Comments by Prayas (Energy Group) on CERC paper on Open Access in inter-state transmission¹

1. Introduction:

One of the underlying expectations of the Electricity Act 2003 is that the generation investment efficiency will improve by moving to competitive market structure. This is reflected in provisions aimed at de-licensing generation, freely allowing captive power plants, trading and open access to transmission network etc. In such market structure, though not clearly acknowledged, it is expected that the development of transmission network might be somewhat sub-optimal than the centralised planning approach. But the cost of this inefficiency is expected to be significantly less than the benefits of improved efficiency of generation². Proposed CERC regulations on 'Open Access in Interstate Transmission' is the first major step in implementing the underlying vision of 'competitive market structure' in the E Act 2003. And in this context we need to clearly acknowledge this trade-off and need to be prepared for a somewhat sub-optimal transmission network and pricing. This is especially important in the transition period from fully regulated, integrated, monopoly industry structure to more competitive structure.

The recent experiences of back-outs and grid failures in several countries (from US to Italy) underscore the delicate nature of transmission in the open access environment. Some extra strengthening of Transmission as well as regulatory vigil on reliability of Transmission network is called for. This will become especially true with commercialisation of transmission utilities (and private Transmission licensees).

In this light, in addition to the objectives listed in the discussion paper, we wish highlight need for following considerations:

- 1. A smooth transition path from regulated to competitive structure, with higher priority to factors such as grid reliability, grid strengthening, and efficient interconnections.
- 2. With increasing role of private sector actors and increasing number of players in the sector, it is essential to ensure that the proposed system is transparent and special attention is given to reduce possibilities of 'gaming and manipulation'. This is also critical in light of the behaviours of certain actors at the time of California crisis.
- 3. Even though the E Act relies significantly on 'competition' to enhance efficiency, we need to clearly understand that more than 95% of the consumers would remain under regulated monopoly for many years to come³. And care needs to be taken than the 'inefficiencies' of competitive market structure are not passed on to these small, captive, regulated consumers.

We are commenting on the CERC's paper mainly from this perspective.

2. Transmission as Regulated Utility:

Though not explicitly stated, the underlying principle in the CERC's paper that transmission will remain a regulated utility is essential. This can even be clearly articulated. The process / principles of regulating the transmission utilities need to be clearly stated (may be through a different document / process) and in this special attention needs to be given to issues relating to expansion planning and investment approval as well as performance monitoring. Some of our suggestions in this regard are listed below.

¹ Open Access in inter-state transmission. Concept paper prepared by CERC staff, treated as a suo moto petition by CERC, dated August 14,2003.

² This is also evident from the cost structure, where by generation costs constitute about 60% of the end user tariff when are transmission costs constitute 10 to 15%. Indicating that cost of inefficiency in transmission is much less than the benefits of generation inefficiency.

³ This is because considering the current status of our distribution network (in terms of reliability, metering and billing) and the technical / commercial requirements for competition at the retail (LT) level, it is certain than practically open access to LT consumers is a distant scenario in the Indian context.

- The process of transmission network expansion should be more consultative.
- The construction of new lines should be only on the basis of bidding with the ceiling of "Avoided Cost" declared by the CTU.
- Line-by-line availability and losses need be looked into at the time of performance monitoring. This would be able to identify metering problems if any and would work as a routine check on energy accounting function of RLDCs. These (line-by-line parameters) also need to made public through Internet on a regular basis.
- The CERC should not wait for receiving a complaint for hoarding or other malpractices but should institute periodic review and routine checks.

3. Transmission Pricing – CEA approach (as reflected in presentation to CERC):

We generally agree with the overall approach of CEA for arriving at Transmission charges. This approach seems better than the methods suggested in the CERC paper in terms of simplicity without loosing the ability to give basic price signals. In particular we see merit in:

- Having higher values of Lamda for open access consumers to compensate for historical cost paid by original customers
- Decreasing Lamda with improving margins in transmission.
- Treatment for losses

But we suggest certain changes in the CEA approach as listed below:

- The underlying principles of arriving at notional distance should be better articulated so as to facilitate re-calculation after some years.
- Incentive for the counter flows could be increased to a certain extent
- We disagree with limiting the distance to 16 (00) KM for NE zone. This would <u>cross-subsidize the hydro development</u> in that area. And this is against the overall principle of replacing cross-subsidy by explicit subsidy. If the GoI thinks that hydro development is critical in NE region, it should give direct subsidy for these projects. The distances may need to be re-worked on that basis.

Other issues:

• In order to prevent chaos and tariff shock, it is essential to renew existing BPTAs of SEBs (original customers) and the same should be for a sufficiently long period (say 10 years).

