



# Annual Report 2007-08

# CERC

Central Electricity Regulatory Commission





# Annual Report

## 2007-08



### **CENTRAL ELECTRICITY REGULATORY COMMISSION**

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## INDEX

1.	The Commission	1
2.	The Mandate	3
3.	Mission Statement	5
4.	Profile of the Chairperson and Members of the Commission	9
5.	Human Resources of the Commission	15
6.	Regulatory Procedures and Processes	17
7.	The Year in Retrospect	23
	(i) Central Advisory Committee	23
	(ii) CERC's Role in shaping Forum of Regulators (FOR)	27
	(iii) Seminars/Conferences/Training Programmes	28
	(iv) Notifications issued during the year 2007-08	29
8.	Annual Statement of Accounts, 2007-08	31
9.	Activities during the year 2007-08	33
10.	Outcome of Regulatory Process in Terms of Benefits to Consumers and Development of Sector	100
11.	Agenda for the year 2008-09	106
12.	List of Annexures	107
	(i) Organisation Chart of CERC	
	(ii) E-mail ID and Phone Numbers of the Chairperson, Members and Staff of the Commission	
	(iii) Seminars/Conferences/Exchange Programmes attended by the Chairperson/Members/Secretary/Staff of the Commission outside India	
	(iv) Programmes attended by Staff of the Commission in India	
	(v) Status of Petitions filed before the Commission during the period from 01.04.2007 to 31.03.2008	

(vi) Cost of Generation (Tariff) of Generating Stations of NTPC existing as on 31-03-2008 in Paise/kWh Ex-Bus at 80% PLF

Cost of Generation of Coal Based Pit head generating Stations at NTPC in March 2008

Cost of Generation for Non-Pithead Stations of NTPC in march, 2008

Cost of Generation (Tariff) on Gas/RLNG fuel of NTPC and NEEPCO Gas Based Stations in March, 2008

Cost of Generation on Liquid Fuel of NTPC Combined Cycle Stations in March, 2008

Cost of Generation on Lignite Based Stations at NLC in March, 2008

## THE COMMISSION

The conceptualization of independent Regulatory Commission for the electricity sector dates back to early 1990s, when the National Development Council (NDC) Committee on Power headed by Shri Sharad Pawar, the then Chief Minister of Maharashtra recommended in 1994, constitution of “independent professional Tariff Boards at the regional level for regulating the tariff policies of the public and private utilities”. The Committee reiterated that “the Tariff Boards will be able to bring along with them a high degree of professionalism in the matter of evolving electricity tariffs appropriate to each region and each State”.

The need for constitution of the Regulatory Commission was further reiterated in the Chief Minister’s Conference held in 1996. The Common Minimum National Action Plan for Power evolved in the Conference inter-alia “agreed that reforms and restructuring of the State Electricity Boards are urgent and must be carried out in definite time frame; and identified creation of

Regulatory Commissions as a step in this direction”.

Thus was enacted the Electricity Regulatory Commissions Act, 1998 paving way for creation of the Regulatory Commissions at the Centre and in the States.

The 1998 Act was enacted with the objective of distancing Government from the tariff regulation. The Act provided for Electricity Regulatory Commissions at the Center and in the States for rationalization of electricity tariff, transparent policies regarding subsidies etc. Under the provisions of this Act, the Central Government constituted the Central Electricity Regulatory Commission (CERC) in July, 1998. The ERC Act, 1998 has since been replaced by the Electricity Act, 2003. The CERC created under the provisions of the ERC Act, 1998 has been recognized as the Central Electricity Regulatory Commission under the Electricity Act, 2003.

The Commission functions in a quasi-judicial manner. It has the powers of Civil Courts. It consists of a



Chairperson, three full time Members and the Chairperson of the Central Electricity Authority (CEA) as Ex-officio Member. In recognition of the need for a multi-disciplinary approach while addressing issues related to independent regulation, the Act prescribes that the Chairperson and Members shall be persons having adequate knowledge and experience in engineering, law, economics, commerce, finance or management. It also prescribes a broad mix of disciplines to be represented in the Commission. The Chairperson and Members are appointed by the President of India on the recommendation of a selection committee constituted by the Central Government as prescribed under

the Act. The Act also provides for the appointment of a Secretary of the Commission whose powers and duties are defined by the Commission.

The Electricity Act, 2003 has significantly enlarged the spectrum of responsibility of CERC. Under the ERC Act, 1998 only the tariff fixation powers were vested in CERC. The new law of 2003 has entrusted on the CERC several other responsibilities in addition to the tariff fixation powers, for instance, the powers to grant licence for inter-State transmission, inter-State trading and consequently to amend, suspend and revoke the licence, the powers to regulate the licensees by setting performance standards and ensuring their compliance, etc.

## THE MANDATE

As entrusted by the Electricity Act, 2003 the Commission has the responsibility to discharge the following functions:-

### Mandatory Functions

- (a) to regulate the tariff of generating companies owned or controlled by the Central Government;
- (b) to regulate the tariff of generating companies other than those owned or controlled by the Central Government specified in clause (a), if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State;
- (c) to regulate the inter-State transmission of electricity;
- (d) to determine tariff for inter-State transmission of electricity;
- (e) to issue licenses to persons to function as transmission licensee and electricity trader with respect to their inter-State operations;
- (f) to adjudicate upon disputes involving generating companies or transmission licensee in regard to matters connected with clauses (a) to (d) above and to refer any dispute for arbitration;
- (g) to levy fees for the purposes of the Act;
- (h) to specify Grid Code having regard to Grid Standards;
- (i) to specify and enforce the standards with respect to quality, continuity and reliability of service by licensees;
- (j) to fix the trading margin in the inter-State trading of electricity, if considered, necessary;
- (k) to discharge such other functions as may be assigned under the Act.



## Advisory Functions

- (i) formulation of National Electricity Policy and Tariff Policy;
- (ii) promotion of competition, efficiency and economy in the activities of the electricity industry;
- (iii) promotion of investment in electricity industry;
- (iv) any other matter referred to the Central Commission by the Central Government.



## MISSION STATEMENT

The Commission intends to promote competition, efficiency and economy in bulk power markets, improve the quality of supply, promote investments and advise Government on the removal of institutional barriers to bridge the demand supply gap and thus foster the interests of consumers. In pursuit of these objectives the Commission aims to –

- Improve the operations and management of the regional transmission systems through Indian Electricity Grid Code (IEGC), Availability Based Tariff (ABT), etc.
- Formulate an efficient tariff setting mechanism, which ensures speedy and time bound disposal of tariff petitions, promotes competition, economy and efficiency in the pricing of bulk power and transmission services and ensures least cost investments.
- Facilitate open access in inter-State transmission
- Facilitate inter-State trading.
- Promote development of power market.
- Improve access to information for all stakeholders.
- Facilitate technological and institutional changes required for the development of competitive markets in bulk power and transmission services.
- Advise on the removal of barriers to entry and exit for capital and management, within the limits of environmental, safety and security concerns and the existing legislative requirements, as the first step to the creation of competitive markets.



***PROFILE OF THE CHAIRPERSON  
AND  
MEMBERS OF THE COMMISSION***





**Shri Bhanu Bhushan**  
**Member**  
**(February 2004 – Continuing)**

Shri Bhanu Bhushan joined the Central Electricity Regulatory Commission as a Member on 4<sup>th</sup> February, 2004. He holds a first class (Honours) degree in Electrical Engineering from Banaras Hindu University. He has worked for the Indian power sector since graduating in 1966, in the Renusagar Power Company Limited, Central Water & Power Commission, Indian Consortium for Power Projects, Bharat Heavy Electricals Limited, Desein (New Delhi) Pvt. Ltd., National Thermal Power Corporation and Power Grid Corporation of India (PGCIL).

During his long career, Shri Bhushan specialized in the design of thermal and combined cycle power plants, having played a key role in the engineering of many pioneering power plants in India. These plants have performed admirably, without any design-related

problems, at least partly due to his personal involvement in technical details.

He joined PGCIL at its inception in 1991, and rose to be its Director (Operations) in 1997, by virtue of his technical expertise and dedicated work. His responsibilities included supervision of O&M of PGCIL's country-wide EHV network (to maintain an availability of over 99%) and operation of the five Regional Load Dispatch Centres. He is an acknowledged authority on Availability tariff, and the originator of the concept of frequency-linked load dispatch and tariff for Unscheduled Interchanges and voltage-linked pricing of reactive energy. These have been commended by World Bank, approved by CERC and implemented at inter-State level in India during 2002-03, to improve the grid parameters, enable generation according to merit-



order, and provide the framework for power trading. He has authored many important chapters of the Indian Electricity Grid Code, and has specified and guided the indigenous development of special energy meters for inter-utility exchanges.

