CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram:

1. **Shri Ashok Basu, Chairman**
2. **Shri K.N. Sinha, Member**
3. **Shri Bhanu Bhushan, Member**
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In the matter of

Amendment to the Central Electricity Regulatory Commission (Open Access in inter state transmission) Regulations, 2004.

STATEMENT OF REASONS IN SUPPORT OF AMENDMENTS

In exercise of powers conferred under Section 178 of the Electricity Act, 2003 ("the Act"), the Commission had notified the Central Electricity Regulatory Commission (Open Access in Inter-state Transmission) Regulations, 2004 ("the regulations"), which were operationalised with effect from 6.5.2004. The open access in transmission was introduced for the first time in the country. Therefore, the Commission intended to review the regulations based on the practical experience to fine-tune them further.

2. After the regulations were operationalised, a number of issues were highlighted by the stakeholders. It was represented that the processing time of the applications for short-term open access needed to be reduced and that short-term transmission charges should be on "per hour" basis against "per day" basis notified in the regulations. The stakeholders pleaded for simplification of commercial procedure and payment security mechanism; refund of short-term

open access charges paid in advance in case of denial of open access on the ground of transmission constraints; reduction of scheduling and system operation charges; waiver of handling and service charges; and flexibility in scheduling process. Some of the state utilities, the beneficiaries and long-term customers, submitted that the beneficiaries within the region be allowed to exchange energy without payment of extra short-term open access charges for use of the transmission assets of which they are the long-term customers. The other issues raised by the stakeholders are:

(a) Surrender of the reserved transmission capacity and adjustment/refund of the short-term open access charges paid;

(b) Flexibility to shift the source of supply, and/or point of drawal; and

(c) Congestion management process.

3. The issues raised by the stakeholders were examined. The Commission published the draft of the Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) (First Amendment) Regulations, 2004 ("the draft regulations") in August 2004 to solicit the views of the stakeholders. In the light of divergent suggestions received from the stakeholders on the draft regulations, it became necessary to consult them further. For this purpose, a paper prepared by the staff of the Commission ("the staff paper") was circulated among the stakeholders highlighting the issues raised, which are:

(a) Payment of transmission charges for short-term open access within the region (inter-state intra-regional),

(b) Sharing of transmission charges for use of inter-regional links by short-term and long-term customers, including those having inter-regional allocations from central generating stations,

(c) Alternative ways of congestion management as against the provision of bidding specified in the regulations, and

(d) Basic procedure for reservation of transmission capacity.

4. While responding to the above issues, the stakeholders also raised a few other issues of their own. An open hearing for deliberations on the issues arising out of the draft regulations and those raised by the stakeholders was held on 17.1.2005. All these issues are discussed in the succeeding paragraphs.

Transmission charges for short-term open access within the region (inter-state intra-regional)

5. At present, the transmission charges for the network belonging to CTU/POWERGRID in a region are shared by the beneficiaries/long-term customers *pro rata* to their share in central generation and contracted power evacuated by CTU/POWERGRID network. The revenue realised from short-term customers is adjusted in accordance with the regulations against the total transmission charges payable by the beneficiaries/long-term customers. The short-term customers are charged a minimum rate corresponding to 25% of the regional transmission charges for the previous year calculated in terms of Rs./MW/day. This is because of the reasons that the short-term customers are served only to the extent of available surplus capacity on the existing transmission network built for the

beneficiaries who have the obligation to pay full transmission charges and the short-term customers are to be curtailed first in case of transmission constraints. The economic rationale was to have some charges corresponding to usage to avoid conflict of interest between those using the network frequently for short-term transactions and others. The transmission charges for short-term customers come to a few paise per kWh for each region. The charges applicable to the short-term customers are also applicable for the long-term customers, if they enter into transactions of short-term nature. In the event of congestion, RLDCs conduct electronic-bidding to decide who should be given the short-term reservation. As far as POWERGRID is concerned, it is in any case assured of recovery of full transmission charges even if no charges are levied for short-term open access. Some of the stakeholders feel that existing beneficiaries/long-term customers should not be required to pay transmission charges within the region for short-term open access. It has been contended by them that beneficiaries/long-term customers have obligation to pay full transmission charges applicable for the region and, therefore, should have the flexibility to make use of spare capacity for short-term open access, without paying any extra charges.

6. The implications of making short-term open access free for beneficiaries/ long-term customers are:

(a) The Independent Power Producers (IPPs), Captive Power Plants (CPPs) may raise demand for free open access on the POWERGRID network in the region so that they can trade their power on equal footing, since otherwise IPPs and CPPs would be forced to sell their surplus generation to the state utilities, who in turn would be able to trade it with other state utilities by availing of open access without payment of the transmission charges. In this manner, the market for short-term trading in power would get monopolized by the state utilities.

(b) 'Early birds' would take advantage and others would not get open access due to congestion. Thus, it may result in heart-burning among the long-term open access customers due to disproportionate usage of the network.

(c) Free usage might result in what is referred to as 'tragedy of the commons'. No one values and cares for a service available free of charge, and this may ultimately result in slackening of investment in transmission sector.

(d) On the same reasoning, any embedded customer while availing of such inter-state open access would also not be required to pay for using the network of the state utility in which it is embedded.

(e) Similar treatment would be expected for intra-state transactions, more so because the procedure and methodology adopted by the Central Commission, serves as a guide for the State Commissions.

(f) The existing methodology for treatment of transmission losses will also call for a review simultaneously. At present, average losses are being apportioned in kind to the short-term open access customers, irrespective of the fact whether they are causing or relieving congestion. It will be fair that short-term customers are levied incremental transmission losses if they are causing congestion and are not apportioned any transmission losses in case they are relieving congestion. Such a differential treatment of transmission losses will also help in optimal utilisation of the transmission network by creating incentive for relieving congestion.

