

TRANSMISSION, TRADING, ACCESS AND EXCHANGE

National Grid

9.20 An integrated power transmission grid helps to even out supply-demand mismatches. The existing Inter-regional transmission capacity of about 20,750 MW connects northern, western, eastern and north-eastern regions in a synchronous mode operating at the same frequency and the southern region asynchronously. This has enabled inter-regional energy exchanges of about 46,000 million units (2008-09), thus contributing to greater utilization of generation capacity and an improved power supply position. Proposals are underway to have

synchronous integration of southern region with the rest.

Trading of electricity

9.21 Power trading helps in resource optimization by facilitating the disposal of surplus power with distribution utilities and in meeting the short-term peak demand. The Central and State Electricity Regulatory Commissions have powers to grant inter-state and intra-state trading licences, respectively. CERC has so far granted 43 inter-state trading licences, of which 41 are in existence as on 31.03.2009. Traders are categorized on the basis of volume of electricity to be traded and the net worth of the trader (Table 9.9 and Box 9.1).

Table 9.9 : Electricity trading

Period	Volume of electricity traded (MUs)	Weighted average purchase price (Rs./kWh)	Weighted average sale price (Rs./kWh)	Trading margin (Rs./kWh)
2005-06	14,188.8	3.14	3.29	0.09
2006-07	15,022.7	4.47	4.51	0.04
2007-08	20,964.8	4.48	4.52	0.04
2008-09	21916.9	7.25	7.29	0.04

Box 9.1 : Inter-state trading Regulations, 2009

The Central Electricity Regulatory Commission (CERC) issued new Inter-state Trading Regulations in February 2009. The aim was to tighten the terms and conditions for grant of trading licence keeping in view the current price of the trading power and the liquidity requirements of the power trading business and to encourage only the serious players. The important features of the new regulations include:

- Definition of inter-state trading has been revised to explicitly include electricity imported for resale.
- Number of categories of licensees has been reduced from 6 to 3.
- Net worth requirement has been increased to the range of Rs. 5 crore to Rs. 50 crore keeping the prevalent prices of traded power in view.
- Net worth definition has been revised to discount the loans and advances given to the associates.
- New conditions of liquidity i.e. current ratio and liquidity ratio have been introduced to adjudge the credit-worthiness of the applicant.
- Technical qualifications of the full time professionals have been specified.
- Definition of associate has been rationalized.
- A provision has been made that licensee shall not purchase electricity from the entities which are defaulting in payment of UI charges, transmission charges, charges of NLDC/RLDC/ ULDC, if so directed by CERC. These regulations are also applicable to the existing licensees. They are required to comply with the new net worth requirement and liquidity requirement by March 31, 2010.

Operationalization of open access

9.22 Open access is an important framework seeking to promote competition. The regulations on open access in inter-state transmission together with the regulations on inter-state trading are issued by the Central Electricity Regulatory Commission (CERC). The responsibility for the introduction of open access at the distribution level rests with the State Electricity Regulatory Commissions (SERCs) (Box 9.2). Open access in inter-state transmission is fully operational. The open access transactions at inter-state transmission have increased from 778 in 2004-05 to 5,933 in 2006-07. The number was 9,560 in 2007-08 and 9,347 in 2008-09 (up to December 2008). Status of applications received for open access in distribution is at table 9.10. The open

access charges are widely different across States (Figure 9.2).

Power exchange

9.23 CERC has issued guidelines for setting up power exchange. It has also given approval to two (2) applications for setting up power exchange. The two power exchanges, viz. the Indian Energy Exchange Ltd (IEX)., New Delhi and the Power Exchange India Ltd.(PXIL), Mumbai have already started their operations from June 27, 2008 and October 22, 2008 respectively (Table 9.11).

Guidelines for procurement of electricity

9.24 The Central Government has issued guidelines for procurement of power by Distribution Licensees through competitive bidding and Standard

Table 9.10 : Status of applications received for open access in distribution (31-3-2009)

States	Received		Approved		Implemented	
	No.	MW.	No.	MW.	No.	MW.
Andhra Pradesh	9	130.5	2	44	2	44
Chhattisgarh	14	332.8	6	66	5	53
Gujarat	15	871.4	15	871.4	15	871.4
Madhya Pradesh	29	59.6	29	59.6	29	59.6
Maharashtra	46	13170.5	41	13122.5	5	88
Rajasthan	30	271.1	12	165.3	12	165.3
Tamil Nadu	12	1764	0	0	0	0
Other States (*)	19	874.2	11	133.9	8	113
Total	174	17474.1	116	14462.7	76	1394.3

Source: Forum of Regulators

(*): Other states include Haryana, Himachal Pradesh, Jharkhand, Kerala, Orissa, Punjab, Uttar Pradesh and West Bengal.