He coordinated the major ADB-funded study on Bulk power tariffs by ECC of USA in 1993-94. He was Member-Secretary of Sankaraguruswamy Committee, and was involved in finalization of the Electricity Laws (Amendment) Bill 1998, which recognized transmission as a separate activity. He also chaired a CBIP Committee, which has formulated a well-received recommendation on

EHV protection. He has been a Senior Member of IEEE and a Member of CIGRE and its Study Committee C1. For his contribution in the field of power systems, he received the CBIP Diamond Jubilee PM Ahluwalia Award for 1996. Administrative Council of CIGRE bestowed upon Shri Bhanu Bhusan the title of "Distinguished Member" in the year 2004. Shri Bhanu Bhushan also received Lifetime Achievement Award in the Power System Conference held in Chennai in December, 2004. He has written many technical papers, and delivered innumerable talks on problems of integrated grid operation, their solutions, inter-utility tariff, power sector reforms etc.



**Shri R. Krishnamoorthy**  
**Member**  
**(May, 2007 – continuing)**

Shri R. Krishnamoorthy joined as Member in the Central Electricity Regulatory Commission on 10th May 2007. Prior to this he was Member in the Delhi Electricity Regulatory Commission from February, 2005. Shri Krishnamoorthy possesses rich experience in the Power Sector, having spent more than 28 years in the power sector. He retired as the Chairman and Managing Director of Power Finance Corporation in January, 2005 after having held various positions including that of Director (Finance and Financial Operations) during his tenure of more than 16 years with PFC. Before that he was working with National Hydroelectric Power Corporation Ltd. for about 10 years. And, also for a brief period worked in Mineral Exploration Corporation Ltd. in Nagpur. He started his career with Indian Audit and Accounts Department as Section Officer (Commercial) in the year 1970.

During his career with PFC, he was instrumental in extending the financial assistance to private sector power producers, after establishing the requisite procedures for entity appraisal, project appraisal etc. He was also associated with the Institutional Development of the State Power Utilities and had contributed in introducing Reforms and Restructuring of the state power sector. He had the honour of having received the SCOPE award for excellence from the Hon'ble Prime Minister of India in September 2004 for being one of the top 10 PSUs in the country. He was a Member of the Deepak Parikh Committee constituted by Ministry of Power on State specific reforms under Government of India's APDRP (Accelerator Power Development & Reform Programme). He was also a Member of the Advisory Council of the Project Management Institute of NTPC Noida.



He is a visiting faculty to various Institutions in and around Delhi. His experience has enriched him with thorough knowledge in all matters of Finance, Project Appraisal, Financial Analysis, Cost Engineering, Fund Management, Foreign Currency Borrowings, Foreign Exchange Management, Resource Mobilization, Analysis and Interpretation of Balance Sheet, appraisal procedures, capital expenditure decisions, Accounting, tax planning and the like.

At DERC he was associated with the issue of two tariff orders and also "DERC Supply Code and Performance Standards Regulation" was finalized

and issued during his tenure. He was involved in the regulation of Multi Year tariff proposed to be introduced after April 2007. During his tenure the allocation of power from the Central generating stations and others to the distribution companies was finalized and intra-State ABT was introduced in Delhi w.e.f. 1st April 2007.

He is a fellow member of the Institute of Cost and Works Accountants of India and has also completed his intermediate examination of the Institute of Company Secretaries. He is a B.Sc. (Mathematics) graduate from the University of Madras.





**Shri Rakesh Nath**  
**Chairperson, CEA and Member Ex-Officio, CERC**  
**(October, 2005 - Continuing)**

Shri Rakesh Nath was appointed as Chairperson, CEA in October, 2005. He was appointed on the Board of NPCIL on November 3, 2005.

Shri Rakesh Nath, Chairperson, Central Electricity Authority is Member (Ex-officio), CERC since October, 2005. He has over 32 years of experience in power sector in various capacities in different organizations viz. Central Electricity Authority, Bhakra Beas Management Board, Power Trading Corporation, Northern Regional Electricity Board, Western Regional Electricity Board, National Thermal Power Corporation and Rajasthan State Electricity Board. He has varied experience in Operation & Maintenance of Thermal and Hydro Power Stations and Transmission System, Maintenance of Canal System, Regulation of Water Supply, Operation of large Interconnected Regional Power Grids.

Shri Rakesh Nath was appointed as Chairman, Bhakra Beas Management Board (BBMB) in the year 2001 and was responsible for administration, operation and maintenance of Bhakra Beas hydro station with installed capacity of 2866 MW, the largest hydro complex in Northern Region. During his tenure, BBMB achieved a record peak generation and availability of plants increased substantially. During his tenure as Whole Time Director of Power Trading Corporation during the years 2000/2001, he initiated important transactions of trading of power from surplus to deficit areas of the country turned the Trading Corporation into a profit earning Company. He visited Islamabad in November, 1998 as a Member of Indian delegation on trading of power with Pakistan and visited Kathmandu in September 2001 as a Member of Indian Team to promote Indo-Nepal power trade. He



participated in talks with Government of Pakistan at New Delhi in January/February, 1999.

Shri Rakesh Nath has been the Member Secretary of NREB and WREB, the two largest regional grids of the country and also Member of various other Committees appointed by the Government of India to enquire into grid failures in different regions and to suggest the remedial measures. He was Convener of Working Groups set up by the Government of India to prepare guidelines for inter-regional

power exchange which paved the way for structuring inter-regional power transfers across the country.

Shri Rakesh Nath attended courses in power system operation & control in UK in 1984 and in Sweden in 1993. He participated as a member in proceedings of Expert Committee on Sedimentation, an International Committee on Large Dams (ICOLD), in Brazil in September, 2002. He was also deputed to attend International Conference on Water Power held at Buffalo, USA in August, 2003.



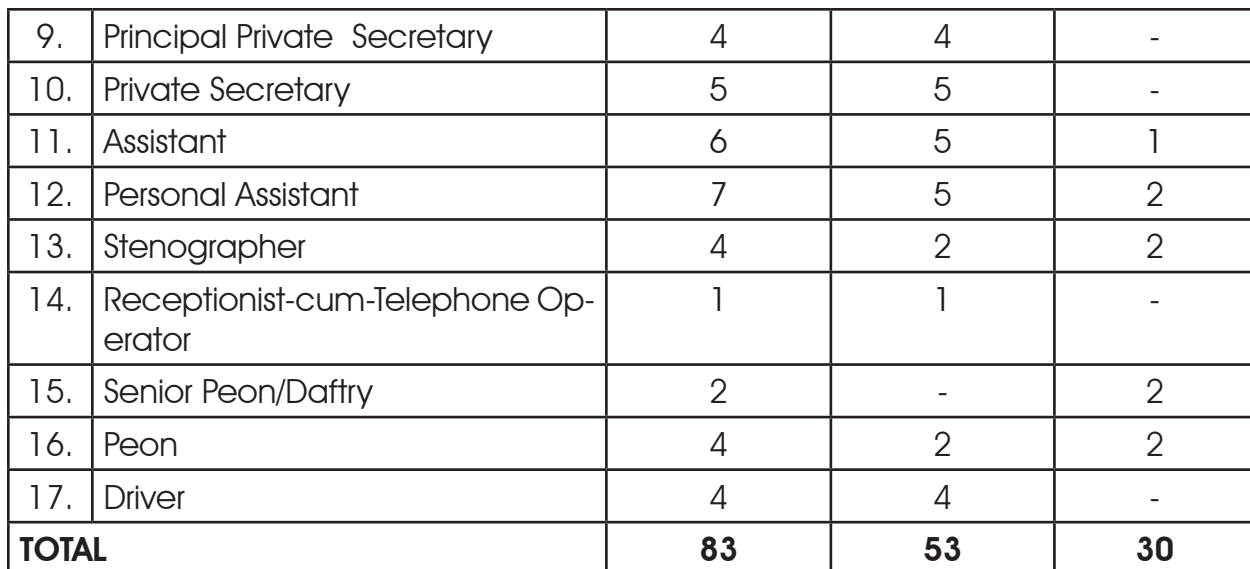
## HUMAN RESOURCES OF THE COMMISSION

The Commission has a very wide mandate under the Act. The efficiency of the Commission in discharging its responsibilities depend upon the quality and functional specialization of its staff with the requisite expertise and experience in engineering, economics, financial management, accounting, law, environment, management information system and other related skills. The details of key human resources are provided in **Annexures I and II**. In addition, the Commission

intends to utilise the human resources with their wide range of expertise and experience available within the Government, industry and research institutions. To supplement the in-house skills and experience available to it, the Commission engages consultants and for this purpose it has framed regulations. The details of Staff position in the Commission and recruitments during the year 2007-08 are given below in Table-1 and 2 :

**Table - 1**  
**SANCTIONED/FILLED/VACANT POSTS IN THE COMMISSION**  
**AS ON 31 MARCH, 2008**

S. No.	Name of the Post	No. of Posts sanctioned	No. of Posts Filled	Vacant Posts
1.	Secretary	1	-	1
2.	Chief	4	3	1
3.	Joint Chief	5	4	1
4.	Deputy Chief	13	7	6
5.	Integrated Financial Advisor	1	-	1
5.	Assistant Chief	16	9	7
6.	Bench Officer	2	1	1
7.	Assistant Secretary	2	0	2
8.	Pay & Accounts Officer	2	1	1