7. It is noted that POWERGRID, NTPC Vidyut Vyapar Nigam (NVVN), Tata Power, BSEB, DVC, Adani Export Ltd (AEL), TNEB, APTRANSCO, GRIDCO , TNERC and KSERC have favoured the option of continuing the existing practice of charging short-term customers 25% of the effective rate for long-term customers with average losses. Reliance Energy Ltd (REL) and Malana Power Company Ltd (MPCL) have also supported this rate but with incremental losses. On the other hand, LANCO has preferred the option not to levy the transmission charges on short-term inter-state intra-regional transactions, but applying incremental transmission losses. PTC, RRVPNL, UPCL, HPSEB, PSEB, DTL, WBSEB and NREB have supported the view that no short-term transmission charges be levied on long-term customers but other users be so charged and by applying average transmission losses. Those supporting the view of making short-term open access free for long-term open access customers have admitted that time is not ripe for application of incremental losses in view of the practical difficulties. RLDCs gave a lucid analysis of the experience of short-term open access so far,

including the pattern of usage by various stakeholders. It revealed that in all the regions some of the beneficiaries are active in availing of short-term open access for power trading while others are not as active. The revenue recovery from short-term transactions was serving as an equalizer by reducing the payment obligation of the beneficiaries who are not active in power trading. If short-term charges were to be dispensed with, the relief received by the beneficiaries, who are not participating in power trading, would stop and their payment obligations would accordingly increase. In other words, if transmission charges are not levied for short-term open access, it is tantamount to giving advantage to the beneficiaries more active in power trading at the cost of beneficiaries less active in power trading.

8. The suggestion of REL and MPCL to apply incremental losses with the existing level of transmission charges may lead to substantial increase in transmission related charges, which in turn, may hamper trading and competition, the prime objective of the Act. On the other hand, the option of making short-term open access free is fair only when applied with application of incremental transmission losses. Otherwise, short-term transactions may not only cause congestion in the grid but may lead to significant increase in the energy losses, which will burden even the other long-term customers who are not engaged in short-term transactions. We, therefore feel that the existing provision of charging short-term customer at 25% of the previous year's effective rate for long-term

customer and applying average transmission losses on short-term inter-state intra regional transactions should be continued for the time being.

9. In the inter-state open access, the subject of the present deliberations, the focus is on inter-state transmission system, which, as of now, is owned by Power Grid Corporation of India, the Central Transmission Utility. Historically, this system has been developed predominantly as the associated transmission system of the generating stations owned by central generating companies. As a consequence, the base transmission charges of this system are paid by the beneficiaries of these generating stations (in proportion to the MW capacity allocations from these generating stations), and transmission of power from these generating stations to the beneficiaries has the first priority over this system. Short-term open access on the above system is allowed to the extent excess capacity is available. In most cases, it would cause incremental power flows leading to incremental losses. Transmission losses being proportional to second power of power flows, the open access can cause a significant increase in total system losses. It would not be reasonable to expect those not involved in open access to share the increase in transmission losses. In other words, it would be reasonable to pass on the liability of incremental losses only to the parties availing open access. As brought out above, Reliance, Malana and LANCO have supported this view, while a number of other respondents opined that the time was not yet ripe for application of incremental losses in view of the practical difficulties (implying that they also supported it in principle). There is another important aspect. Open access may

also be applied for power flow in the opposite direction, which would reduce the net power flow and cause a reduction in total system losses. Such transactions are also presently loaded with the average transmission losses, which is not fair. The concept of incremental losses shall bring in equity here as well.

10. The Commission may move to incremental losses for short-term open access at an opportune time. Also, once the incremental losses liability is passed on to the concerned open access customers, there may not be a justification for burdening them further with transmission charges (for curtailable, non-priority use of surplus capacity). All these aspects would be taken up for detailed deliberation in due course.

Sharing of charges for inter-regional assets

11. The inter-regional links were originally envisaged for bi-directional flow of power. Each regional grid was supposed to extend reliability support to the connected regional grid as and when required. With this type of usage in mind, it was considered that transmission charges for such inter-regional links should be shared equally by both the connected regions. The provisions for sharing of charges for inter-regional transmission of power as contained in Government of India, Ministry of Power's notification dated 16.12.1997, as amended vide notification dated 3.31998 provided for sharing of 1/3rd charges by beneficiaries of one region, 1/3rd charges by beneficiaries of other region and remaining 1/3rd by the beneficiaries of the importing region actually receiving power as per the commitment in case of firm power exchanges. In case of non-firm power

exchanges, the notification stipulated sharing of monthly transmission charges in the ratio of 50:50 between the two contiguous regions. The Commission, while notifying the terms and conditions of tariff for the period 2001-04, decided to apply 50:50 sharing ratio among two regions, irrespective of nature of exchange and discontinued the sharing formula on 1/3:1/3:1/3 basis. This was done mainly because the transmission tariff for firm transactions was getting loaded on the importing utilities thereby limiting the total power flow on these lines and resulting in higher transmission charges per unit for such transactions.

12. It has been observed that since around mid-nineties, Eastern Region is having surplus power almost on consistent basis, whereas Northern, Western and Southern Regions are facing shortage conditions for significant periods of the year. With the result, the inter-regional links connecting Eastern Region with Northern, Western and Southern Regions are having unidirectional power flows. Continuation of this situation for the past several years has led Eastern Regional beneficiaries to raise issue of fairness of the arrangement of sharing of charges for inter-regional links. The main arguments in favour of the continuation of sharing in the ratio of 50:50 by the connected regions has been that Eastern Regional beneficiaries have also benefited from export of power to other regions as, in the absence of these inter-regional links, the power would have been bottled up in Eastern Region and its beneficiaries would have to bear capacity charges without having actually used the power. It has also been argued that these inter-regional links have been conceived and implemented on the basis of equal sharing of

charges and it would be unfair to change this arrangement now. It is also a fact that some of the beneficiaries of Northern, Western and Southern Regions may not be using these inter-regional links at all or may be using them occasionally. However, the sharing of charges is based on a set formula, irrespective of actual use. The fact remains that the reluctance on the part of some of the beneficiaries of Eastern Region to agree for fresh transmission capacities has started affecting the development of new inter-regional links. Recent disputes regarding non-payment by BSEB for Raipur-Rourkela inter-regional link and its refusal to sign agreements for Jeypore-Gazuwaka link (2nd block) and inter-regional assets of Tala transmission system are testimony to this.