- Section 4.5, on dedicated system says that dedicated line charges will be additional to the open
 access charges. Since the dedicated system would typically be designed only to meet the current
 requirements including this system at a later point of time in the grid (as has happened many
 times before) will be problematic. Hence, request for dedicated system should be reviewed
 against the transmission plan of the CTU or STU to decide the sizing and tariff chargeable to the
 consumer.
- We do not agree with the MPERC point that special meters can act as a barrier for consumers going to open access. We feel that metering (in HT and EHT systems) needs substantial strengthening. And considering the limited cost of on-line remote reading meters (compared to value of energy to be metered), we feel that it is a small investment for all customers desiring open access⁴. All interchange points of CTU must have high quality meters. [Most interface points, on national Transmission network would any way have good communication facilities]. This is essential to properly manage the situation when the open access transactions increase.
- The process of CTU performance review (of line-wise losses) should crosscheck the energy flows. This is especially critical to avoid a situation that CTU / STU suffers losses at the benefit of some private party due to some metering problems. Role of commission in protecting small consumers (and public exchequer) from bearing such inefficiencies of open access is important and high-end, good quality SEMs would be beneficial for this.

⁴ The cost of Rs 1 lakh is only Rs 0.016 / Unit for a typical 1 MW consumer (assuming that the cost is spread over only one years' energy flows).

- Power drawl schedules (6.1): The inter-regional contracts are expected to increase in number (where the generator and consumer are located in different regions). The day-ahead generation and drawl schedules need to be matched. Such accounting and re-conciliation of large number of contracts on daily basis may become complicated. The role of NLDC becomes critical in this case. The expected role o NLDC and how this issue would be addressed till the time NLDC is fully equipped need to be clarified.
- Defining ATC: Norms and procedures for deciding availability of transmission capacity need to be clearly and carefully defined. It should be made mandatory for CTU as well as other licensees to make the necessary data public at routine intervals, to enable verification of their claims by prospective OA consumers.
- Clarity about hoarding: Similarly what will be termed as hoarding and how long OA consumer
 can continue to block transmission capacity without actually using it, needs to be clarified to
 avoid uncertainty and disputes.
- It needs to be explicitly stated that this policy and the related regulations would be applicable to all transmission licensees.

4. Need to Remove Information Asymmetry:

For several reasons, it is utmost essential to increase the transparency in the interstate open access (amongst other areas). In this connection we suggest that

All transactions done using open access system (including quantum, duration, sale price, source and consumer) be made public - and be registered on a web site of the nodal agency – (without which it should not be considered as valid). This information would automatically become public one week after the day it is registered (signed). Mandatory filling of 'Quarterly Energy Reports' initiated by FERC (USA) in year 2002 is one such example.⁵

This should also be applicable for trading contracts. The purchase and sale price by trader should be disclosed.

In our opinion unless such transparency is mandated it would be difficult to ensure:

- That inefficiencies of 'competitive structure' are not passed on to regulated, captive consumers (in this case through increase in Transmission charges, on account of imprudent investments or excessive losses due to improper metering at some points)
- That a competitive market develops
- A check on trading margin by CERC as required by the E Act (unless such system is introduced, CERC cannot keep effective vigil on trading margins and there is a danger that regulatory intervention might be too late and costly.)

5. Transitional issues:

<u>Phased implementation:</u> We suggest that open access policy should be reviewed after the initial / pilot term (of 2-3 years) and also subsequently on a periodic basis. This is essential for several reasons. For example such a review can test the underlying hypothesis that open access would facilitate generation efficiency improvements, it would give opportunity to reduce cost of errors in the learning process, and the initiative of policy would continue with the CERC and SERCs.

⁵ The data fields in QER of FERC are - **respondent_name**; report_year, report_qtr_month, transaction_unique_identifier, contract_id, **customer_name**, transaction_begin_date, transaction_end_date, time_zone, point_of_delivery_control_area, point_of_delivery_specific_location, class_name, term_name, increment_name, increment_peaking_name, product_name, **transaction_quantity**, **price**, **units**, total_transmission_charge, total_transaction_charge

Till the time of such review, <u>contract terms for Open Access consumers should be limited to one year</u>. This would prevent unfair advantage to the early movers. This is important in light of limited transmission margins today. The market for this margin is yet to develop.

<u>Consultative process:</u> We welcome CERC's approach of floating a discussion paper and inviting public comments. But we also request CERC to take a more pro-active approach to enhance the inputs from non-utility players such as academic and research institutes. For example, a one day round-table at each regional LDC after giving due publicity to discussion papers through specialised news-groups and specially inviting academic and research bodies or professional associations (such as IEEE and Institution of Engineers) to comment on the paper would enhance the quality of inputs. We urge CERC to adopt such an approach for important decisions / regulations in the future.

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