## REGULATORY PROCEDURES AND PROCESSES

The Central Commission in discharge of its functions under the provisions of the Electricity Act, 2003:

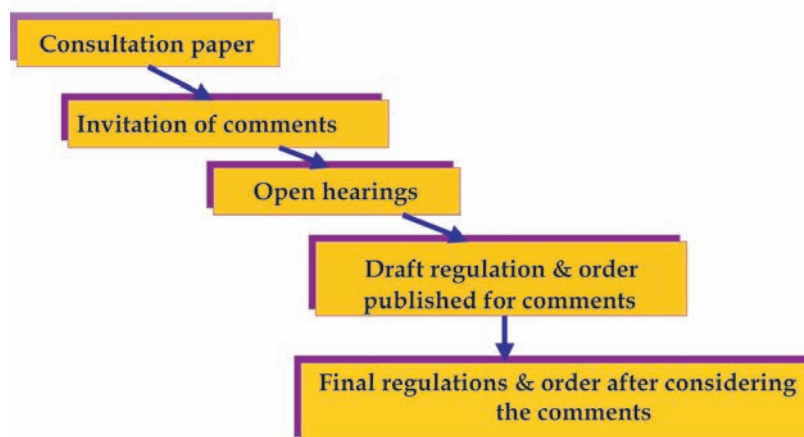
1. Notifies Regulations
2. Issues orders on petitions relating to
  - Grant of licence
  - Determination of tariff
  - Review and miscellaneous petitions.

### 1. Procedure for Regulations

The Commission follows a detailed and transparent process before issuing a Regulation. To start with, a Consultation Paper is developed

on the issue on which a Regulation is proposed to be made. Quite often the consultation paper is prepared at the staff level and is also labeled as Staff Paper. The Consultation Paper/ Staff Paper is then given wide publicity through electronic and print media inviting comments and suggestions from the stakeholders. On receipt of the comments, open public hearings are held to discuss the issues threadbare. Based on the comments received and the discussions in the public hearing, draft Regulations are formulated. As per the requirement of the Act, the draft Regulation then undergoes the process of 'previous publication'. This implies that the draft Regulations are published

### PROCEDURE FOR REGULATIONS





Petitions/Applications are made  
before the Commission primarily for

- Apart from the above, the following petitions/applications are also filed before the Commission :-

- The applicants file petitions with prescribed fee and serve a copy of their petition to all concerned. The applicants are also required to publish their application on their website and give notice in newspapers inviting objections and suggestions from the public. Thereafter, public hearings are held where the petitioners and the respondents argue their case before the Commission. The Commission





passes final orders on the petition after hearing all concerned. The petitioners and the respondents are allowed under the law to file for review before the Commission or appeal against the orders of the Commission before the Appellate Tribunal of Electricity.

## **2.1 Process and Principles of Tariff Determination**

Prior to the creation of CERC, the tariff of Central generating companies namely NTPC, NHPC, NLC and NEEPCO were being determined by Government of India through project specific notifications. The Central Electricity Regulatory Commission came into existence in July, 1998 under the Electricity Regulatory Commissions Act, 1998. The determination of tariff inter alia of Central generating companies was entrusted to CERC. In order to discharge this task, the Commission was required to finalize terms & conditions of tariff. After going through transparent process of hearing all stakeholders, the Commission finalized and notified Terms & Conditions of tariff initially for a three-year period i.e. 2001-04 in March 2001. After the enactment of the Electricity Act, 2003 (which repealed inter alia the Electricity Regulatory Commissions Act,

1998) the Commission notified new Terms & Conditions of tariff for a further five-year period i.e. 2004-09 in March 2004. The above notifications provide for determination of generation tariff station-wise and transmission tariff line or system-wise.

The tariff is determined as per the terms & conditions of tariff as applicable from time to time. The terms & conditions contain the financial norms and technical norms. The tariff is usually called the cost plus tariff because the capital cost of the project is the starting point for tariff calculations. It would be more appropriate to call it regulated tariff because other than actual capital expenditure, most of the financial & technical parameters adopted for tariff are normative and not actuals. The variable charges of thermal stations are corrected for fuel price variation as per monthly weighted average price and heat value of fuel.

The tariff calculations are quite elaborate, as various elements going into the tariff are computed individually to arrive at the full tariff. The tariff is different for each generating station depending on its admitted capital cost, base fuel price & GCV and



applicable norms of efficient operation. The exercise is time consuming but nevertheless essential to ensure that the utilities function in an efficient and economic manner and do not misuse their dominant position to extract high prices from the buying utilities.

The tariff of thermal generating stations consists of two parts:

- 1) Annual Fixed Charges (AFC)
- 2) Variable Charges

The Annual Fixed Charges consist of five elements namely, Return on Equity, Interest on Loan, Depreciation & Advance against Depreciation (AAD), O&M and Interest on Working Capital and is computed based on prudent capital expenditure admitted by the Commission. Commission may disallow or limit a capital expenditure if not found justified giving reasons in the tariff order. All the stations regulated by CERC have to follow 'day ahead' scheduling procedure and declare their availability on 'day ahead' basis. The annual availability of the station is the weighted average of the declared availability for each day of the year. The full recovery of Fixed Charges in case of thermal stations is linked to achieving

Target Availability. There would be pro-rata reduction in the recovery of Fixed Charges below the level of Target Availability. The beneficiaries of the generating stations are required to pay the AFC irrespective of the quantum of electricity drawn.

The variable charges for thermal stations are payable based on norms of operation i.e. station efficiency in terms of heat rate i.e. heat energy required for producing one unit of electrical energy, specific fuel oil consumption and auxiliary energy consumption. Fuel cost is calculated based on the specified norms and considering actual heat value (GCV) and prices of fuel on month to month basis. Central Commission does not have any control over the quality and price of fuel used for power generation. The variable charges are payable corresponding to scheduled generation. The beneficiaries may prefer their drawal schedule on the basis of merit order of the stations depending upon the variable charges.

In case of hydro stations, there is no fuel component and the AFC is notionally divided into capacity charge and variable charge. The full recovery







The tariff of transmission line/sub-station/transmission system consists of Annual Fixed Charges linked to target availability. The transmission utility is also entitled to incentive for achieving availability higher than the target availability.

The tariff of Central generating stations and inter-State transmission systems are annexed at the end of the Report. The Annual Fixed Charges have been converted into Paise/kWh to give a clear comparative picture of tariffs.



## THE YEAR IN RETROSPECT

### (I) Central Advisory Committee (CAC):

The Commission has reconstituted Central Advisory Committee (CAC) by representation from Commerce, Industry, Transport, Agriculture, Labour, Consumers, Non-Governmental Organisations and Academic & Research bodies in the energy sector to get advise on policy formulation, quality continuity and extent of service provided by licensees, compliance by the licensee with the license conditions and requirements of the license, protection of consumer interest and energy supply and overall standards of performance by utilities. The Composition of the Central Advisory Committee was as follows:

1. Shri V. Subramanian, Secretary, Ministry of Non-Conventional Energy Sources, New Delhi
2. Shri Ramesh Chandra, Member (Electrical), Railway Board, New Delhi
3. Shri G.S. Rajamani, Ex Member, CERC, F-2 Harmony Apartments, 56, 4<sup>th</sup> Main Road, Raja Annamalaipuram, Chennai
4. Shri Sanjay Mitra, Joint Secretary, Prime Minister's Office, New Delhi
5. Shri S.K. Garg, Chairman & Managing Director, National Hydro Power Corporation Ltd., Faridabad
6. Shri T. Sankaralingam, Chairman & Managing Director, National Thermal Power Corporation Ltd., New Delhi
7. Shri R.P. Singh, Chairman & Managing Director, Power Grid Corporation of India Ltd., New Delhi
8. Ms. Rachael Chatterjee, Chairman & Managing Director, Andhra Pradesh Transmission Corporation Limited, Hyderabad
9. Shri Malay Kumar De, Chairman, West Bengal State Electricity Board, Kolkatta
10. Shri S.C. Das, Chairman, Assam State Electricity Board, Guwahati
11. Shri J.P. Chalasani, Director, Reliance Energy Ltd., New Delhi



12. Shri Prasad R. Menon, Managing Director, Tata Power Company Ltd., Mumbai
13. Shri V. Raghuraman, Senior Advisor (Energy), Confederation of Indian Industry, Gurgaon
14. Dr. Amit Mitra, Secretary General, Federation of Indian Chambers of Commerce and Industry, New Delhi
15. Shri Ajay Bhushan Pandey, Managing Director, Maharashtra State Electricity Distribution Co. Ltd., Mumbai
16. Shri Gagan Kumar Dhal, Chairman & Managing Director, GRIDCO Ltd., Bhubaneswar
17. Shri Avnish Kumar Awasthy, Chairman, Uttar Pradesh Power Corporation Ltd., Lucknow
18. Dr. B.S. Mann, President, Bhartiya Kisan Union, Punjab
19. Shri R. Chidambaram, Chairman, All India Power Engineers Federation, Chennai
20. Shri Pradeep S. Mehta, Secretary General, Consumer Unity & Trust Society, Jaipur, Rajasthan
21. Shri Girish Sant, Prayas, Pune
22. Shri R. Ravimohan, Managing Director, Credit Rating Information Service of India Ltd., Mumbai
23. Shri V.S. Shetty, Chairman & Managing Director, Industrial Development Bank of India, Mumbai
24. Shri K. Ramanathan, Distinguished Fellow, The Energy and Resources Institute, New Delhi
25. Dr. Suman Kumar Bery, Director General, National Council for Applied Economic Research, New Delhi
26. Shri T.L. Sankar, Advisor, Administrative Staff College of India, Hyderabad
27. Dr. Badal Mukherji, Apartment 808, Block No.24, Heritage City, M.G. Road, DLF Phase-II, Gurgaon (Haryana).
28. Shri Deepak Parekh, Chairman, Housing Development Finance Corporation, Mumbai
29. Shri L. Mansingh, Secretary, Department of Consumer Affairs, Krishi Bhawan, New Delhi.