13. According to the regulations, the floor rate for short-term customers is equal to 25% of the previous year's effective rate for long-term customers. In case of congestion, reservation of transmission capacity for short-term customers during the period of congestion is done through electronic-bidding, which is likely to result in higher rate. This recovery for short-term use, after retention of 25% amount by POWERGRID, goes towards reduction in transmission charges for inter-regional links payable by long-term customers located in the two connected regions, who have obligation to share transmission charges. However, some of the long-term customers of the inter-regional links, which are not very active in trading, feel that the recovery from short-term customers does not offer adequate relief to them. For example, BSEB has submitted a copy of the bill for the month of November 2004 to show that while its liability to pay transmission charges for

inter-regional links was Rs 3.66 crore, the reduction in liability on account of short-term open access was only to the extent of Rs 0.63 crore, leaving an uncovered balance amount of Rs.3.03 crore to be paid, without actually using the inter-regional links for power flows. It is, therefore, advocated that short-term customers should pay charges proportionate to their usage. On the other hand, it has been argued by long-term customers, which are active in trading that they should not be required to pay short-term charges as they are already sharing charges for inter-regional links as long-term customers.

14. To address the issue raised by long-term customers active in trading, it was proposed in the draft regulations that long-term customers of the inter-regional links shall get transmission rights *pro rata* to their payment obligations. The long-term customers were not to pay additional charges for short-term transactions, if power flow on account of all the transactions is within their transmission right. One option to take care of viewpoint of long-term customers, which are not active in trading, is to make these transmission rights over inter-regional links as tradable. This way, non-users of the inter-regional links may sell their transmission rights at negotiated rate, to parties, which are engaged in trading. However, the staff paper has deliberated upon the consequences of this arrangement, which are:

(a) Precious time might be wasted not only in bargaining the price but also contacting the person with full authority to take decision in this regard on behalf of a long-term customer.

(b) The sale and resale of the transmission rights could result in transmission capacity of the inter-regional links either getting fragmented under numerous players or getting consolidated with one or two big players. Both these situations are undesirable.

(c) In the process, the concept of non-discriminatory open access would get compromised.

(d) The payment obligations and hence the transmission rights of long-term customers would keep on changing with change in allocation from the central generating stations.

(e) In some cases, the allocation from central generating stations across the region is more than transmission right.

Thus, there are practical difficulties in implementing the concept of allocation of transmission rights.

15. To summarize, the inter-regional links, which were basically developed for supporting the regional grids of the adjoining regions, have increasingly come into use for trading of power. Unlike the case of regional transmission system, the inter-regional links generally have very little committed power flows based on the central allocation because central allocations across the region are far and few. The predominant use of inter-regional links accordingly is for power trading. In the staff paper, it was, therefore, made out that whoever uses the inter-regional link for conveyance of allocation from central generating stations or for any long-term use should pay charges *pro rata* to the capacity used vis-à-vis rated capacity of the

inter-regional link. Further, it was urged that the short-term rate should be increased so that long-term customer not using the inter-regional link gets reasonable compensation for the commitment.

16. Based on the above principles, the formulation proposed in the staff paper can be summarized as under:

(a) Proportional charges for allocations across the regions and for long-term use.

(b) Floor rate for short-term customer equal to 50% of the last year's effective rate for long-term customers.

(c) Balance to be shared in the ratio of 50:50 by two regions as reliability charges.

(d) Provision of retention by the transmission licensee of 25% of the recovery from short-term use to be dispensed with.

17. It was also proposed that since, reliability support is a separate sub-set of transmission service, distinct from the usage of the asset for short-term/long-term transactions, all long-term customers of the two regional systems connected by the asset should pay reliability support charges in addition to usage based charges.

18. WBSEB, NVVN, LANCO, KSEB, DVC, TNEB and TNERC have supported the formulation contained in the staff paper. PTC, Tata Power, REL, MPC and AEL

have suggested short-term rate equal to 25% of the previous year's effective rate for long-term customers, while BSEB has suggested that this rate should be 75% of the previous year's effective rate for long-term customers. RVPNL, UPCL, HPSEB, PSEB, DTL and APTRANSCO have favoured continuation of the existing practice. RVPNL, UPCL, HPSEB, PSEB, DTL have favoured concept of transmission rights whereas Tata POWER does not consider it to be desirable. System Operation Group of POWERGRID has suggested short-term charges @90% for inter-regional links connecting Eastern Region to Northern Region and Western Region and short-term charges @ 50% for other inter-regional links. Engineering Group of POWERGRID has suggested that short-term rate should be same as long-term rate. Commercial group of POWERGRID has suggested that the provision of 25% of the recovery from short-term use to be retained by POWERGRID should not be dispensed with.

19. We have considered the matter and are of the view that the concept of transmission rights over inter-regional links is not feasible for the reasons elaborated in the staff paper. We are of the opinion that the proposal to charge for long-term usage of inter-regional links and usage for conveyance of allocation from central generating stations across the region pro rata to the capacity utilisation vis-à-vis capacity of the inter-regional links is fair and should be adopted. This type of service is curtailable only as a last resort and, therefore, user must pay proportionate charges based on usage. We are also in agreement with the proposal of raising the floor rate for short-term usage from 25% to 50% for the

inter-regional links. This will give much needed relief to the long-term customers of the adjoining regional transmission system, which are not active in trading across these inter-regional links. However, such customers continue to derive reliability support out of these inter-regional links and, therefore, should share balance transmission charges. Regarding request of POWERGRID to allow retention of 25% recovery from short-term usage, it may be pointed out that the Commission had inserted this provision primarily to facilitate much needed investment in the transmission sector. The relevant portions of the Commission's order dated 30th January 2004 are as under:

> *"56. …………… POWERGRID has suggested that the rates may be fixed for one year and money collected may be put into a "Transmission Development Fund". According to POWERGRID, a proportion of this (about 20%) be paid to the Central Transmission Utility against the extra burden and associated additional maintenance costs and the balance amount may be used for future investment in developing and augmenting power system. ………"*
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> *"66. We are not impressed by the argument of POWERGRID that it needs to be compensated for extra maintenance. Since the capacity allotment/reservation shall be made based on availability of the transmission capacity, the question of extra maintenance should not arise. However, we direct that 25% of the revenue received from the short-term customers shall be retained by the transmission licensee, which is expected to be utilised in the core activity of building new transmission system. The balance 75% shall be used for reduction in charges payable by the long-term customers of the transmission charges determined as per the terms and conditions of the tariff notified by the Appropriate Commission………."*

