No.L-7/105(121)/2007-CERC
CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram:

Shri Bhanu Bhushan, Member Shri R. Krishnamoorthy, Member

In the matter of

The Central Electricity Regulatory Commission (Open access in inter-State Transmission System) Regulations, 2008

STATEMENT OF REASONS

Non-discriminatory access over the transmission system is a pre-requisite for power trading, bilaterally and through energy exchanges, on scheduled basis among utilities, permitted consumers and generators located in the different States or regions of the country. Not only does it enable better utilization of available resources but also facilitates the harnessing of untapped sources of power including captive, cogeneration and merchant generating capacity. In a deficit scenario, it is desirable to tap all the possible sources of power.

2. In exercise of power 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 was operationalized with effect from 6.5.2004. The open access in transmission was introduced for the first time in the country. This enabled the trading of electricity to be carried out on scheduled basis in an orderly manner at a reasonable transmission cost. The Regulations were amended in February 2005, based on the operational experience of the first order. Subsequently, a minor amendment was carried out in December, 2006 to prevent blocking of transmission capacity.

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3. The Commission had issued guidelines for setting up of Power Exchange in February, 2007 and accordingly need had arisen to revamp open access regulations in order to accommodate collective transactions emanating from power exchange as well as conventional bilateral trading. Accordingly, new draft regulations on Open Access in Inter-State transmission were published on 18.12.2007 inviting comments Salient features of new draft were elaborated in the from the stakeholders. explanatory memorandum published along with the draft regulations. The date of submission of comments was extended from 10.01.2008 to 24.01.2008 after such extension was sought by some stakeholders. An overwhelming number of stakeholders (63) have responded to the draft regulations by submitting their comments/observations. List of the stakeholders who have submitted coments/suggestions is attached as Annexure. Based on these observations, it has been decided to modify the draft regulations on Open Access in certain respects. The issues raised by the respondents and our response thereon, are given below.

# Flexibility to revise the schedule and exit option

4. Most of the stakeholders have observed that it is impractical to schedule a transaction too much in advance. Global Energy Limited has observed that the prohibition against revision and cancellation of schedules would put the generating companies to undue hardship, as they would be exposed to uncertain UI charges even on account of shutdown of generating units for genuine and unforeseeable reasons. Some stakeholders have stated that hydro generators should be allowed to revise the schedule as their generation is dependent of uncertain water flows. Similar reason has been advanced for wind generation by GFL. Some stakeholders have suggested that period of advance scheduling should be reduced further for simplification and certainty.

- 5. In the draft regulations, the proposal to fix the schedule for the entire period of transaction while approving the application of open access customer was intended to prevent blocking of the transmission capacity. For the same reason, no exit option was provided to the open access customers whose applications have been approved by the nodal agency. This issue has been reconsidered in view of the comments/suggestions of the stakeholders and it has now been decided to grant a limited flexibility of revising or canceling previously approved schedules by giving 5 days notice. If the period of revision/cancellation is up to 5 days, the customer will pay transmission charges as per the originally approved schedule. If the period of revision or cancellation is more than 5 days, the customer will be liable to pay first 5 days transmission charges as per the originally approved schedule and for the remaining period as per the revised schedule. Operating charges shall be payable as per the original number of days during the period of scheduling, if the period of cancellation is up to 5 days. If the cancellation period is longer, operating charges for the period beyond five days shall be refunded. Since, the revised provision will give some flexibility of revision/cancellation in case of contingencies, the provision in the draft proposing powers to the nodal agency to allow revision/cancellation in extraordinary circumstances has been omitted. The regulations provide full freedom to the applicants to apply over a period of three months. Those, who are comfortable only few days before or even a day before the date of actual transaction to commit to the transaction, can choose to do so. When viewed in this manner, there is no need to change regulations further.
- 6. To recapitulate, one can apply for open access and scheduling three months in advance, two months in advance, one month in advance and one or more days in advance, depending on when he is able to commit to the schedule being applied for. Exit option is also available up to five days ahead of the day for which schedule is

proposed to be curtailed or cancelled, but without refund of any transmission charges for first five days of curtailment/cancellation. We believe that the final regulations adequately address the concerns expressed by the stakeholders.

# **Prior concurrence of SLDCs**

7. Several stakeholders have suggested that the proposal of getting concurrence from SLDC first and then submitting application to nodal agency will be time consuming and will lead to complexity. They have requested that the provision in the existing regulation, whereby applications are submitted to the nodal agency (RLDC) which in turn obtains concurrence of SLDC concerned, should be retained. It has been expressed that the system of 'Single Window Clearance' by nodal agency has worked effectively so far. PTC has suggested that if SLDC concerned refuses concurrence on an invalid ground, appropriate penalty needs to be imposed on that organization. PCKL has stated that 50% of the installed capacity of a generating company located in the State and having the status of 'Intra-State entity' should be supplied to the State concerned at the tariff determined by the appropriate Commission. OPTCL has suggested for incorporating a provision that concurrence from State Utilities should be obtained and submitted to SLDC while seeking its concurrence. Some stakeholders have suggested that in case of non-response from the SLDC within 3 days, the approval should be deemed to be available. Shri S. Suryaprakasha Rao has suggested that there should be an information system available on the web site of SLDC or STU for getting concurrence of SLDC and taking it further to RLDC. Powergrid (System Operation) has suggested that format for their concurrence should be specified by the individual SLDCs rather than including it in the detailed procedure. MERC has suggested that in view of the role/responsibility sought to be entrusted on SLDCs under proposed draft regulations, it becomes necessary to analyze the compatibility and implications of proposed draft OA regulations with existing State specific OA regulations.