8th CAC meeting held on 01st June, 2007

The 8<sup>th</sup> meeting of the Central Advisory Committee (CAC) was held on 01<sup>st</sup> June, 2007 at India Habitat Centre (IHC), New Delhi to discuss the following issues :-

- **Development of Power Exchange**

There was a general appreciation of the action taken by CERC with regard to the development of

electricity market, especially the Staff Paper followed by the Guidelines for setting up of a Power Exchange in India. It was felt by the Committee that adequate transmission corridor has to be provided to enable Power Exchange to function smoothly and that hand-holding support has to be extended to the Power Exchange in terms of transmission access.





8th CAC meeting held on 01st June, 2007

Concern was expressed on instances of obstructive and protective approach in not extending open access in the State network system which it was reiterated could fail the operation of Power Exchange. There was general consensus with the light-handed approach adopted by the Commission to allow the situation to evolve naturally in a commercial atmosphere.

- **Hydro development and issues in regulating tariff for hydro stations**

The issues which came up before the Commission in respect of the existing hydro tariff design were discussed – the issue especially of inequitable hydrological risk sharing between the generators and the beneficiaries as a result of the concept of capacity index. The other concern was that the present tariff format did not provide for



direct incentive for providing greater peak power.

- **Discussion Paper on remedy for default in payment of dues by Power Utilities**

The discussion paper issued by the Commission on remedy for default in payment of dues by Power Utilities was discussed. The Commission explained that in the present scenario when the inter-State transmission system has become a mesh, it was neither possible nor desirable to curtail the supply to a defaulting entity through physical opening of the transmission lines. It was explained that the remedy lied in reducing the schedules of power supply to a defaulting entity. When the schedule of a defaulting entity was curtailed, it was possible that the affected utility might continue to overdraw from the grid notwithstanding the fact that it was supposed to reduce its drawal corresponding to curtailment. In such a situation, the defaulting utility could incur heavy liability for payment to the regional UI Pool Account. A problem would arise if it failed to pay its UI dues. Therefore, it was important that there must be adequate payment security against UI payment default.

It was however, pointed out that the suggestion in the discussion paper to resort to appropriation from Central Plan Assistance to recover UI payment default only meant to be a deterrent.

- **Discussion Paper on proposed approach for sharing of charges for and losses in inter-State Transmission System**

The discussion paper issued by the Commission on the subject was explained to the Members of the Committee. It was felt that the concept of transmission pricing was a subjective, complex and contentious issue. It was suggested that the Commission should hold a national Workshop so that ample opportunity was available for all the stakeholders to fully understand the implication of the proposal contained in the discussion paper.

## **(II) CERC's Role in shaping Forum of Regulators (FOR)**

Forum of Regulators ( FOR ) has been constituted by Central Government in terms of the provisions of the Electricity Act, 2003. The Forum consists of Chairperson of Central Electricity Regulatory Commission



(CERC) and Chairpersons of State Electricity Regulatory Commissions (SERCs). The Chairperson of CERC is the Chairperson of the Forum. CERC plays a pivotal role in building consensus amongst the electricity regulators in the country, on several issues of critical importance facing the power sector. .

### **(III) Seminar/Conferences/Training/Exchange Programs**

The details of Seminar/Conferences / Training / Plant visits / Exchange Programs attended by the Chairman, Members, Secretary and Staff of the Commission are provided in **Annexure III and Annexure IV.**





## Notifications Issued during the Year (2007-08)

The Commission during the year 2007-08 has issued following notifications:

### NOTIFICATIONS

S. No.	Notification No. & Date	Subject
01.	Issue No.60 dated 14.03.2007	CERC Terms & Conditions of Tariff (Amendment) Regulations, 2007.
02.	Issue No.62 dated 16.03.2007	Billing of Charges of CPSUs up to 30.09.2007.
03.	Issue No.63 dated 15.03.2007	CERC (Recruitment, Control and Service Conditions of Staff) Regulations, 2007.
04.	Issue No.84 dated 12.04.2007	Annual Escalation Rates for Bid Evaluation (for bid opening up to 30.09.2007).
05.	Issue No.98 dated 27.04.2007	CERC Terms & Conditions of Tariff (Second Amendment), 2007.
06.	Issue No.100 dated 27.04.2007	CERC Indian Electricity Grid Code (Amendment), 2007.
07.	Issue No.105 dated 11.05.2007	Constitution of Central Advisory Committee of CERC.
08.	Issue No.156 dated 31.07.2007	CERC (Recruitment, Control and Service Conditions of Staff) Regulations, 2007.
09.	Issue No.169 dated 17.08.2007	CERC (Leased Accommodation) Regulations, 2007.
10.	Issue No.192 dated 26.09.2007	Annual Escalation Rates for Bid Evaluation and for Payment purpose as per the PPA.



11.	Issue No.196 dated 01.10.2007	CERC (Terms & Conditions of Tariff) (Third Amendment), 2007.
12.	Issue No.197 dated 01.10.2007	Billing Charges up to 31.03.2008.
13.	Issue No.235 dated 31.12.2007	CERC (Terms & Conditions of Tariff) (Fourth Amendment), 2007.
14.	Issue No.236 dated 31.12.2007	CERC (Sharing of Revenue Derived from Utilization of Transmission Assets for other Business), 2007.
15.	Issue No.10 dated 07.03.2008	CERC (Open Access in inter-State Transmission), 2008.
16.	Issue No.53 dated 07.04.2008	Annual Escalation Rates for Bid Evaluation and Annual Escalation Rates Applicable for payment purpose.
17.	Issue No.54 dated 07.03.2008	Provisional Billing of Charges.

## ANNUAL STATEMENT OF ACCOUNTS

Consequent to enactment of the Electricity Act, 2003, the Central Electricity Regulatory Commission is being extended budgetary support by the Central Government as Grants-in-aid from the Financial Year 2004-05 onwards. The Central Commission has established its fund to be called the Central Electricity Regulatory Fund in the grants/loans made by the Central Government, all fee received and all sums received by the Central Commission from such other sources as may be decided by the Central Government is credited. The fund is applied for meeting the expenses on salary, allowances and other remuneration of the Chairperson, Members, Officers and other

employees of the Central Commission and also the expenses incurred by the Commission in discharge of its function etc.

2. During the Financial Year 2007-08, the budgetary support extended to the Central Commission as grants-in-aid was Rs.6.00 crore against which expenditure incurred was Rs.15.17 crore. The major share of expenditure was on Rate, Rent and Taxes (RRT) followed by salary. The deficit of Rs.9.17 crore has been met from the receipt of CERC. The annual accounts of CERC for the year 2006-07 duly audited by the C&AG were placed before both Houses of Parliament.



## ACTIVITIES DURING THE YEAR

During the year 2007-08, the Commission dealt with 277 petitions - 104 petitions carried forward from the previous year and 173 petitions filed during 2007-08. Of the total, 128 petitions were disposed of during 2007-08. Details of Petitions are documented in [Annexure-V](#).

### IMPORTANT ORDERS AND REGULATIONS DURING 2007-08

#### REGULATIONS/GUIDELINES/LICENCES:

##### (1) Process of finalising the Terms & Conditions of Tariff for the next tariff period 2009-14 initiated.

The Commission issued approach paper in December 2007 seeking views of the stakeholders on important issues in the context. The paper broadly covered the following issues:

##### 1. Approach for Rate of Return

Whether to continue with Return on Equity (ROE) approach or to go for Return on Capital Employed (ROCE) approach.

##### 2. Rate of Return on Equity

Whether a review of rate of return on equity from the existing rate of 14% will be required considering the present equity market expectation, risk perception (Beta value) of power sector, etc, in case ROE approach is to be adopted.

##### 3. Pre-tax Vs Post-tax Return

Whether to continue with post-tax return on Equity or to go for pre-tax rate of return.