20. The need for investment in transmission sector continues to be there. However, the expectation of investing in the transmission sector is realistic only in case of Central Transmission Utility and State Transmission Utilities, which have been conferred statutory responsibility in respect of inter-state and intra-state

transmission system respectively of undertaking transmission of electricity and ensuring development of efficient, co-ordinated and economic system of transmission lines. There is no guarantee that other licensees shall invest in the development of transmission system. We, therefore, feel that 25% of the recovery from short-term customers shall be continued to be retained by Central Transmission Utility and State Transmission Utilities for intra-regional system. However, this percentage shall be 12.5% in case of inter-regional assets. This provision shall not apply in case of other transmission licensees. This is differentiation between licensees having statutory responsibility to develop transmission system and licensees investing in transmission sector purely as business proposition. We have consciously reduced the percentage of the recovery from short-term customers to be retained by CTU and STUs, for the inter-regional links, from present level of 25% to 12.5% to keep it at the same absolute level in spite of increase in the rate for short-term customers from 25% to 50%.

21. In view of the above findings, transmission charges for inter-regional links shall be regulated as under:

(a) The beneficiaries having allocation from the central generating stations across the region and customers having long-term bilateral contract should pay transmission charges proportionate to their allocation plus long-term contract vis-à-vis capacity of the inter-regional link.

(b) Out of the balance capacity of the inter-regional link, Regional Load Despatch Centres may decide to keep certain capacity as a reserve margin. The capacity of the inter-regional link after accounting for allocation from central generating stations, long-term contracts and reserve margin should be made available for short-term open access. Regional Load Despatch Centres shall declare the capacity available for short-term use for the next month on their website, for which short-term customers can submit their applications. The short-term customers shall pay transmission charges @ 50% of the previous year's effective rate for long-term use as calculated below:

ST_Rate = 0.5 * TSC/(CIR*365)

Where

ST_Rate = Short-term rate in Rupees/MW/day

(c) The remaining transmission charges for the inter-regional asset shall be shared in the ratio of 50:50 by the two regions for reliability support available due to this asset. Within a region, these charges should be shared in the ratio of Allotted Transmission Capacities in the regional transmission system.

(d) 12.5% of the charges collected from short-term customers for use of inter-regional links owned by Central Transmission Utility / State Transmission Utility shall be retained by Central Transmission Utility / State Transmission Utility, as the case may be, and balance of 87.5% shall be adjusted towards reduction in the transmission charges payable by long-term customers of the connected regional transmission system.

(e) Thus, the transmission charges for reliability support payable by long-term customers of the regional transmission system of the two regions connected by the inter-regional assets would be:

$$T_r = 0.5 \times \{ (TSC/12) - \sum TL - 0.875 \times TRSC \} \times (CL/SCL)$$

Where

T_r = Reliability support charges payable for the month for inter-regional asset by a long-term customer of regional transmission system connected to the inter-regional asset,

TSC = Annual transmission charges for the inter-regional asset,

$\sum$ TL = Total transmission charges payable for the month for use of the inter-regional asset for transfer of allocated power from Central generating Station or power available consequent to a long-term agreement,

TRSC = Total recovery from customers for short-term use of the asset during the month,

CL = Allotted Transmission capacity to the long-term customer in the regional transmission system in which it is located, and

SCL = Sum of the Allotted Transmission Capacities of all long-term customers of the regional transmission system in which it is located.

22. We are aware that above decisions require amendments not only to the regulations (pertaining to open access in inter-state transmission) but also to the terms and conditions for determination of tariff applicable for the period 2004-09, notified by the Commission. We, therefore, direct that the necessary amendments shall also be carried out to the notification issued by the Commission. We would also like to clarify that the above principle shall be applied to all the existing inter-regional links, except Talcher-Kolar HVDC link. As the hydro/coal power resources of the country are concentrated in North-Eastern and Eastern Regions, the Commission is conscious of the fact that there is going to be considerable generation capacity addition in these regions and this capacity is likely to be allocated or traded across other regions of the country on a scale not witnessed so far, requiring building of inter-regional assets on a much larger scale. Obviously, the charges for such inter-regional assets would have to be shared by the prospective beneficiaries and the formula of sharing of charges in the ratio of 50:50 for the inter-regional links by the adjoining regions may not be relevant in such cases. Accordingly, the Commission will be receptive to any other mechanism of sharing of charges between two regions in case of future inter-regional links on case-to-case basis, provided there are plausible reasons for the same.

Congestion management

23. The existing regulations stipulate that if capacity sought by short-term customers is more than available transmission capacity at that point of time, RLDC

concerned shall carry out bidding. RLDCs, in the procedure formulated by them, had prescribed that applications received on the same day shall be construed to have arrived simultaneously. Thus, practically, only applications received on the same day were subjected to bidding. It was, therefore, suggested that a regular timetable for reservation and bidding of the transmission capacity should be prescribed so that the same can be carried out in an organised manner. Accordingly, in the draft regulations, a timetable for monthly bidding was proposed. Another concern has been expressed that bidding may push up the transmission prices, thereby increasing the price of total transaction. If one considers the fact that out of the several regional systems and inter-regional assets, bidding, if required, may have to be carried out for one inter-regional asset and that for a fraction of the contract duration, the increase in transmission charges for the entire transaction may not be of much significance. Still, this apprehension can be taken care of by applying a suitable price cap (say 200% to 500% of the floor price) and reservation *pro rata* to transmission capacity sought in case of equal bid price. However, there is a school of thought, according to which the complications of bidding can be avoided by introducing rationing to take care of congestion. This immediately brings us to the issue as to what shall be criteria for rationing. If the rationing is in the ratio of the capacity sought, the applicants will seek reservation of higher capacity than actually needed in order to get needed capacity. One way to tackle this problem would be to cap the transmission capacity sought in terms of their share as per payment obligation or their projected shortage. Besides being arbitrary, the problem with such a criteria is that it can be applied only to long-term customers (SEBs and their successors) and not to IPPs, CPPs or eligible consumers. Besides, the rationing of corridors may invite criticism on the ground that it is a step in backward direction i.e. moving from market mechanism to quota/allocation regime.