8. In our view SLDC is the apex body to ensure integrated operation of the power system in the State as per the provision of the Act. For the overall benefit of sector, it is necessary that SLDCs act impartially in the matters of system operation and take responsibility for their actions. The scheme proposed in the draft regulations is designed to propel SLDCs in this direction. Therefore, this proposal has been retained in the final regulations. As regards suggestion of PTC, it may also be emphasized that any intra-State entity having a grievance with its SLDC have to approach the concerned State Commission for remedy. The suggestion of PCKL to make it mandatory for the intra-state generating company to sell at least 50% of the capacity to the State is contrary to the provisions of the Act and therefore can not be accepted. Two basic issues which need to be addressed while giving concurrence by SLDC areavailability of surplus capacity in the network and adequate metering arrangement. The first issue has to be handled by SLDC itself. For the second issue, it may have to confirm metering arrangement from STU or Distribution licensee concerned, if the customer has approached first time for open access. Therefore, there is no merit in the suggestion of OPTCL to get concurrence of all State Utilities before submitting request to SLDC. Since metering and energy accounting of the intra-state entities has to be carried out at the State level, it is necessary to have prior concurrence of SLDC. Such concurrence will lead to avoidance of disputes later on. It is better to have a uniform format for concurrence of all SLDCs. In any case, since all stakeholders including SLDCs will get opportunity to give comments/suggestions on the detailed procedure, suitable suggestions in this regard may be incorporated in the detailed procedure. As regards suggestion of MERC, it may be stated that fundamental role of SLDCs is to carry out system operation within the State in a

smooth manner. What ever it does, including roles and responsibilities relating to open access, has to be with this broader function in mind. Compatibility between regulations framed by the Central Commission and that by State Commissions has to be ensured by the concerned State entities while framing their own regulation. If required, SLDCs need to be strengthened in different respects so that they can perform all related tasks efficiently and effectively.

# Curtailment

- 9. In the draft regulations, it was proposed that transmission charges will be refunded pro rata to the curtailment only if curtailment exceeds 50% in terms of MW per hour. Most of the respondents have suggested that refund of charges should be pro rata and limit of 50% may be omitted. CEA has suggested that reasons for curtailment should be elaborated in stead of stating 'due to transmission constraints or otherwise'. CEA has also pointed out that provision should be made for curtailment of the approved transaction to accommodate allocations made by Central Government from the central generating stations. Some stakeholders have stated that curtailment priority of open access customers vis-à-vis long term customers is not clear. Powergrid (System Operation) has suggested that in case need for curtailment arises, collective transaction should be curtailed after bilateral transactions because latter are difficult to curtail in the absence of one-to-one source-sink relationship and also because latter get scheduled based on anonymous competitive bidding.
- 10. It has now been decided to accept the suggestions that in case of curtailment, transmission charges will be reduced pro rata to the curtailment without any threshold limit. With regard to the suggestions of CEA, it has been decided that reasons for curtailment will be specifically mentioned in the regulations namely transmission constraints or to maintain grid security. The provision of curtailment to accommodate allocations from central generating stations is part of the pre-existing regulations but

was inadvertently left out in the proposed draft regulations. The same has been incorporated in the final regulations. It is noted that CTU has incorporated provision of curtailing bilateral transactions first followed by collective transactions. The issue of curtailment in general is elaborated in sub-section 9 of Section 6.4 of IEGC.

### Provision for long term access

- 11. The stakeholders have pointed out that several aspects forming part of preexisting regulations such as categorization of customers into long-term and shortterm, procedure for becoming a long term customer and relative priority among these two categories of customers is missing from the proposed regulations. Powergrid (Engineering) has pointed out that till date 24 applicants amounting to power transactions of about 22,500 MW have been granted long term access and 55 applications amounting to 41,500 MW are under process. It has been suggested that provision of long term open access may be continued with suitable modifications. Powergrid (System Operation) has raised an issue about status of long term customers already approved as per the existing procedure. CEA has suggested introduction of a separate category for the period of 1 year and more on firm and continuous basis. Some stakeholders have raised the issue of connectivity of merchant power plant to the inter-state transmission system. Some stakeholders have suggested categorization of users of ISTS into two categories - Fixed users (who are willing to contribute to annual revenue requirement of Powergrid) and nonfixed users (who will be using the ISTS temporarily). It has also been suggested that since term for loan repayment is 7-10 years, fixed users should be allowed exit after this period.
- 12. We have decided to incorporate definition of long term customer in the regulations. It has also been decided to clarify that the term 'open access customers' shall be synonymous with what was earlier referred as 'short term customers'. The

open access customer will use the surplus capacity available after accommodating the transaction of long term customer. The Commission, in due course, will come out with separate regulations covering aspects relating to access for a longer term. Till such time, the provision of existing regulations namely Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2004 shall continue to apply in so far as long term access is concerned. It may be clarified that the long term access granted as per existing regulations shall not be disturbed. The commission has taken cognizance of views of the stakeholders. The issues like long-term usage, grid connectivity to upcoming generating stations including merchant power plants and introduction of a new category of medium-term customers shall be taken up through separate regulation.