MW=megawatt

Box 9.2 : Recommendations of the task force on open access (Extracts)

- Central and states' ERCs should be advised to comply with the statutory requirements relating to open access State Governments and state ERCs should enable operationalizing open access.
- SERCs should specify temporary connection charges to be charged by the Discom for standby supply.
- States ERCs should provide open access to all consumers of 1 MW and above within five years from the coming into effect of the amendment of the Act in January 2004.
- The tariff for distribution companies should specify energy charges and wheeling charges separately.
- Transmission and trading should be segregated by all states.
- States should be advised to set up SLDCs as independent entities with financial and operational autonomy.
- SERCs should ensure enabling arrangements such as standby supplies at affordable prices, metering and settlement.
- IPPs, captive and small generators should be allowed to bring power to the market in grant of open access.
- Regulators should meet bulk consumers and stakeholders to address their concerns.
- The supplies from the unallocated Central quota of CPSUs should not be permitted to be sold by a recipient state and/or its utilities outside the recipient state at prices exceeding the regulated tariff and the permissible trading margin.
- 25 per cent of the Centre's discretionary allocation of 15 per cent of CPSU generating capacity may be made available for direct sale by CPSUs to open access consumers. For new capacity of CPSUs, 50 per cent of the unallocated quota may be reserved for sale to open access consumers.

Figure 9.2 : Net cost of power through open access

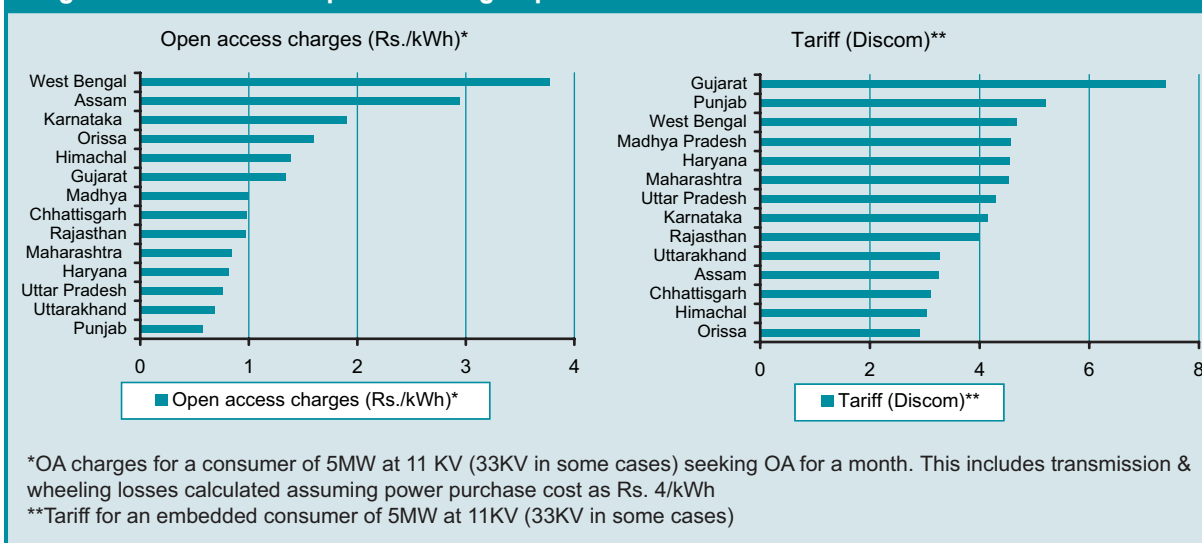


Table 9.11 : Volume and price of electricity transacted by power exchanges

		Aug. 2008	Sept. 2008	Oct. 2008	Nov. 2009	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
Volume (MUs)	IEX	239.81	278.54	375.19	450.65	354.10	291.70	180.80	377.17
	PXIL			2.12	19.40	14.90	24.73	36.77	51.44
Price (Rs./ unit)	IEX	7.61	7.95	8.32	7.47	6.64	6.16	6.85	8.33
	PXIL			7.57	7.22	6.58	6.86	7.42	8.54

Bidding Documents (SBDs) for long-term procurement of power from Case-2 projects having specified site and SBDs for long-term procurement from Case-1 projects, where the location, technology

or fuel is not specified. The guidelines for procurement of power by Distribution Licensees through competitive bidding were amended before issuing SBDs for Case-1.