24. The staff paper had sought to know preference of the stakeholders between the two methods of handling congestion, namely:

(a) Rationing and criteria to be applied for rationing of transmission capacity, if it is the preferred option, and

(b) Bidding and price cap for bidding, if any, in case it is the preferred option.

25. POWERGRID, REL, Orissa Genco, LANCO have preferred bidding without any price cap. MPC, BSEB, APTRANSCO, DVC, GRIDCO, TNERC and KSERC have preferred the option of bidding with price cap. The price cap suggested by various stakeholders is in the range of 100% to 300% of the effective rate for long-term customers. RVPNL, UPCL, HPSEB, PSEB, DTL, WBSEB, PTC, NVVN, Tata Power, AEL and NREB have opined in favour of rationing pro rata to the capacity sought. During hearing, we were informed by RLDCs that till that date only three occasions to carry out bidding had arisen. It was also pointed out that the process of bidding had worked satisfactorily and RLDCs had successfully implemented web-based electronic-bidding procedure. On consideration of the different view points we have come to conclusion that the experience of bidding that we have so far does not lead us to jettison the concept of congestion management through bidding.

However, to avoid possibility of market domination and unreasonably high transmission charges on congested corridors, we have decided that a price cap of 125% corresponding to the previous year's effective rate for long-term customers (i.e. 5 times the floor rate in case of intra-regional system and 2.5 times the floor rate in case of inter-regional system) shall be applied on bidding in case of congestion. If the price quoted by two or more bidders is equal to the ceiling price, the capacity shall be reserved pro rata to the capacity sought by them. We also direct that in case of congestion, even if any of the bidders has sought reservation for part-day, the floor rate for bidding shall be full day rate. This is because of the following reasons:

(a) The basic principle of bidding is that the person willing to pay higher amount should get to reservation of transmission capacity. If the number of hours per day during which access is being sought by the two or more competing bidders is different, the higher quoted rate may not necessarily translate into higher total payment. Therefore, in order to facilitate bidding on the basis of rate quoted, it is necessary that all the competing bidders should make payment for same number of hours per day irrespective of actual requirement of hours of access per day.

(b) For optimum utilisation of the system, it is desirable that the bidder with requirement of full day access should get priority over the bidder intending to utilise the system over part-day. This preference can be incorporated into price-based bidding by applying full day transmission rate even for part-day transactions.

Procedure for reservation of transmission capacity

26. The following procedure for reservation of the transmission capacity had been proposed:

> "*The processing of application for the access commencing in the month of application shall be done on first-come-first-served basis depending on availability of the transmission capacity. Applications received till the nineteenth day of the month for access for the period falling in the next month shall be considered together on the twentieth day of that month and shall be processed in the manner given hereunder, namely:*
>
> *(a) Applications shall be analysed to check for congestion on any of the transmission corridors to be used for short-term access.*
> *(b) In case the nodal Regional Load Despatch Centre does not anticipate congestion on any of the transmission corridors, the applicants shall be granted short-term access by twenty-fifth day of the month for the quantum and duration of the short-term access sought.*
> *(c) If in the opinion of the nodal Regional Load Despatch Centre, grant of short-term access to all applicants is likely to lead to congestion in one or more transmission corridors to be used for short-term access for any duration, it shall accordingly inform the applicants of its opinion and the reasons therefor on or before twenty-third day of the month.*
> *(d) An applicant may reduce its requirement of transmission capacity during the period of congestion or may opt for access only for the duration when no congestion is anticipated and in such a situation shall inform the nodal Regional Load Despatch Centre accordingly by twenty-fifth day of the month.*
> *(e) If nodal Regional Load Despatch Centre anticipates congestion in one or more transmission corridors to be used for short-term access, it shall invite bids for reservation of transmission capacity of the congested transmission corridor on twenty-sixth day of the month.*
> *(f) The floor price for the bidding shall be equal to ST-Rate.*
> *(g) Non participation of an applicant in the bidding process shall be construed as if he is no longer interested in access and his application shall not be processed."*

27. The stakeholders have generally favoured the basic procedure for transmission capacity reservation including monthly processing timetable as

suggested in the staff paper. However, RVPNL, UPCL, HPSEB, PSEB, and DTL have suggested that maximum duration of reservation should be 3 months instead of one month suggested in the staff paper. REL, APTRANSCO and AEL have suggested this period to be one month while WBSEB and PTC have suggested for one year duration. POWERGRID/RLDCs are of the view that maximum duration of more than one month is not possible because it is difficult to foresee the availability of transmission capacity for short-term customers with a reasonable degree of certainty beyond the period of one month. It may be recalled that in the regulations, the maximum duration for short-term reservation was one year and in the draft regulations, it was sought to be reduced to about six months. After considering the views of stakeholders, we have come to conclusion that to facilitate trading based on seasonal surpluses, the procedure should provide for reservation of transmission capacity for next 3 months. We are sure that RLDCs shall develop expertise and tools to foresee requirements for a period of next 3 months. Even if some uncertainties creep in due to reservation of transmission capacity for 3 months period, short-term customers are aware that their service is curtailable at the first instance.

28. POWERGRID has suggested certain modification to the timetable for the bidding with the cut-off date for receiving applications to be 14th day of the month instead of 19th day of the month suggested in the staff paper. This suggestion appears to have been given to provide more time to RLDCs for processing of applications. We are sure that RLDCs and SLDCs are capable of processing the

advance applications as envisaged in the timetable suggested and therefore favour its adoption. The procedural aspects relating to processing of application for the same day and for the next day on first-come-first-served basis have been dealt with elsewhere in this statement of reasons, while discussing the time schedule for processing of applications.

29. In accordance with our findings in the above paragraphs, processing of applications for short-term reservation shall be done in accordance with procedure given below:-

(a) The applications for short-term open access for the period falling in the current month and the next three months shall only be processed.