# Justification for transmission charges proposed

13. Some stakeholders have sought to know the basis for fixing transmission charges proposed. Some stakeholders have sought confirmation that in case of collective transactions, the rate mentioned will be applicable at point of injection as well as point of drawal i.e. the total energy on which transmission charges will be applicable will be twice the volume cleared by the PX. Some stakeholders have expressed that rate of Rs 40/MWh for collective transactions is on higher side. Some stakeholders have suggested that transmission charges should be reviewed periodically as the new transmission elements would be added with the passage of time. RERC has stated that transmission charges proposed are on lower side. It has also been suggested that specifying a rate of Rs.30 per MW hour for state network is encroachment of powers of State Commission. Powergrid has stated that difference between short term and long term prices is very high which is hampering development of transmission system. Prof. Khaparde of IIT, Bombay has opined that flat rate of transmission charges is over simplification and will lead to loss of price signals arising

due to distance and directions sensitively. It has been suggested that point of connection tariff may be a better option. Powergrid (System Operation) has stated that as per the pre-existing regulations, State Utilities were getting compensation for use of their inter-regional lines. However, no such provision exists in the proposed draft regulation. TNEB has drawn inference that it is not required to pay the rate mentioned in this regulation for availing temporary allocation from central generating station, like from Kayamkulam CCGT and NTPC stations in ER.

14. Presently, transmission charges for short term customers are applied in terms of Rs/MW/day. These charges are about 25% of the effective charges for long term customers at the end of last financial year. Since, open access customers will be using only surplus transmission capacity with lower priority; therefore it is logical that their rate of transmission charges should be significantly lower than effective rate for long-term customers. We are of the view that transmission charges for short term open access should only be nominal and have, therefore, deliberately specified them on the lower side, and in Rupees/MWh, for easy application. Since, in case of collective transactions, one to one source-sink relationship is not there, the rate for transmission charges will be applied both at the point of drawal as well as point of injection. In the draft regulations, transmission charges for collective transactions was proposed as Rs.40 per MWh for each point of injection and each point of drawal. It has now been decided to reduce it to Rs 30/MWh. There is no doubt that the effective rate for long-term customers will increase due to augmentation. The Commission will be alive to the issue of reviewing the prescribed rate for open access customers but tracking effective rate for long-term customers on continuous basis for revising the prescribed rates for open access customers is not warranted

15. For the State network, only default rate for inter-State transmission has been prescribed in line with pre-existing regulations. SERCs may prescribe open access transmission charges for use of the State network. Inter-State transmission including use of State network for the same is in the domain of the Central Commission and therefore comment of Rajasthan ERC does not reflect correct position.

### Applicable operating charges and its utilization

- 16. It has been suggested that since existing beneficiaries are already paying RLDCs charges, there is no justification for further charge of Rs.3000 per day from them in case of their short term transactions. It has also been suggested that operating charges recovered from open access customers should be used for reduction in RLDCs fees and charges. Some stakeholders have also suggested increase in operating charges payable to SLDCs while NVVN has suggested reduction in operating charges.
- 17. With the advent of open access transactions, the work load of RLDCs has increased considerably due to activities such as scheduling and monitoring of transactions and collection and disbursement of transmission charges/operating charges etc. This increased work load and necessary manpower was not factored into RLDCs fees and charges approved by the Commission. However, since volume of transactions is steadily increasing, it has been decided to peg operating charges payable to RLDCs in case of bilateral transaction to Rs.2000 per day instead of Rs.3000 per day proposed earlier. Although, transactions at the State level are presently limited, there is no doubt that such transactions will increase and this will increase work load of SLDCs as well. Therefore, it has been decided to increase operating charges for SLDCs and bring them at par with RLDCs that is to Rs.2000 per day. In case of collective transactions also, operating charges for SLDCs have been

increased to Rs.2000 per day from Rs.1000 per day proposed earlier. It is expected that SLDCs will strive to play the role of an impartial grid operator at the State level as per the mandate of the Act.

# Utilisation of transmission charges recovered from open access customer

- 18. Some stakeholders have objected to the proposal of using the transmission charges collected from open access customers for partly meeting annual transmission charges of the surplus transmission capacity built specifically for open access and future use. It has been pointed out that in accordance with the existing regulations, 75% of the transmission charges collected from open access customers are utilized for reduction in transmission charges payable by long term customers, whereas 25% charges are retained by the CTU. Some stakeholders have sought to know utilization of such charges collected by CTU and have suggested that entire amount collected from open access customers should be utilized for reduction transmission charges payable by long term customers.
- 19. It has been decided to continue with the mechanism in the pre-existing regulations that is 25% of the transmission charges collected from open access customers will be retained by CTU and balance 75% shall be used for reduction in transmission charges payable by long term customers. The manner in which transmission charges collected from customers of bilateral transactions and collective transactions shall be used for reduction in transmission charges of the regions involved, has also been specified in the regulations.

### **Definitions**

20. According to stakeholders, regional entity has been defined as "a person whose metering and energy accounting is done by the Regional Load Dispatch Centre'. However, as per the resolution of RPCs and IEGC in vogue, REA on monthly

basis and statement of UI charges on weekly basis is prepared and issued by RPC's Secretariat.