##### 4. Determination of Cost of Debt

Whether the Commission should adopt:

- (a) Existing method of considering weighted average rate of interest, calculated on the basis of actual loan, actual interest rate and scheduled loan repayment, or
- (b) Normative cost of debt calculated on the basis of present debt market condition.



## 5. Treatment of Foreign Exchange Rate Variation (FERV)

- (i) Whether the present arrangement should continue and FERV risk shall be made as pass through? Or
- (ii) Whether the hedging/swapping be allowed and if so, costs associated with hedging and swapping be allowed for debt obtained in foreign currencies and the resultant benefits, if any, be passed over to beneficiaries/consumers?

## 6. Capital Cost

- (a) Whether the capital cost considered for tariff is to be restricted to actual cash out go, balance sheet figure, or whether undischarged liability should be included, as a part of capital cost for the purpose of tariff?
- (b) Whether prudence check is to be linked to any benchmarked capital cost?
- (c) Treatment to be given to cost elements like initial spares, return on equity during construction, Govt. grant and

subsidies, intangible assets like technical know-how, etc in the capital cost.

## 7. Capital Cost: GFA approach Vs NFA approach

Whether the Commission should continue with Gross Fixed Asset (Liability Side) Approach as at present, or switch over to the Net Fixed Asset (Asset Side) Approach, in all cases.

## 8. Debt/Equity Ratio

What should be the optimum Debt-Equity mix for determination of tariff during tariff period commencing on 1.4.2009, for the existing and the future projects as also for apportionment of additional capital expenditure for the projects commissioned prior to 1.4.2009, but where additional capital expenditure is incurred after that date and those commissioned thereafter.

## 9. Depreciation

- (i) Whether there is a need to expressly link depreciation to repayment of debt?
- (ii) Whether the existing grouping of assets for specifying depreciation rates is required to be revisited?



- (iii) Whether the existing practice of allowing AAD should be continued?
- (iv) In case AAD is not allowed, whether the existing rate of depreciation is required to be revisited or, the utilities should be asked to make their own arrangements to meet the debt repayment obligation (from internal resources/profits/ or by rescheduling of debts, etc), like any other business entity?
- (v) Whether to apply methodology of block-wise depreciation rate instead of the existing practice of applying weighted average rate of depreciation?
- (vi) Whether the life of the project be decided on normative basis against the present methodology of life of the project being decided on the basis of weighted average life of the assets derived from the rates prescribed in Appendix-II of the 2004 regulations? If so, what should be the life of the thermal, hydro and transmission projects?

## 10. Interest on Working Capital (IOWC)

- (i) Whether working capital is to be calculated by taking into account both current assets and current liabilities, or the existing method of considering only current assets is to be continued?
- (ii) Whether amount and stock of fuel oil/O&M expenses/maintenance spares/receivables specified in the existing regulations should continue or, any change is required?
- (iii) Whether maintenance spares should form a part of the working capital along with O&M expenses in the existing methodology is to be continued?
- (iv) Whether stores and spares / repairs & maintenance / employees cost, insurance, security and most of the sub-elements under administrative expenses and most of the sub-elements under corporate office expenses included in O&M expenses should form a part of the working capital?



(v) Whether instead of providing it separately an additional mark-up in terms of percentage may be added up to the ROE or ROCE, as the case may be, to take into account the requirement of IOWC?

(vi) In case ROCE approach is applied, whether net working capital can be a part of the Regulatory Asset Base instead of providing it separately?

The Commission vide order dated 7.1.2008 also directed all the Central generating and transmission companies under its jurisdiction to furnish the actual operational parameters and actual operation & maintenance expenses incurred during the years 2002-03 to 2006-07. The Commission also requested the other State generating & distribution companies, SEBs, IPPs etc. to furnish the required information for generating/transmission companies operated by them.

## **(2) New open access Regulations to facilitate trading through Power Exchange**

The Commission issued revised regulations for open access in inter-State transmission, which facilitate

trading of electricity across the whole country.

The Commission had issued guidelines for setting up of Power Exchange in February 2007 and accordingly need arose to revamp open access regulations in order to accommodate collective transactions emanating from power exchange as well as conventional bilateral trading.

The salient features of the proposed new regulations are as follows:

- (a) A generating company, requiring long term power evacuation arrangement would be required to approach the Central Transmission Utility/State Transmission Utility for the creation of new transmission system in a coordinated and planned manner.
- (b) Open Access in inter-State transmission shall be available depending on availability of surplus transmission capacity after catering to the requirement of long term beneficiaries.
- (c) In the new regulations, emphasis is on 'scheduling' rather than 'reservation' because from the perspective of an open access





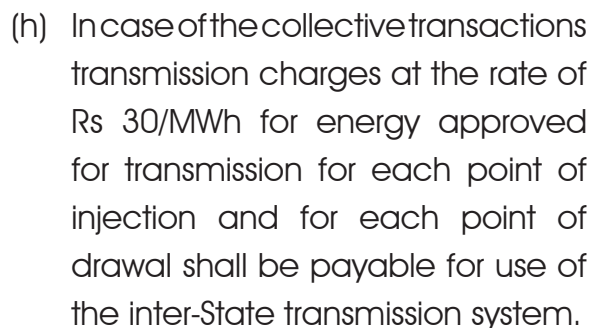
customer, what matters ultimately is that his request is included in the despatch schedules, released by the Regional Load Despatch Centre (RLDC).

- (d) Procedures for advance scheduling up to three months, scheduling on first come first served basis and day-ahead basis have been modified to accommodate collective transactions as well as bilateral transactions.
- (e) The concurrence or no objection of State Load Despatch Centre (SLDC) up to certain quantum of power (MW) shall be obtained in advance and submitted along with the application to the nodal agency. In case the infrastructure required for energy metering and time-block wise accounting already exists, and required transmission capacity in the State network is available, the SLDC shall give concurrence within three (3) working days. In case of denial of

clearance, reasons for the same shall be clearly stated.

- (f) It was seen that the exit option or flexibility granted to open access customers was being used frequently for blocking transmission corridors. In the revised regulations, it has been proposed that the open access schedules shall not be revised or withdrawn by an open access customer for at least 5 days once they have been accepted by the nodal agency and the transmission charges and operating charges shall not be revised. This has been done to ensure that only a genuine user applies for scheduling and the balance transmission capacity is available for others so that entire capacity is utilized in the most optimal manner.
- (g) In case of bilateral transmission, the open access transmission charges for the use of inter-State transmission shall be as follows:

Type of Transaction	Transmission charges (Rs /MWh)
Bilateral, intra-regional	30
Bilateral, between adjacent regions	60
Bilateral, wheeling through one or more intervening regions	90



(i) The intra-State entities shall additionally pay transmission charges for use of the state network as determined by the respective State Commission. In case the State Commission has not determined the transmission charges, the charges for use of respective State network shall be payable for the energy approved at the rate of Rs.30/MWh. Non-determination of charges by the State Commission shall not be a ground for denial of open access.

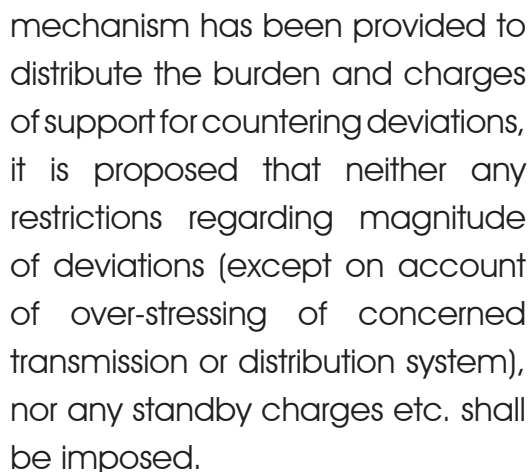
(j) The operating charges for the bilateral transactions and for power exchange collective transactions shall be as follows:

(i) For Bilateral Transaction, it is Rs 2000/- per day for each RLDC and same amount per day for each SLDC.

(ii) For Collective Transaction, it is

Rs 5000/- per day for NLDC and  
Rs 2000/- per day for the SLDC  
for each point of transaction.

Annual Report - 2007-08



- (iii) In case of bilateral transaction through one or more intervening regions:- 25% of the transmission charges for each of importing and exporting each region and remaining 25% of the transmission charges to be allocated equally among intervening regions.

- (m) The transmission charges collected for use of the transmission system other than the State network for a collective transaction shall be disbursed in the following manner, namely-
- (i) 25% of the transmission charges payable for each point of injection and each point of drawal shall be retained by the Central Transmission Utility
  - (ii) 75% of the transmission charges payable for each point of injection and each point of drawal shall be used for reduction in transmission charges payable by long-term customers of the region in which point of injection or point of drawal, as the case may be, is situated.



