for planning is given as under:

u/S 38(2)(b) to discharge all functions of planning and co-ordination relating to interstate transmission system with -

- (i) State Transmission Utilities:
- (ii) Central Government:
- (iii) State Governments;
- (iv) generating companies:
- (v) Regional Power Committees;
- (vi) Authority;
- (vii) licensees:
- (viii) any other person notified by the Central Government in this behalf;

38(2)(c) to ensure development of an efficient, co-ordinated and economical system of inter-State transmission lines for smooth flow of electricity from generating stations to the load centres:

As per the Electricity Act 2003, role of STU for planning is given as under:

39(2)(b) to discharge all functions of planning and co-ordination relating to intra-state transmission system with -

- (i) Central Transmission Utility;
- (ii) State Governments:
- (iii) generating companies;
- (iv) Regional Power Committees;
- (v) Authority;
- (vi) licensees;
- (vii) any other person notified by the State Government in this behalf;

(c) to ensure development of an efficient, co-ordinated and economical system of intra-State transmission lines for smooth flow of electricity from a generating station to the load centres;

CERC has made CTU as nodal agency for grant of Long Term access (LTA) and Medium Term Open Access (MTOA). CTU is also nodal agency for Billing Collection & Disbursal(BCD) of ISTS charges and nodal agency for tripartite TSA with DICs and the transmission service providers.

In light of above and the present practice of planning through the Regional Standing Committees for Power System Planning, it is proposed to formalize the procedure for coordinated planning of transmission system in the country.

The draft procedure is enclosed.

The comments/observation on the draft procedure may please be sent through email at following address, latest by 31-October-2013:

cea.sppa@yahoo.in

This is issued with the approval of Member(Power System), CEA.

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## Central Electricity Authority System Planning & Project Appraisal Division

(Draft Procedure – Comments invited by 31-October-2013)

## Procedure for coordinated transmission planning through the Regional Standing Committees for Power System Planning

- New ISTS proposals associated with or on account of generation project: CTU, after interaction with the STUs, CEA, RPC, generation developer etc, shall carry out necessary system studies as per the Manual on Transmission Planning Criteria and prepare transmission addition proposals. The studies would also take into account the requirements of Grid Standards, Technical Standards for Connectivity to the Grid and any other relevant standards/regulations.
- 2. New IntraSTS proposals: STU, after interaction with the CTU, CEA, RPC, generation developer etc, shall carry out necessary system studies as per the Manual on Transmission Planning Criteria and prepare transmission addition proposals for general system strengthening in the intra-state network, evacuation of power from Intra-State generation projects including renewable energy sources and for drawal of power from ISTS points. The studies would also take into account the requirements of Grid Standards, Technical Standards for Connectivity to the Grid any other relevant standards/regulations. Major intra-State schemes are to be planned in a coordinated manner, and thus would be discussed and endorsed by the Standing Committee. Other transmission schemes may be planned by the respective STU and noted by the Standing Committees.
- It will be responsibility of each State/STU to assess and communicate its import/export requirement through the ISTS for next 3-5 year time-frame. The STU would provide details of import/export points to CEA and CTU for coordinated planning of ISTS.
- STUs would also share their long term transmission plans for conventional and renewable generations with CEA and CTU on regular basis so that total system could be optimized.
- 5. System Strengthening in ISTS: CEA and CTU would jointly carry out necessary system studies as per the Manual on Transmission Planning Criteria and prepare transmission addition proposals for general system strengthening in the regional/inter-regional ISTS network for next 3-5 years. The studies would also take into account the requirements of Grid Standards, CERC regulations and any other relevant standards/regulations. The system strengthening would also be planned considering operational feedback of POSOCO, SLDC etc. CTU would regularly carry out system adequacy studies for the planned/ongoing system and bring out any strengthening needed for removing constraint for taking up in the Standing Committee.

- 6. CTU along with CEA would assess the export / import capability of the planned transmission system for each State/region. While determining the import/export capabilities, the time-frame and other assumptions should also be mentioned.
- 7. For coordinated planning of the transmission system, a transmission planning group consisting of working level officers of CEA, CTU and POSOCO would be formed. The STU representatives would be invited by the group while taking up planning issues of the respective State. The group would prepare the load/generation assumptions to be considered for transmission planning, assessment of export/import requirements for each State/Region and prepare base case models.
- 8. The transmission addition proposals would be firmed up after discussion in the Standing Committee meetings. As for as possible the transmission addition plans would be firmed up though consensus of the Members. If a consensus could not be reached, Chairperson of the Standing Committee will take a decision giving reasons.
- 9. Each Standing Committee for Power System Planning would normally meet twice in a year. A combined meeting of the different regions may also be called depending on requirement. In any case, the members of a regional Standing Committee would also be free to participate in the meetings of the other Standing Committees as per their interest. In case of exigency of planning a system, CEA may give in-principle approval a proposal and the same may be confirmed in the next meeting of the Standing Committee meeting or through circulation.
- 10. In addition to new proposals, the agenda for the Standing Committee meetings would also include the following:
  - Review of progress of implementation of the already planned ISTS and IntraSTS schemes. Each transmission utility i.e. STUs and the CTU to provide status of their respective planned transmission schemes, target dates of approvals/award/completion and constraints if any. For the ISTS schemes to be implemented / under implementation through TBCB, CEA would provide the status.
  - The proposals for grant of Long term access / general network access for which CTU is nodal agency
- 11. CEA would upload the agenda for the Standing Committee meeting(s) fifteen(15) days in advance. Minutes would be uploaded in 15 days after the meeting. Observation, if any, may be communicated to CEA in next 15 days. Based on the observations of members or otherwise, CEA may issue corrigendum to the minutes. The corrigendum will be confirmed in the next meeting. If no observations are received in 30 days, the uploaded Minutes shall be treated as confirmed.