- 21. NVVNL has suggested that definition of 'bilateral transaction' may be modified to account for the possibility that the transaction may take place between buyer and seller either directly or through a trader. NVVNL has also suggested that definition of 'collective transaction' should be modified to reflect that the transaction discovered in Power Exchange will correspond to one day. TERI has sought to know about anonymous bidding mentioned in the definition of collective transactions.
- 22. Department of Consumer Affairs (DOCA), Ministry of Consumer Affairs, Food and Public Distribution, Government of India has suggested that the word 'Power Exchange' may be replaced by 'Electrical Power Exchange'. DOCA has also suggested that definition of Central Transmission Utility may be included in the regulation. DOCA has also given suggestion to include the definition of 'Special Energy Meter'.
- 23. Several stakeholders have suggested that the words 'For any time block' appearing in the definition of bilateral transaction may be omitted.
- 24. The stakeholders have suggested that the words 'State Transmission Utilities' should be omitted from the definition of State Utility as it can not engage in sale or purchase of electricity. PCKL has stated that in the State of Karnataka, a separate company has been established under the Companies Act, 1956 to look after the power procurement process for the State on behalf of Distribution licensees. It has therefore suggested that definition of State Utility should be modified accordingly.

- 25. RERC has stated that as per metering regulations of CEA, all interface meters are to be owned by STU or CTU or transmission licensees whereas proposed regulations envisage metering and energy accounting by SLDC/RLDC.
- 26. Definition of 'Regional entity' has now been modified as "a person whose metering and energy accounting is done at the regional level.'. Suggestions of NVVN regarding definition of 'bilateral transaction' has been accepted and the definition has been modified accordingly. The suggestion given by NVVNL regarding definition of 'collective transaction' will make it restrictive and therefore, the same has not been accepted. As regards anonymous bidding, what it means is that identity of suppliers as well as buyers submitting bids in the Power Exchange is not revealed until 'solution' giving volume at which supply matches demand along with associated clearing price has been found. The term 'Power Exchange' (PX) has been used internationally as well as in the previous proceedings of the Commission to denote a common trading platform for electricity. Therefore, this term has been retained as proposed in the draft regulations. Similarly, all the stakeholders in the electricity sector are now familiar with the term, Special Energy Meter. The term 'Central Transmission Utility' has been defined in the Act and therefore, in line with the Regulation 2(2) it is not necessary to define it in the regulations.
- 27. As regards definition of bilateral transaction, the words 'any time block' have now been substituted by 'any time period'.
- 28. The term 'State Utility' has been used in the regulations in the context of metering and accounting. Therefore, the definition of State Utility covers various possibilities but this entity may or may not be purchaser of electricity on behalf of the State. In so far as observation of PCKL, it may be stated that metering and energy

accounting has to be done by a government company or organization. In view of the above, no change has been made in the definition of State Utility.

29. As regards issue raised by RERC, it may be pointed out that regulation 22 provides for SEMs to be owned by CTU/STU and therefore there is no conflict with metering regulations of CEA. The term metering has been used to denote collection of the metered data from these SEMs.

#### **Transmission losses**

- 30. The stakeholders have suggested that the treatment of transmission losses is an important issue which has not been deliberated in the draft regulations. RERC has suggested that it would be appropriate to refer to transmission losses to be specified by the State Commission concerned. MPPTCL has observed that in case of conveyance of power through displacement, only incremental losses need to be applied.
- 31. In our scheme, the transmission losses are adjusted in the schedule and not in monetary term. The scheduling process for open access transactions has been elaborated in the detailed procedure, which covers this aspect. Estimation of transmission losses in the State network has been left to the SLDC with the reasonable condition that losses should be declared in advance and should not be revised retrospectively. The SLDC concerned, will follow the directions/regulations framed by the State Commission in this regard.

### Redressal mechanism

32. Some stakeholders have sought to retain the provision of the pre-existing regulations whereby complaints regarding open access in inter-state transmission are first directed to Member Secretary, Regional Power Committee of the Region in which the party against whom complaint being made, is located.

33. In our view, complaint against an entity should be made directly to the appropriate Commission and therefore, the provision in the draft notification has been retained. RLDCs and SLDCs have been specified as apex bodies under the Electricity Act, and therefore any complaints against them can be looked into only by the concerned Commission.

### Information system

- 34. Some stakeholders have suggested that transactions through power exchange should also be displayed on the web site of NLDC. Some stakeholders have suggested that requirement of declaring available transmission capacity on day-ahead basis should be incorporated in the regulations. Some stakeholders have suggested that details of past transactions may be available as achieves.
- 35. Dissemination of information relating to trade conducted on its platform is primarily a responsibility of the Power Exchange and RLDCs should be spared from duplication of effort. Although, the pre-existing regulations provided for maintaining details of past transactions on the website of RLDCs, it may be of academic use only and therefore this requirement has not been incorporated in the new regulations.

### **Unscheduled Interchange (UI) charges**

36. CEA has suggested application of transmission charges on UI transactions as they tend to congest transmission corridors. Some stakeholders have stated that UI charges and reactive energy charges have no linkage with open access and therefore should not be covered in these regulations. It has also been suggested that these issue are intra-State in nature and therefore fall in the domain of SERCs. Mahavitran has stated that 15 minutes time block for billing and scheduling will be implemented after intra-state ABT is implemented in Maharashtra. PCKL has suggested that appropriate UI charge may be specified for interface below 11 kV. RERC has stated

that provision under regulation 20(4) comes under the purview of the State Commission and intervention of CERC is uncalled for. RERC has suggested that it would be appropriate to define 'standby charges' because para 8.5.6 of the tariff policy provides that in case of outages of generators supplying to a consumer on open access, standby arrangement should be provided by the licensee on the payment of tariff for temporary connection to that category as specified by the appropriate Commission. Some stakeholders have suggested that STU or SLDC are not responsible for payment of composite dues of UI and reactive energy of the State as envisaged in the draft regulation 20 and 21. NEEPCO has pointed out that for under generation, generators have to pay 105% of UI rate while for over generation he is entitled for only 95% of UI rate.