(b) The application for the period falling in the current month shall be processed on first-come-first-served basis depending on availability of the transmission capacity.

(c) The applications received till the nineteenth day of the month for access for the period falling in the next three (3) months shall be considered together on the twentieth day of that month and shall be processed in the manner given hereunder, namely:

(i) Applications shall be analysed to check for congestion on any of the transmission corridors to be used for short-term access.

(ii) In case the nodal Regional Load Despatch Centre does not anticipate congestion on any of the transmission corridors, the applicants shall be granted short-term open access by twenty-fifth day of the month for the quantum and duration of the short-term access sought.

(iii) If in the opinion of the nodal Regional Load Despatch Centre, grant of short-term access to all applicants is likely to lead to congestion in one or more transmission corridors to be used for short-term open access for any duration, it shall inform the applicants of its opinion and the reasons therefor on or before twenty-third day of the month.

(iv) An applicant may reduce its requirement of transmission capacity during the period of congestion or may opt for access only for the duration when no congestion is anticipated and in such a situation, he shall inform the nodal Regional Load Despatch Centre accordingly by twenty-fifth day of the month.

(v) If the nodal Regional Load Despatch Centre anticipates congestion in one or more transmission corridors to be used for short-term open access, it shall invite bids for reservation of transmission capacity of the congested transmission corridor on twenty-sixth day of the month.

(vi) The floor price for the bidding shall be equal to ST-Rate.

(vii) Non-participation of an applicant in the bidding process shall be construed as if he is not interested in access and his application shall not be processed.

Minimum charges applicable for short term customers

30. As per the regulations, the transmission charges payable for short-term customers, shall be for one day and in multiple numbers of whole day. In the draft regulations, it was proposed to apply charges in term of Rs./MW/hour. POWERGRID has explained that it will be extremely onerous and complex task to apply the concept of Rs./MW/hour and nowhere in the world, transmission charges are levied on hourly basis. Most of the stakeholders on the other hand have suggested that the applicable rate should be in terms of Rs./MW/hour. They have argued that application of per day rate for part-day transactions makes such transactions costlier and thereby affects viability of such transactions. After taking into account all the factors, the Commission has come to the conclusion that the charges for short-term customers shall continue to be declared in terms of Rs./MW/day.

31. We find merit in the argument for making the transmission charge rate on per hour basis but at the same time we are concerned with the practicability of applying per hour rate in short-term. We would like to take cautious steps in this direction rather than to take a big leap in haste, which may adversely affect most important function of RLDCs, namely system operation. We, therefore, direct that rate of transmission charges for transactions involving power transfer on each day of continuous duration up to 6 hours, 12 hours and 24 hours shall be as below:-

(a) Up to 6 hours in a day in one block - 1/4th of per day rate,

(b) More than 6 hours and up to 12 hours in a day in one block - 1/2 of per day rate,

(c) More than 12 hours and up to 24 hours in a day in one block - per day rate.

These rates are applicable only if there is no congestion. In case of congestion, the floor rate for biding shall be the full-day rate.

Exit option for short-term customers

32. In the regulations, there is no exit option for short-term customers. Based on the feed back received from the stakeholders, it was proposed in the draft regulations that short-term customer, who has surrendered reserved transmission capacity or whose reserved transmission capacity has been reduced or cancelled by the nodal RLDC due to under-/non-utilisation of reserved transmission capacity, shall bear transmission charges and scheduling charges based on original reserved capacity for 15 days or balance period of reservation, whichever is shorter. RVPNL, UPCL, HPSEB, PSEB and DTL have pleaded for full refund in case of surrender/reduction/cancellation of reserved transmission capacity. POWERGRID has suggested that exit option should be allowed with payment of charges corresponding to 7 days or half the unutilised period, whichever is less.

33. We are of the opinion that full refund of charges in case of surrender of the reserved transmission capacity by short-term customers or reduction/cancellation

of the reserved transmission capacity by the nodal RLDC is not desirable as it may lead to gaming by way of blocking of the transmission capacity on the basis of the loose agreements to prevent other transactions from taking place. Therefore, in case of surrendered/reduction/cancellation of reserved transmission capacity, transmission charges and operating charges (composite scheduling charges and handling charges, as explained elsewhere) for 7 days or balance period of reservation, which ever is shorter and application fees (if not paid already) shall be paid by short-term customer.

Flexibility to change point(s) of injection and drawal

34. The regulations do not provide for change in the declared point of injection or drawal. There have been requests to allow flexibility to change point(s) of injection and drawal to take care of unforeseen conditions such as forced outage of generating units of supplier or load crash in the system of buyer. In the draft regulations such flexibility was proposed only in respect of point(s) of injection. Some stakeholders have expressed a view that this may lead to blocking of transmission capacity by a few dominant players. However, flexibility of change not only in injection point(s) as suggested in the draft regulations, but also of change in drawal point(s) has been advocated by some stakeholders. Central Transmission Utility, on the other hand, has opined against any kind of flexibility for change in point(s) of injection and drawal as it may lead to misuse by the traders to capture transmission corridors. In the staff paper, it was pointed out that the need for flexibility ceases to exist in view of the exit option provided to short-

term customers as also due to reduction in maximum duration of reservation of transmission capacity. During open hearing on 17.1.2005, it was argued by RLDCs that if freedom is given to shift the points of injection or drawal, it will result in total uncertainty and consequently there will be no sanctity of power trading agreement which forms the basis for seeking open access.

35. To us it appears that such flexibility is being sought because the buyers and the sellers are not willing to enter into firm power trading arrangements. This view gains credence in view of the fact that we have also received suggestions that supplier should bear charges in case of default in supply. We do not consider it a desirable situation. The buyer and seller must be serious about the quantum and duration of their power trading agreement and open access regulations should not become a means to provide escape route from contractual commitments. However, in case of genuine difficulty, we have already decided to grant the exit option by payment of minimum charges. Accordingly, we have decided not to provide flexibility for shifting either point(s) of injection or point(s) of drawal.