### **(3) Proportion of revenue from other business to reduce transmission charges—Regulation under section 41 of the Electricity Act, 2003**

Section 41 of the Electricity Act, 2003 authorises a transmission licensee to engage in any business for optimum utilisation of its assets, with prior intimation to the Appropriate Commission. The first proviso to section 41, however, lays down that a proportion of the revenue derived from such other business, as may be specified by the Appropriate Commission, shall be utilised for reducing its charges for transmission and wheeling. The second proviso enjoins upon the transmission licensee to maintain separate accounts for each such business undertaking to ensure that the transmission business neither subsidises the other business undertaking nor does it encumber the transmission assets to support the other business. Accordingly, in keeping with the provisions of the Act, a draft of the regulations on sharing of revenue derived from utilisation of transmission assets for other business, as regards the transmission utilities within the regulatory jurisdiction of the Commission was published through a public notice dated 31.10.2007 to invite comments.

Considering the comments of stakeholders, the Commission issued final Regulations in December 2007 giving revenue sharing mechanism for use of transmission assets by Powergrid and other inter-State transmission licensees for telecom business such as by laying and leasing of optical fibre communication cables over their transmission towers.

As per the regulations, the transmission owner shall share revenue at the rate of Rs 3000/- per year per km of the right of way utilised for laying one optical fibre cable over the transmission towers. Length of the right of way for communication as existing on 1<sup>st</sup> April shall be considered for calculation of revenue sharable for the period 1<sup>st</sup> April to 30<sup>th</sup> September and that existing on 1<sup>st</sup> October for the period from 1<sup>st</sup> October to 31<sup>st</sup> March of the relevant financial year. The Commission has adopted a normative formula for revenue sharing because it is simple to apply and obviates the necessity of getting into the actual profit and loss account of the company's telecom business.

The revenue calculated by applying the specified rate shall be



utilised towards reduction of transmission charges payable by the beneficiaries of those assets in proportion to the transmission charges payable by them to the transmission owner and shall be adjusted on monthly basis for the bills of the respective month.

In order to safeguard the interest of transmission beneficiaries, the Commission has stipulated following conditions for carrying out other business by the transmission owners:

- a) The transmission owner shall ensure that the transmission business does not subsidise the other business.
- b) The transmission owner shall not in any way encumber its transmission assets to support the other business.
- c) The transmission owner shall ensure that the utilisation of its assets for the other business shall not in any manner adversely affect its performance or obligations in the transmission business.

#### **(4) Grant of permission for setting up of Power Exchange**

In line with the responsibility cast under section 66 of the Act,

the Commission had released Staff Paper in July, 2006 on "Developing a Common Trading Platform – Power Exchange (PX)" for electricity trading in the country. Power Exchange is mechanism for institutionalized, transparent and efficient trading. Creation of common platform for trading would help in further streamlining the trading process, standardization of electricity as a tradable product, provides security mechanism through a Clearing House and increase business confidence in the power sector. The functional mechanism of Power Exchange would be in line with the Indian Electricity Grid Code (IEGC) and balancing mechanism through Unscheduled Interchange (UI) rate. The Commission sought comments from the stakeholders.

A public hearing was conducted in December, 2006 to debate possibility of setting up a Power Exchange. More than 150 stakeholders including CEA, generators, distribution utilities, State Electricity Boards, traders, commodity exchanges and IIT Mumbai participated in the deliberations and some of them made detailed presentation. In the interest of fair play and protection of consumer interest,



the stakeholders recommended that the Exchange should function under regulatory oversight. It was clarified that the existing long term contracts which cater to the more than 97% of the demand shall not be disturbed and as such there was no basis to apprehend that electricity prices would increase by creation of exchange.

It was clarified that the Power Exchange would be a voluntarily platform for electricity trading, which will co-exist with other options for trading already facilitated through open access. The Exchange would have common price discovery principle through double sided bidding by matching the aggregated demand and supply both in terms of quantity and price. The buyer would not be compelled to buy at a price higher than the price quoted by him. Power Exchange would be a Day Ahead exchange inviting bids for each one-hour time block for the next 24 hours. The time line for the power exchange would be aligned with scheduling and dispatch time line as per IEGC. Dispatch and drawal schedules to be released by Power Exchange to buyers and sellers respectively shall be firmed. The payment and collections for the

firm trade schedule of power exchange would be settled by its financial clearing-house. The real time deviation from the net schedule of a State or a generator shall be financially settled through existing UI pool mechanism.

The Commission issued guidelines for setting up of Power Exchange in February, 2007. The general approach of the Commission was to allow operational freedom to the Power Exchange within an overall regulatory framework. The promoters were asked to seek permission from the Commission before start of operation. Following broad guidelines for developing Power Exchange were issued.

- De-Mutualised form of organization
- Reliable, effective and impartial management
- Ring fencing between ownership, management and participation
- Investment support from the investors including institutional investors
- Transparency in operation and decision making
- Computerized trading clearing system



- Efficient financial settlement and guarantee system
- Effective trade information dissemination system

The promoters will have the freedom to develop, manage and operate power exchange according to approved rules, by-laws and procedures. Any company registered under Companies Act, 1956, or a Consortium of Companies would be eligible for applying for setting up of the Power Exchange. The applicant would be required to have adequate knowledge and understanding of IEGC, Open Access issues, Availability Based Tariff, UI mechanism, scheduling dispatch and energy accounting procedure.

Based on Commission's guidelines, Indian Energy Exchange Ltd (IEXL), JV Company, promoted by MCX and FTIL, applied for permission for setting up of Power Exchange. The Commission after detailed hearings allowed IEXL vide its order dated 31.8.2007 to set up Power Exchange. This is the first permission given by the Commission to set up Power Exchange.

#### **(5) Grant of Transmission license to Jaypee Powergrid Ltd.**

Jaypee Powergrid Ltd. (JPL), a joint venture company promoted by Jaiprakash Hydro Power Ltd. (JHPL) and PGCIL applied for transmission license to evacuate power from Karcham-Wangtoo HEP which is being developed by Jaiprakash Associates Ltd (JAL). Jaypee Powergrid Ltd (JPL) applied for grant of transmission license for construction and maintenance of the transmission lines and facilities to be used for evacuation of power from Karcham-Wangtoo HEP to the Central Transmission Utility's Abdullapur sub-station located in the State of Haryana, as under:

- (a) LILO of 400 kV D/C Baspa - Nathpa Jhakri transmission line at Wangtoo;
- (b) 400 kV D/C Karcham-Wangtoo-Abdullapur transmission line (Quad conductor); and
- (c) 400/220 kV sub-station (Extension) (PGCIL) at Abdullapur.

The Commission heard the objections raised by M/s. Brakal Corporation NV and HPSEB. CEA





confirmed that the transmission system proposed by JPL is in conformity with the overall transmission plan prepared for the region. After consideration of the issues, the Commission observed that JPL has satisfied the requirements of law for grant of license for the assets and accordingly granted transmission license to JPL on 01.10.2007.

The Commission further clarified that JPL had applied for grant of transmission license for the 'dedicated transmission lines'. As per the Act, the 'dedicated transmission lines' means any electric supply lines for point to point transmission and however in this case the proposed transmission system shall be available for evacuation of power from other generating station located in the Satluj river basin, therefore, the proposed transmission system shall not be treated as the 'dedicated transmission system'. JPL confirmed that it shall provide non-discriminatory open access to its transmission system.

#### **(6) Clarification on open access/ connectivity**

TNEB sought directions to Powergrid for the method of charging transmission charges in case of extending supply from the existing Powergrid sub-station

and for LILO of existing transmission line for laying and establishment of new lines and sub-stations by State Sector investing its own resources.

TNEB planned to establish from its own sources the three new 400 kV sub-stations at Sunguvarchatram, Sholinganallur and Tirunelveli to meet additional requirement of power in the areas served by these sub-stations. The proposal was approved by CEA in the Standing Committee.

The three sub-stations have been planned to be established in the following manner:

- (a) Supply to Sunguvarchatram will be by LILO of 400 kV S/C Sriperumpudur-Kalivanthapattu line owned by Powergrid
- (b) For Sholinganallur sub-station, the feeding arrangement will be from Powergrid's Kalivanthapattu 400 kV sub-station (under construction) by laying a new 400 kV double circuit line from Kalivanthapattu to Sholinganallur
- (c) The feeding arrangement to Tirunelveli sub-station will be from Powergrid's 400 kV Tirunelveli sub-station presently under execution







network has the required surplus transmission capacity. TNEB shall not claim a transmission right or priority over the Powergrid network (in the name of zero-cost, eco-friendly, renewable power, which wind generation is), unless it has applied for and has been granted the required "open access" for using this transmission corridor. Therefore, TNEB should seek "open access" for the requisite quantum (MW) and duration for wheeling power from Tirunelveli to appropriate points, depending on their own transmission development plan vis-à-vis wind generation enhancement time frame. The wind generation quantum is highly variable and unpredictable, and that all available energy should be absorbed in the grid. This makes it all the more necessary for TNEB to judiciously assess the wind generation availability and consequent "open access" requirement.

The Commission in its Order differentiated between providing connectivity to the transmission system and allowing usage of the transmission system through short-term/long-term open access. It is possible that during planning/execution stage, a generating company/licensee may just seek connectivity in the first instance.