37. As regards suggestion of Mahavitran, it is clarified that once Special Energy Meters have been installed at the periphery of open access customers, billing of UI charges can be done without waiting for intra-state ABT in the State. In fact, this provision is part of existing regulations as well and has been implemented in several cases without intra-state ABT. These regulations already provide that regulations made by State Commission on this matter will prevail and so specifying a UI rate for interface below 11 kV is not warranted. Therefore, no change has been made. In case of inter-state transmission, the jurisdiction lies with the Central Commission and therefore it is unfortunate that RERC has termed this particular regulation as 'uncalled for intervention by CERC'. However, it may be pointed out that this regulation makes it clear that the mismatch between schedules and actual will be covered in the intrastate UI accounting scheme. It is needless to say that such intra-state UI accounting scheme will be framed by the State Commission concerned. Thus, what has been suggested by RERC is already implicit in the regulation concerned. Regulation 20(6) has now been modified to make it clear that no charges other than those applicable in

accordance with these regulations shall be applied on the open access customers. Therefore, there is no need to define 'standby charges' etc. As regards applicable charges in case of outage of generators as pointed out by RERC, it has been clarified why no charge is necessary after applying UI charges. The fact that STU or SLDC may not be responsible for payment of composite UI charges and reactive energy charges has been recognized and regulations have been amended suitably.

### **Congestion management**

38. OPGC has suggested that congestion should be managed by asking some generators to increase generation while others to decrease generation. Congestion charges should be recovered from the parties causing congestion. Some stakeholders have sought to know desirability and criterion for allocating transmission capacity to NVVN has given certain suggestions regarding bidding procedure and has PX. suggested that if a person does not participate in bidding, he should be deemed to have participated in the bidding with floor price. Some stakeholders have suggested that 'electronic auction' increases cost and therefore pro-rata allocation should be done in case of congestion. Prof. Bijwe of IIT, Delhi has suggested that congestion management should be done based on an optimization procedure with a social objective. TPTC has suggested that proportionate allotment of capacity is a better option because in the past, on several occasions whenever need for e-bidding has arisen, the applicants had collaborated and approached RLDCs for proportionate allotment of transmission capacity. OPTCL has suggested that STU or State Utility reserves right to declare congestion in the State network as per CEA planning criteria and SIL. Deo & Associates have suggested that platform for collective transaction may help in conducting auction for transmission corridors. Powergrid (System Operation) has suggested that instead of electronic auction, the nodal RLDC should invite single price e-bid through e-bidding. It has also been suggested that in case

available transmission capacity is less than what is required for the solution informed by the PX, curtailment has to be carried out by PX itself. To accommodate this activity time line for scheduling may have to be modified.

39. The intention in the draft regulation is to use single price bids from applicants to manage the congestion. The word 'auction' may have conveyed a different meaning and therefore this word has been replaced by e-bidding. The issue of bidding vis-s-vis rationing by some other criterion has been debated earlier also. Rationing by allocating capacity pro-rata may lead to situations where the applicants will seek reservation of higher capacity than actually needed. 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. As regards suggestion of TPTC, it may be stated that conscious collaboration by competing applicants (which is a sort of collusion) is not same as administered allotment by RLDCs due to problem of over requisitioning mentioned earlier. Further, formulating a social objective may involve avoidable subjectivity. Suggestion of OPGC is impractical in present conditions where no generation capacity may be available in the downstream of the congested corridor to relieve the congestion. The detailed procedure approved by the Commission gives opportunity to the applicants to opt for the duration when no congestion has been envisaged. The suggestion of NVVN regarding deemed participation in e-bidding at the floor price has not been accepted. As regards suggestion of OPTCL, it may be stated that planning criteria is only for planning and should not be mixed with system operation tools. Depending on system conditions, lines can be loaded well beyond SIL. Further, it is not the STU or any other transmission licensee to decide about level of congestion but this decision has to be taken by SLDC or RLDC concerned. For the present, allocation of transmission capacity to PX has not been envisaged. Congestion management through e-bidding

will be done only for applications for bilateral transactions received for advance scheduling and therefore RLDCs shall continue to provide platform for e-bidding developed in accordance with pre-existing regulations. The CTU is yet to submit detailed procedure for the collective transaction. If it is necessary to revise the time line of IEGC to accommodate one additional round of information exchange between PX and NLDC to facilitate congestion, the same will be considered by the Commission.

# **Detailed procedure**

- 40. Some stakeholders have stated that the provisions of the detailed procedure will have significant impact and therefore stakeholders should be given opportunity to submit their comments/observations of the detailed procedure submitted by the RLDCs before it is approved by the Commission.
- 41. In view of the time constraint, the Commission has approved detailed procedure for bilateral transactions vide order dated 31.01.2008. However, this procedure shall be available on the website of RLDCs and stakeholders may submit their suggestions/ comments on the same to the Commission by 29.02.2008. If necessary, the Commission may issue directions for amendment in this detailed procedure.