Application fees, Handling Charges, Operating Charges and Commercial conditions

36. In the draft regulations, the application fees for short-term open access was done away with. Other important amendments proposed were abolition of separate handling and service charges and acceptance of payment through cheque. In the draft regulations, a composite charge of Rs 5000/- per day and Rs 1000/- per day was proposed for the nodal RLDC and each of the SLDC involved. In

the draft regulations, it was further proposed that charges shall be payable on fortnightly basis within three days of grant of open access or one day before commencement of transaction, whichever is earlier. The requirement of LC was proposed to be stipulated only if duration of access exceeds one month. These amendments were proposed basically to avoid delays arising out of making advance payments, specially in the form of bank drafts. POWERGRID has suggested that application fee should be retained to discourage non-serious applicants. It has also suggested that handling and service charges should be increased from present level of 2% to 5%. On the issue of application fees, RVPNL, UPCL, HPSEB, PSEB and DTL have suggested that application fees may be allowed to be deposited within a week. PTC has suggested that application fees may be charged as advance to be set off against the payment of charges. MPCL has suggested continuation of application fee of Rs 5000/-. The proposal of paying composite charge only to the nodal RLDC was opposed by POWERGRID on the ground that in case of inter-regional exchanges, other RLDCs will also be required to deploy resources but shall not be compensated. This will particularly be true in case of ERLDC as it will seldom be the nodal RLDC where as most of the power shall be exported from Eastern Region.

37. We are in agreement with the views expressed by POWERGRID that provision of application fees may be retained to avoid frivolous applications. However, separate handling and service charges shall be dispensed with. Instead, a composite charge shall be payable to RLDC and SLDCs. We agree that each

RLDC should be compensated for its efforts and, therefore, composite operating charges shall be payable to each RLDC @ Rs 3000/- per day and to each SLDC @ Rs.1000/- per day. We shall take a view on these charges while considering the petition relating to reimbursement of RLDC charges duly taking into account additional resources required to be employed by RLDCs to facilitate short-term open access transactions. The application fees shall normally be submitted along with the application, except in case of application for open access for the same day or for the next day, in which case the application fee shall be deposited within next 3 working days of submission of application. Definition of working day as the day on which banks are not closed, shall be inserted in the regulations. For the sake of simplicity, we direct that advance payment of transmission charges, operating charges payable to RLDCs and SLDCs for one month or period of reservation (whichever is shorter) shall be made within 3 working days of grant of open access by the nodal RLDC. Subsequent payments shall be made on monthly basis at least one day before beginning of the month. If the period of reservation is in excess of one month, an irrevocable back-up LC shall be opened within 7 working days of commencement of the open access transaction.

38. Based on the above decisions, the stipulations regarding commercial conditions in the regulations shall be revised as under:

(a) The application fees shall normally be submitted along with the application for short-term open access, except in case of application for the same day or for the next day, in which case the application fee shall be deposited within next 3 working days of submission of the application.

(b) The transmission charges and operating charges shall be paid to the nodal Regional Load Despatch Centre on monthly basis.

(c) Payment for one month or period of open access, whichever period is shorter, shall be made within next three days of grant of open access

(d) Subsequent payments shall be made at least one day before beginning of next month or period of open access.

(e) Payments shall be made either through cheque/demand draft payable at the location of the nodal Regional Load Despatch Centre or through electronic transfer.

(f) In case of non-receipt of payment within the period specified above, the nodal Regional Load Despatch Centre shall have the right to invoke LC or cancel the reservation, as it may deem proper.

(g) If duration of open access granted exceeds one month, short-term customers shall provide an irrevocable back-up LC within seven days of commencement of open access transaction.

Refund to short-term customers in case of transmission constraints

39. In the draft regulations it was proposed that in case of curtailment by RLDC of more than 50% of the reserved transmission capacity on account of

transmission constraints on any particular day, the transmission charges for that day shall be payable pro rata based on the transmission capacity actually provided. RVPNL, UPCL, HPSEB, PSEB, DTL and Tata Power have argued for pro rata refund of charges in case of constraints. POWERGRID, on the other hand, has suggested that pro rata refund should be given only if curtailment exceeds two days.

40. We are of the opinion that proportionate refund of transmission charges is not logical keeping in view that the rate for short-term customers has been kept at about 25% of long-term customers only because short-term customers are curtailable at first instance in case of constraints. Therefore, the proposal in the draft regulations is in order and shall be adopted.

Re-routing in case of constraints

41. Several stakeholders have suggested that there should be automatic re-routing of transmission path in case of constraints in direct inter-regional links. However, it must be remembered that the transmission charges and operating charges payable in case of route other than direct route shall be different. We are conscious of the fact that short-term customers are not always aware of alternative routes and corresponding charges. Therefore, in case of congestion or constraints in the direct inter-regional link, RLDC concerned shall advise the affected short-term customers of feasibility of routing the open access transaction through other regions. If short-term customer gives consent for alternate route, he

shall not be required to submit fresh application for alternate route. Provision shall also be made in the application form to enable short-term customers to give standing instructions to the nodal RLDC about alternate route in case of congestion (at the time of processing of application) or constraint (during actual operation) in the direct inter-regional link.

Time scheduling for processing application for short-term access

42. In the draft regulations, following time schedule was proposed for processing of applications:

S.No.	Type of service/activity	Maximum Processing time
1.	Short-term Service (for the period to be treated on first-come-first-served basis)	
	For the same day (Emergency only)	4 hours
	Up to one day (Request received at least one day in advance)	8 hours
	Up to one week	2 days
	More than a week	3 days
2.	Long-term Service	
	Intimation regarding feasibility of access without system strengthening	30 days
	Intimation of results of studies for system strengthening with cost estimates and completion schedule	90 days

43. RVPNL, UPCL, PSEB, HPSEB and DTL have suggested that in case of emergency requirement, the processing time should be 90 minutes instead of 4 hours. Stakeholders have strongly pleaded that formalities stipulated in the open access regulations should not become hindrance in obtaining access on day-to-day basis. Keeping this in view, we are specifying separate procedure for

processing of applications for reservation on the same day and next day in the paragraphs that follow. We would also like to point out that processing time stipulated in the table is maximum expected time and RLDCs should endeavour to process applications in less than the prescribed time. Therefore, the time schedule proposed in the above table, except for the request concerning same day or next day, shall be adopted. The revised time schedule shall be as under:

S.No.	**Type of service/activity**	**Maximum Processing time**
1.	Short-term Service (for the period to be treated on first-come-first-served basis)	
	Up to one week	2 days
	More than a week	3 days
2.	Long-term Service	
	Intimation regarding feasibility of access without system strengthening	30 days
	Intimation of results of studies for system strengthening with cost estimates and completion schedule	90 days

44. In order to facilitate day ahead transactions and same day transactions (in case of emergency), the following procedure for processing and scheduling of such requests shall be applicable:

(a) **Day ahead transactions**:

i) The advance payment of transmission charges, operating charges and application fees shall not be insisted upon. These payments can be made within the next 3 working days.

ii) A composite request for open access and scheduling shall be sent to the nodal RLDC through SLDC concerned latest by 3.00 PM. The nodal RLDC shall take steps to incorporate the same in the schedules to be issued by RLDCs concerned, if the request could be accommodated without causing congestion.

iii) Composite request for open access and scheduling to utilise surpluses known after issuance of the first despatch schedule by RLDCs at 5.00 PM, must be submitted to the nodal RLDC latest by 10 PM or preferably earlier. The nodal RLDC shall endeavour to incorporate the same in the revised despatch schedule to be issued by RLDCs concerned, if the request can be accommodated without causing congestion.

(b) **Same Day transactions**:

(i) The advance payment of transmission charges, operating charges and application fees shall not be insisted upon. These payments can be made within the next 3 working days.

(ii) In the event of emergency, the beneficiaries/buying entity may locate a source of power to meet their short-term emergency requirement on the same day and forward such request to the nodal RLDC through the concerned SLDC. RLDCs will endeavour to accommodate such emergency requests as soon as and to the extent practically feasible.

Banking arrangement

45. PSEB, HVPNL and RVPNL have contended that energy banking is a special category of intra-regional inter-state exchange having no payment obligations. They have expressed a view that such exchanges necessarily have to be outside the purview of short-term open access. We are not in agreement with the view that all banking arrangements have to be outside the purview of the short-term open access. Any transaction which utilizes system of one or more transmission licensee has to be covered by open access regulations. In case there is an issue as to whether or not the system of a particular transmission licensee is used, the matter may be referred to Member Secretary, Regional Electricity Board/ Regional Power Committee as per redressal mechanism contained in the regulations.

Detailed procedure to be prepared by RLDC

46. In the draft regulations it was proposed that RLDCs shall announce detailed procedure for reservation of transmission capacity to short-term customers, which shall include the procedure for inviting bids, advance reservation, reservation on first-come-first-served basis, usage of alternate route through other regions if direct links between two regions are congested or constrained and any other residual matter. It was also proposed that any further revision in this procedure shall be carried out after obtaining prior approval of the Commission. This proposal was made in view of the several issues raised by stakeholders concerning the procedure formulated by RLDCs in accordance with the regulations presently in force. Accordingly, RLDCs shall submit the detailed procedure for

approval of the Commission, within 21 days of issuance of amended regulations. The new regulations and the detailed procedure by RLDCs shall come into force from 1st April 2005.

Other amendments

47. In the draft, definitions of "day" and "month" were proposed to be inserted. Incorporation of these definitions in the regulations is necessary to avoid varying interpretation of the terms. We also direct that the definition of "open access customer" shall be modified as under to bring more clarity:

> "Open access customer" means a consumer permitted by the State Commission to receive supply of electricity from a person other than distribution licensee of his area of supply or a generating company (including captive generating plant) or a licensee, who has availed of or intends to avail of open access;

48. In the draft regulations, the following amendment was proposed :

> *"In case of inter-regional transactions, reservation of transmission capacity to the short-term customer may be reduced or cancelled by the Regional Load Despatch Centre, if Government of India allocates power from the Central Generating Station or Stations in a region to a person in another region and such allocation, in the opinion of the Regional Load Despatch Centre, cannot otherwise be effected due to congestion in the inter-regional link."*

49. Allocation of power from generation at the central generating stations is the prerogative of Government of India. The Commission is conscious of the fact that such allocation may at times be made from central generating stations located in

one region to a beneficiary in another region. In order to facilitate implementation of such allocation, we have decided to approve the proposed amendment.

50. In the draft regulations, the following amendment was proposed:

> *"In the event of a reserved transmission corridor subsequently becoming fully or partly vacant for certain duration in a month, the Regional Load Despatch Centre shall display this information in public domain on its website. "*

51. We are of the opinion that this amendment is necessary for dissemination of information regarding transmission capacity becoming available due to surrender/cancellation/reduction with a view to ensuring transparency and optimum utilisation of the transmission capacity and accordingly have decided for its adoption.

52. As per the regulations, all transmission licensees were required to declare information regarding existing open access customers using their system, on their website or website of Regional Load Despatch Centres or State Load Despatch Centre concerned within 180 days. We are conscious of the fact that many State Transmission Utilities / State Electricity Boards do not have their own website. We have, therefore, decided to extend this deadline up to 31.6.2005.

53. The regulations provide for reduction or cancellation of the reserved transmission capacity by Regional Load Despatch Centres in case a short-term customer frequently under-utilizes reserved transmission capacity. We have received suggestions to the effect that such reduction or cancellation should not

be done without prior notice. Accordingly, a provision for notice was made in the draft regulations. We approve the proposal in the draft regulations to insert following proviso to the clause dealing with reduction or cancellation of reserved transmission capacity:

> "Provided that the reserved transmission capacity shall not be reduced or cancelled under this clause without a notice to the short-term customer whose reserved transmission capacity is sought to be reduced or cancelled."

54. In the draft regulations it was proposed that Special Energy Meters shall be installed by the Central Transmission Utility for and at the cost of direct customers and by the State Transmission Utility for and at the cost of embedded customers. In the interest of uniformity and standardisation, we have decided to approve this proposal.

Sd/-	Sd/-	Sd/-	Sd/-
(H.L. BAJAJ)	**(BHANU BHUSHAN)**	**(K.N. SINHA)**	**(ASHOK BASU)**
MEMBER	**MEMBER**	**MEMBER**	**CHAIRMAN**

New Delhi dated the 10th February, 2005