This will help the generating company/licensee to plan/execute dedicated transmission system up to the grid. However, the generating company/licensee may be able to firm up its delivery/injection points at a later date, and be able to apply for open access at that stage only. Thus, connectivity may be seen as a pre-cursor to the open access. The requirement of connectivity of this nature was not envisaged previously and, therefore, the Commission's regulations on open access did not cater for these situations. The requests for connectivity from all such persons who are eligible to buy/sell as per the Electricity Act, 2003 should normally be disposed off within one month of receipt of such requests. While granting permission to connect to the system, reasonable broad design requirements may be intimated to the person seeking connection. The person seeking connectivity must agree to:

- (a) Comply with Indian Electricity Grid Code;
- (b) Reimburse the cost of inter-connection bay including bus extensions etc;
- (c) Pay O&M expenses for inter-connection bay; and



It was clarified that under the law, a captive generating plant is at liberty to sell its surplus power to any person, not necessarily to the distribution licensees in State of its operation. In view of this, the opinion of the State Government for sale of surplus power by the captive power plants to the State lacks force.

Orissa State Load Despatch Centre confirmed that there is no congestion in OPTCL system for the quantum of injection for which open access was sought. The only issue was from the point of view of provision of PLCC and SCADA as per Orissa Grid Code (OGC). NBVL confirmed that communication equipment as per specifications furnished by Orissa Power Transmission Corporation have been procured and installed and permission has been sought for installing such equipment in the switching station and sub-station owned by Orissa Power Transmission Corporation. The Commission observed that it should be possible to meet even the requirement of real time monitoring before scheduled date of the transaction i.e. 7.1.2008 and directed that open access be allowed.

### (8) Denial of Open Access by Karnataka State Load Despatch Centre

M/s Viswanath Sugar Ltd. (VSL), M/s Ugar Sugar Ltd. and M/s Shree Dhoodhaganga filed their petitions stating that open access was not granted by WRLDC. In the Order dated 3.12.2007, the Commission dealt only VSL as other two are of similar nature.

VSL has set up a co-generation plant in the State of Karnataka. It had executed a Power Purchase Agreement (PPA), initially with Karnataka Power Transmission Corporation Limited (KPTCL) for sale of power to Hubli Electricity Supply Co. Ltd. (HESCOM). As per PPA, in the event of any payment default by HESCOM for a continuous period of three months, VSL can sell power to third parties. HESCOM defaulted in making payment of dues from January to April 2006. KERC permitted VSL to sell power generated by it to third parties.

VSL entered into a PPA with Tata Power Trading Company Limited for sale of 7.5 MW of power on round-the-clock basis. Tata power applied for open access for sale of power to Gujarat which was rejected by WRLDC as there was no consent from SLDC, Karnataka.





also been synchronized this year. The Five stations namely Tanda TPS, Talcher TPS, Simhadri TPS, Faridabad GPS and the Kayamkulam GPS are supplying power to single State of UP, Orissa, AP, Haryana and Kerala respectively. The other generating stations of NTPC are regional stations supplying power to the regional constituents in the ratio of pre-specified allocations. The Installed capacity and the date of commercial operation of each of the generating station of NTPC are given below:

Annual Report - 2007-08



B.	Non-Pit head Generating Stations		
1	FGUTPP TPS St-I	420.00	13.2.1992 (Date of Take over)
2	FGUTPP St-II	420.00	1.1.2001
3	FGUTPP St-III	210.00	1.01.2007
4	NCTP Dadri	840.00	1.12.1995
5	Farrakka STPS	1600.00	1.7.1996
6	Tanda TPS	440.00	14.1.2000 (Date of Take over)
7	Badarpur TPS	705.00	1.4.1982
8	Kahalgaoon STPS	840.00	1.8.1996
9	Simhadri	1000.00	1.3.2003
	Sub-Total	6475.00	
	<b>Total Coal</b>	<b>21895.00</b>	
<b>Gas /Liquid Fuel Based Stations of NTPC</b>			
1	Dadri CCGT	829.78	01.04.1997
2	Faridabad	431.00	01.01.2001
3	Anta CCGT	419.33	01.03.1990
4	Auraiya GPS	663.36	01.12.1990
5	Gandhar GPS	657.39	01.11.1995
6	Kawas GPS	656.20	01.09.1993
7	Kayamkulam CCGT	359.58	01.03.2000
		4016.64	
	<b>Total NTPC (Coal+Gas)</b>	<b>25911.64</b>	



During the year the Commission awarded final tariff in respect of Rihand St-II (2x500 MW), Ramagundam-III (500 MW) and Talcher-II (4x500 MW). The Commission approved the final tariff based on the actual capital

expenditure incurred after excluding undischarged liabilities as provided in CERC Tariff Regulations, 2004. The station wise annual fixed charges (AFC) allowed are as follow:

#### **Rihand TPS St-II (2x500 MW):**

(Rs. in lakh)

<b>Particulars</b>	<b>2005-2006</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on Loan	7015	13033	11795	10430
Interest on Working Capital	1522	2986	3038	3043
Depreciation	4950	9560	9560	9560
Advance Against Depreciation	3406	4918	7304	7569
Return on Equity	5741	11116	11116	11116
O & M Expenses	4865	10120	10520	10950
<b>TOTAL</b>	<b>27500</b>	<b>51733</b>	<b>53333</b>	<b>52668</b>

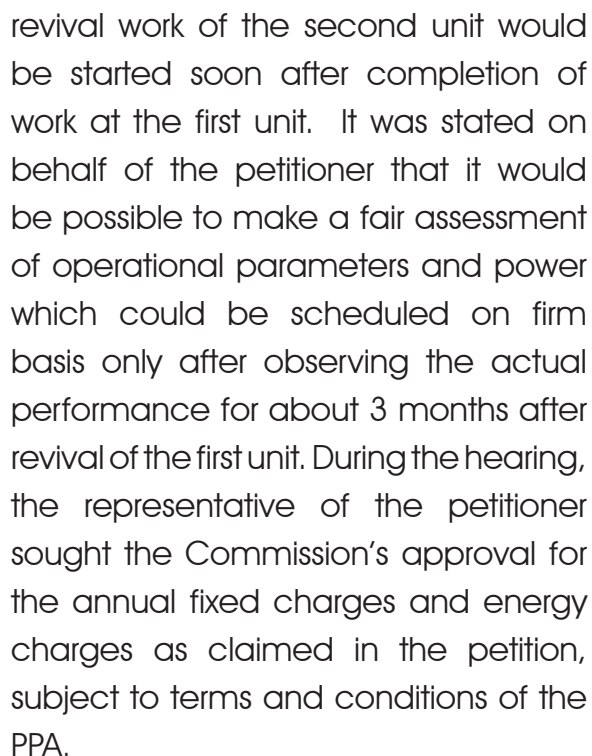
#### **Ramagundam St-III (500 MW)**

(Rs. in lakh)

<b>Particulars</b>	<b>2004-05 (Pro rata)</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on Loan	91	4767	4767	4767	4767
Interest on Working Capital	132	6615	5990	5271	4529
Depreciation	106	5517	5517	5517	5517
Advance Against Depreciation	83	2040	4089	4428	4428
Return on Equity	32	1605	1606	1616	1615
O & M Expenses	90	4865	5060	5260	5475
<b>TOTAL</b>	<b>534</b>	<b>25409</b>	<b>27028</b>	<b>26858</b>	<b>26331</b>







"9. The operational parameters considered by the petitioner to work out the annual fixed charges and energy charges (e.g. 25-40% for target availability, 23-21% for auxiliary energy consumption etc.) are much inferior to the norms prescribed in the 2004 regulations for other generating stations with similar configuration. Therefore, we are not in a position to approve the annual fixed charges and energy charges claimed in the petition,

based on these inferior norms. Further, on consideration of the facts submitted by the petitioner that power cannot be scheduled on firm basis till operation of the first unit is stabilized, we are of the view that supply of power from the generating station at this stage may be treated as infirm power and charged at UI rates as specified in the 2004 regulations, as amended from time to time. This shall be in conformity with clause 7.1.6 of the PPA, when schedule is assumed to be zero. For this purpose, metering, accounting, billing, etc. shall be finalized by the petitioner in consultation with the respondent. The revenue earned from the sale of infirm power in excess of fuel cost shall be adjusted against the capital cost as per Regulation 19 of the 2004 regulations. Therefore, the petitioner shall not charge provisional annual fixed charges till further order and the past bills, if any, raised by the petitioner in this regard shall be ignored by the respondent. We are constrained to point out that provisions in clauses 7.1.3 to 7.1.5 of the PPA are not in order, and should be kept in abeyance.