### Issues related to Power Exchange

42. NVVNL has given certain suggestions regarding specifying bid zones for PX, time line for information exchange with PX etc. NVVNL and IEX have suggested that in case of collective transactions also, time of 3 days should be allowed to make payment for transmission and operating charges. It has also been suggested that the procedure for collection and disbursement of transmission charges for state network and operating charges to SLDCs should be same for bilateral and collective

transactions. DOCA has suggested that time period for payment of application fee in case of collective transaction also needs to be specified. Deo & Associates have raised an issue as to how market clearing price will be worked out for emergency transactions included after 1500 hrs. PTC has opined that as far as day ahead bilateral scheduling is concerned, it should be at par with Power Exchange. Powergrid (System Operation) has suggested that collective transactions should get higher priority than day-ahead bilateral transactions while scheduling due to following reasons:

- (a) The advantage of uniform price discovery.
- (b) Anonymity and confidentiality of bids in the PX.
- (c) Congestion management would have strong influence on the Market Clearing Price and Market Clearing Volume of PX.
- (d) The schedules of intra-State utilities would also undergo change and full information about them would be available to PX only.
- 43. Several issues relating to collective transactions will be covered in the detailed procedure for collective transactions while some others will get resolved based on understanding reached between PX and NLDC/RLDCs. PX is expected to have facility of internet banking/ electronic clearance and therefore time period of one working day for making payment is fair. Also, PX will be having sustained relationship with SLDCs and STU unlike some open access customers for bilateral transactions who may use open access for a short period only. Therefore, it is logical that payments of operating charges for SLDCs and transmission charges for State network are made by PX directly to the entities concerned. Regulation 7 provides that with the exception of dayahead and same day transactions, application fee has to be deposited along with application. The PX can work out modalities for payment such as advance payment etc so that application can be construed to have been accompanied with the fee. The

Commission is of the view that at the present stage of market development, traditional bilateral transactions received in the category of advance scheduling or received up to four days in advance, may be accommodated first, followed by collective transactions. Subsequently remaining requests for bilateral transactions may be disposed of. The emergency transactions referred by Deo & Associates have been termed as 'transactions in contingency' and have been covered in Regulation 13. Such transactions have to be scheduled as bilateral transaction and not as collective transaction through PX.

#### Miscellaneous issues

- 44. (i) CEA has pointed out that surplus capacity may also be available due to in-built spare capacity created for future generation addition also and so regulation 3(c) should be amended accordingly. CEA has also sought to know meaning of the word 'interface' in draft regulation 6(2). CEA has also sought to know if provision regarding netting of transactions within the state are valid for bilateral transactions as well.
- (ii) PTC has suggested that in case of default in payment, a notice should be given before taking any action. TERI has suggested that to avoid default in payment, a bank guarantee should be deposited by the open access customer.
- (ii) Reliance Energy Ltd. has stated that as per pre-existing regulations application can be made for three months whereas in the proposed draft, separate application has to be made for each month. Payment of application fees will increase burden on the consumers.
- (iii) Several stakeholders have suggested that non-conventional energy sources should be given priority. It has been expressed that without such priority the provision in the Act whereby State Commissions have to specify minimum percentage of power

to be purchased from non-conventional sources will become redundant. It has been argued that payment of transmission charges should be subsidized and UI charges should be exempted for non-conventional energy sources. Some stakeholders have suggested higher priority in the scheduling for non-conventional energy sources.

- (iv) PCKL has suggested that Special Energy Meters for intra-State entity should be open for inspection by any person authorized by the State utility or SLDC.
- (v) RERC has drawn attention towards explanatory memorandum wherein it is stated that ISTS has been built primarily as associated transmission system for carrying power from ISGS to the identified entities that are bearing transmission charges on a long term basis. RERC has stated that in spite of this understanding, regulations propose that transmission charges will be payable for open access even though these beneficiaries are owners of the system. RERC has also suggested for giving credit to a regional entity for forgoing/surrendering power available on long term basis.
- (vi) GUVNL has expressed apprehension that buyers and sellers will be at the mercy of nodal agency after 1500 hrs of the preceding day for meeting the shortages or meeting their surpluses. Shri Ashok Kundu has suggested that a particular organization may be allowed a fix number of opportunities during a period to avail scheduling due to contingency.
- (vii) IEX has stated that regulations will be effective from 1<sup>st</sup> April, 2008 whereas its Power Exchange would be operational by the end of January, 2008. It has been suggested that date of effectiveness for collective transaction should be from 31<sup>st</sup> January, 2008.

- (viii) Powergrid (System Operation) has suggested that to have uniform approach and to avoid commercial dispute, particularly in low volume transaction, the loss percentage applied for scheduling needs to be up to two decimal value.
- (ix) Tata Power Ltd. has stated that treatment of forfeited fees, transmission charges and operating charges on account of cancellation of schedule is not clear.
- (xi) TERI has raised an issue as to whether transmission charges and operating charges will be required to be deposited in case of rejection of application.
- (xii) TPTC has suggested that whenever nodal agency rejects application, it should convey reasons for the same in writing.
- 45. The Commission's response on the above issues is as under, in seriatim:-
- (i) We have recognized the possibility of having spare transmission capacity builtin for future generation capacity addition and the regulation has been modified
  accordingly. The word 'interface' means the point of sale (at which sale quantum in
  MW is deemed to be metered) as opposed to point of injection. For example, a
  generating company embedded in a State may opt for interface as State network-CTU
  interface even though point of injection is inside the State. In case of bilateral
  transaction, the losses will be applied from the interface onwards so as to arrive at
  schedule at the point of drawal. The provision regarding netting for collective
  transactions for the purpose of operating charges payable to NLDC etc has been
  modified. Now, entities involved in collective transactions within a State shall be
  grouped by PX in two categories- buyers and sellers. Each group will be counted as
  single entity by NLDC for its operating charges and scheduling. UI accounting for each entity
  has to be carried out separately. This grouping is applicable only for PX based transactions

because entities involved are part of a bigger group of collective transactions discovered at a particular PX.

- (ii) In case of default in payment since possible consequences have already been stipulated in the regulations and therefore, it is not necessary to give a notice before initiating any action as sought by PTC. Payment default by open access customers has not been experienced so far and therefore is no need for bank guarantee etc.
- (iii) Provision for monthly application is for streamlining the process and since application fee is very nominal, it will not have any significant financial impact.
- (iv) The issue of promoting non-conventional energy sources is under active consideration of the Commission and the Commission shall come out with separate regulations for the same. For the present, no specific provision has been made in the regulations for non-conventional energy sources.
- (v) The regulations stipulate that SEMs for intra-State entities shall be installed by STU at the cost of the intra-State entities. No specific provision regarding inspection of SEMs for intra-State entities has been made. This aspect can be covered either in the relevant agreement or in the relevant regulations such as grid code framed by the State Commissions.
- (vi) Long-tem customers have lien over ISTS for particular transactions (such as drawal of share from ISGS) for which system was planned. Open access transaction may impose a markedly different flow pattern on the ISTS. Therefore, long-term customers do not have an automatic right to use the system for some other purpose. This issue has been deliberated in previous orders of the Commission as well. Since 75% of the revenue collected from open access customers shall be used for reduction

in transmission charges payable by long-term customers, the issue of giving credit to regional entities is taken care of.

- (vii) Apprehension of GUVNL that beneficiaries will be at the mercy of RLDCs for scheduling transactions after 1500 hrs of the proceeding day is unfounded. Such transactions were being scheduled even under pre-existing regulations and the Commission is not aware of any difficulties faced in this regard. As regards suggestion of Shri Ashok Kundu, it may be stated that since it is already provided that nodal agency shall accommodate contingency requests to the extent practically feasible, it is not necessary to further restrict number of such requests.
- (viii) Though IEX has stated that Power Exchange will be operational from end of January 2008, it is understood that some issues regarding co-ordination between PX and NLDC/RLDCs including that of dedicated communication facilities are still to be resolved. Therefore, date of implementation has not been modified in the notification.
- (ix) The contention of Powergrid (System Operation) regarding specifying loss percentage in two decimals has been accepted and necessary amendments in the IEGC shall be carried out in due course. Since, such a provision will only improve accuracy no one should have any objection if its gets implemented along with these regulations. The Commission orders accordingly.
- (x) It is implicit that forfeited charges shall be retained by the entity concerned. For example, once application fee has been received, it is to be retained by the nodal agency concerned. Similarly, forfeited transmission charges and operating charges will be given to the transmission licensee or SLDC concerned.

- (xi) It is clarified that transmission charges and operating charges shall be payable only to the extent of accepted schedule of energy and number of days on which schedule has been approved.
- (xii) Suggestion of TPTC has been accepted and regulation 9(5) has been modified accordingly.

# **Issues raised by Competition Commission**

- 46. Detailed comments of Competition Commission of India (CCI) were received on 29.1.2008 after the final regulations were issued by the Commission. However, CCI has raised certain pertinent issues and therefore, the Commission has deliberated the same as discussed below. It is mentioned that CCI had entrusted a study on competition issues in the energy sector to TERI. The report by TERI has found that even though the Electricity Act, 2003 provides the overall competition-enabling framework and, in pursuance to this Act, several State Regulators have issued regulations pertaining to tariff rationalization, trading, open access etc., these regulations have not generated much interest among private utilities in the sector. Despite many States issuing open access regulations, very few applications have been received and acted upon. There are currently several 'other charges' over and above the cross subsidy charge. This has probably disincentivised potential entrants. Interest in open access in transmission across States has also been constrained because of lack of information regarding transmission capacity. Another policy bottleneck pertains to non-existence of definitive guidelines for design and development of power market.
- 47. It has been contended that non-availability and inappropriate pricing of transmission capacity could act as major entry barrier in the electricity sector. In India, the issue related to congestion has historically been under-emphasized and network

has not been developed with long term prospective. It is stated that cost of network access and usage is currently not determined in a manner that promote open access and trading. It is urged that the Commission should take steps in this direction.

- 48. CCI has welcomed the draft regulations and termed it as steps in the right direction. According to CCI, two most important issues that need to be addressed in the transmission sector are; i) non-discriminatory access and ii) reasonable pricing. Having identified these issues, CCI has given following comments on the draft regulations:
  - (i) The proposed changes in regulations do not address the issue of open access as such. Open access in real sense would be applicable only when access on a non-discriminatory basis is available to users irrespective of whether they are accessing network on long term or short term basis. The practicability of achieving this is a moot question, given that transmission capacity is limited and is not sufficient to meet the growing transmission need.
  - (ii) It is not clear as to the extent to which the cost of access will change due to proposed regulations. The number of charges and the layers of payments envisaged, are not encouraging. A system could be evolved by which centralized administration of charges can be effected.
  - (iii) It is not clear as to the extent which the various issues identified in the study by TERI are being addressed in the draft regulations.

- 49. While responding to the issues raised by CCI, it is emphasized that electricity is a concurrent subject and the Act demarcates the roles and responsibilities of the State Commissions and the Central Commission. In so far as, transmission is concerned, which is core issue under discussion, jurisdiction of Commission envelopes inter-state transmission whereas this transmission is in the domain of respective State Commission. The Commission is aware of the fact that in some of the States, some 'other charges' in addition to cross subsidy surcharge identified in the Act, are being applied. It is for this reason that the Commission in the regulations 20 (6) has stipulated that charges other than those applicable in accordance with these regulations shall not be imposed on inter-state open access customer. These regulations also provide for an information system through web site of the NLDC./RLDCs. The Commission sincerely hope that the State Commission would issue necessary directions so as to ensure that similar information is made available by SLDCs as well. In so far as market development is concerned, regulations in open access in inter-State transmission 2004 have facilitated the development of diversified market based on bilateral negotiations. In 2007, the Commission issued guidelines for trading through a common trading platform (Power Exchange).
- 50. Historically, congestion has been experienced on inter-regional transmission corridors. With integration of 4 regional grids except Southern Region Grid and commissioning of necessary transmission system, this kind of congestion seldom occurs now. Further, the Central Transmission Utility is working on a plan to enhance existing inter-regional transmission capacity from 17,000 MW to about 36,000 MW by the end of 11<sup>th</sup> Plan. However, it may be emphasized that over building the transmission capacity to totally eliminate congestion is not a good idea considering cost implications. In order to ensure that

no unnecessary augmentation of the transmission system is carried out, it is logical to have at least two categories of customers – long term and short term. Long term users will have a lien on the transmission system and they will have first priority for usage. If required, transmission capacity may be augmented to meet the requirement of long term users. On the other hand, if augmentation is carried out for a short term users, the resulting additional transmission capacity may remain idle after the requirement of short term user ceases. Therefore, this kind of categorization is not discrimination but a necessary differentiation based on different needs. Even though, the regulations identify various types of charges, they are for different kinds of services. Further, since these charges are known transparently, they will not hamper competition in any way. The concept of nodal agency in these regulations is for the centralized administration to the extent possible, as emphasized by CCI.

Sd/-(R. KRISHNAMOORTHY) MEMBER Sd/-(BHANU BHUSHAN) MEMBER

New Delhi, dated the 4<sup>th</sup> March 2008

### LIST OF STAKEHOLDERS

- 1. BSES
- 2. Central Electricity Authority
- 3. Chandigarh Distillers & Bottlers Ltd.
- 4. Eastern Regional Power Committee
- 5. Essar Power Ltd..
- 6. Global Energy Ltd.
- 7. Growel Energy Co. Ltd.
- 8. Gujarat Urja Vikas Nigam Ltd..
- 9. GVK Technical & Consultancy Service Pvt. Ltd..
- 10. Himachal Small Hydro Power Association
- 11.IDBI Bank
- 12. Indian Energy Exchange
- 13. Prof. Bijwe, IIT, Delhi
- 14. JSW Power Trading Co. Ltd.
- 15. Kanchanjunga Power Co. (P) Ltd.
- 16. KUT Energy(P) Ltd.
- 17. Maharashtra State Electrcity Distribution Co. Ltd. (Mahavitaran)
- 18. Malana Power Co. Ltd.
- 19.MPPTC
- 20. NDPL
- 21. NEEPCO
- 22. Northern Regional Power Committee
- 23. Nuclear Power Corporation of India Ltd..
- 24. NVVNL
- 25. Powergrid (System Operation)
- 26. PTC India Ltd.
- **27.PSEB**
- 28. Reliance Energy Ltd.
- 29. Shril S. Suryapradasa Rao, Hyderabad
- 30. Tata Power
- **31.TERI**
- 32. Western Regional Power Committee
- 33. W.B. State Electricity Distribution Co. Ltd..
- 34. Shril Verma P.C., Jharkhand ERC
- 35. Shril A.K. Sachan
- 36. Adani Enterprises
- 37. Shril Ashok Kundu
- 38.BSEB
- 39. Damodar Valley Corporation
- 40. DSCL
- 41. HPSEB
- 42. Haryana VPNL
- 43. Shril Jayapalan
- 44. Shri Jayant Deo
- 45. Ministry of Consumer Affairs
- 46. OPTCL
- 47. Orissa ERC
- 48. Orissa PGCL

- 49. Power Grid (Engg.)
- 50. Power Corporation of Karnataka Ltd (PCKL)
- 51. Rajashthan ERC (RERC)
- 52. Shri SA Khaparde
- 53.TNEB
- 54. APTRANSCO
- 55. Competition Commission of India (CCI)
- 56. NLC
- 57. Small Hydro Power Developers Association
- 58. Torrent Power
- 59. Tata Power Trading Co. (TPTC)
- 60. Gugarat Fluro Chemicals
- 61. Maharashtra ERC (MERC)
- 62. Karnataka ERC (KERC)
- 63. Shri Vivek Bhatnagar