The Commission vide Orders dated 10.7.2008 and 31.7.2008 has also approved the final tariff for Feroze Gandhi Unchahar Thermal Power Station, Stage-III(210 MW) and for Vindhyachal stage-III (2x500 MW) respectively, of NTPC. The annual fixed charges (AFC) allowed are as follow;



### Vindhyachal Stage-III (2x500 MW):

(Rs. in lakh)

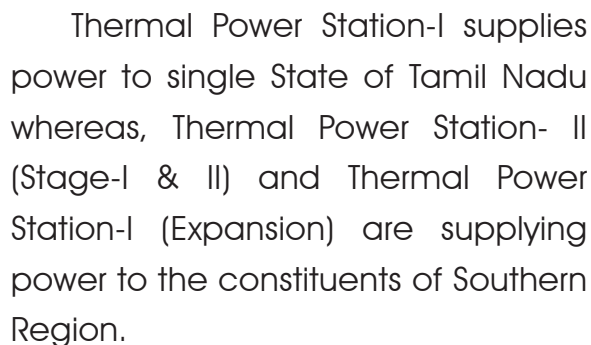
Particulars	2006-07 (1.12.2006 to 31.3.2007)	2007-08 (1.4.2007 to 14.7.2007)	2007-08 (15.7.2007 to 31.3.2008)	2008-09
Interest on Loan	8850	9510	16556	15499
Interest on Working Capital	1630	1673	3863	3690
Depreciation	6082	6480	11398	11398
Advance Against Depreciation	0	0	1087	5685
Return on Equity	7008	7466	13200	13200
O & M Expenses	5060	5260	10520	10950
<b>TOTAL</b>	<b>28630</b>	<b>30390</b>	<b>56624</b>	<b>60693</b>

The Commission has approved the provisional tariff for unit-I of Kahalgaon St-II (2x500 MW) and for unit-I of Sipat-II (2x500 MW) of NTPC.

### (2) Tariff of thermal generating stations of Neyveli Lignite Corporation

The Neyveli Lignite Corporation (NLC) has a total installed capacity of 2490 MW as on 31.3.2008 based on lignite. The installed capacity and the date of commercial operation of each of the generating station of NLC are given below:

S. No.	Name of the Generating Station	Installed Capacity as on 31.03.2008	COD of the Station
1.	TPS-I	600.00	21.02.1970
2.	TPS-II (Stage-I)	630.00	23.04.1988
3.	TPS-II (Stage-II)	840.00	09.04.1994
4.	TPS-I (Expansion)	420.00	05.09.2003
5.	Total Lignite	2490.00	



The Commission concluded the hearing on 26.2.2008 for the determination of tariff for the period 2004-09 along with the approval of additional capitalization for the period 2001-04 and 2004-07. The Order has been reserved.

The North-Eastern Electric Power Corporation (NEEPCO) has a thermal generating capacity of 375 MW as on 31.3.2008 based on natural gas as fuel, namely Assam GPS (291 MW) and Agartala GPS (84 MW). Both these stations supply power to the beneficiaries of North-Eastern region. Agartala Gas Power Station runs on open cycle and Assam Gas Power Station runs on combined cycle mode. Both the stations have small capacity (below 50 MW unit size) gas turbines. The installed capacity and the date of commercial operation of each of the generating stations are given below:

S. No.	Name of the Generating Station	Installed Capacity as on 31.03.2008 ( MW)	COD of the Station
1.	Agartala GPS	84.00	01.08.1998
2.	Assam GPS	291.00	01.04.1999
	<b>Total</b>	<b>375.00</b>	

The Commission awarded tariff for the period 2003-04 in respect of Agartala GPS and Assam GPS vide Order dated 9.9.2005 and 22.8.2005 respectively. The Commission vide Order dated 14.12.2006 revised the

annual fixed charge in case of Assam GPS following the review petition filed by NEEPCO while in case of Agartala GPS Commission rejected the review petition. However, the Commission vide Order dated 8.1.2008 also revised



the tariff of Agartala GPS for the period 2003-04 earlier awarded by the Commission subsequent to judgment by Appellate Tribunal for Electricity on 31.10.2007. In light of the order of Appellate Tribunal the capital cost as on 31.3.2003 has been reviewed and Rs.32488 lakh is allowed instead of Rs. 31910 lakh allowed in the earlier Order dated 9.9.2005.

The Commission passed the tariff Orders for the period from 1.4.2004 to 31.3.2009 in respect of Assam GPS and Agartala GPS vide Orders dated 20.2.2008 and 22.2.2008 respectively. The details of the tariff awarded for the period 2004-09 after considering the additional capital expenditure 2004-06 in respect of above stations are given in the table below:

Particulars	Agartala GPS ( GT 4X21 MW )				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	1828	1828	1829	1829	1829
Interest on Loan	322	249	204	95	19
Return on Equity	2287	2288	2288	2288	2288
Advance Against Depreciation	0	0	0	0	0
Interest on Working Capital	195	197	200	202	205
O&M Expenses	795	824	860	895	930
<b>TOTAL</b>	<b>5427</b>	<b>5386</b>	<b>5381</b>	<b>5309</b>	<b>5271</b>

Particulars	Assam GPS ( GT 6X30 MW + ST 3x 37 )				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	7051	7127	7128	7128	7128
Interest on Loan	3915	3623	3184	2555	1927
Return on Equity	10212	10278	10279	10279	10279
Advance Against Depreciation	0	0	0	0	0
Interest on Working Capital	797	803	806	806	805
O&M Expenses	2753	2855	2980	3099	3221
<b>TOTAL</b>	<b>24728</b>	<b>24687</b>	<b>24376</b>	<b>23866</b>	<b>23359</b>

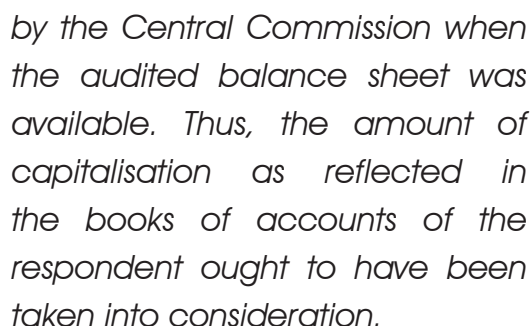












32. We accept the plea of the Appellant on this count and direct the Central Commission to re-look into the matter and restrict the amount of capitalisation to the extent reflected in the balance sheet subject to its prudence check.”

The Commission vide Order dated 9.4.2008 review its earlier decision in the light of ATE and held follow:

18. On re-verification of records, it was noticed that the gross block shown in the balance sheet was different from the capital cost on which revised fixed charges were determined in the said Order dated 24.10.2005. The petitioner was directed to explain the difference between the gross block in the books of accounts and the capital cost on the basis of which revised fixed charges

were claimed. The petitioner has explained that the generating station was transferred to it by the Government of Uttar Pradesh at the price of Rs.1000 crore. At the time of transfer, gross block in the books of account was shown as Rs.967.29 crore and the balance amount of Rs.32.71 crore was kept in the inventories as spares. It has been further submitted that while approving the tariff for the period up to 31.3.2004 prior to additional capitalisation, the Commission in its Order dated 28.6.2002 in Petition No.77/2001 considered the actual project cost of Rs.607 crore, on the date of commercial operation, as against the claim of the petitioner project cost of for Rs.1000 crore. Consequently, the petitioner got the revaluation of assets done in accordance with certain observations of the Commission in the said order and adjusted an amount of Rs.393 crore in the gross block during the year 2002-03.

19. Since an amount of Rs.32.71 crore was kept in the inventories by the petitioner without reflecting the same in the balance sheet,



*the said amount has not been considered for capitalization in view of the observation of the Tribunal extracted above. Accordingly,*

*the gross value of the assets as on the date of takeover has been re-worked out as under:*

(Rs in lakh)

Opening Gross Block as per Balance Sheet	96729
(Less) Adjustment made in 2002-03	39293
Adjusted Gross Block for the purpose of tariff	57436

*20. The capital cost of the generating station has been recalculated as under after taking*

*into account the adjusted gross block as given above and the additional capitalization allowed by us in this order:*

### **Capital Cost**

(Rs. in lakh)

Particulars	1999-00	2000-01	2001-02	2002-03	2003-04
Opening Gross Block	57436	57436	61516	66151	72175
Additional capitalization allowed		4080	4636	6024	2643
Closing Capital cost	57436	61516	66153	72175	74818

## **TRANSMISSION**

The Commission dealt 85 petitions relating to inter-State transmission. Most of the tariff petitions filed by PGCIL were pertaining to tariff period 2004-09 including approval of second additional capitalization during the same period in some of the petitions, approval of provisional tariff in 28 petitions, etc. NRLDC filed two petitions

seeking directions to the constituents to honour power transfer limits and curb the overdrawals from the grid to maintain grid security of the entire North East West (NEW) grid. The Commission also took one suo-motu petition to ensure secure and reliable operation of Regional Grid by maintaining the grid frequency above 49 Hz. There were also petitions relating to disputes



in grant of open access by some of the State Load Despatch Centres. The Commission also dealt with the petition filed by Jaypee Powergrid Transmission Private Limited for grant of transmission license. There were also petitions relating to trading applications for inter-State trading of power.

M/s Indian Energy Exchange Limited (IEXL) filed an application for grant of permission for setting up of Power Exchange. This was the first application for setting up of power exchange and the Commission gave permission on 31.8.2007.

Uniform Common Pool Transmission Tariff (UCPTT) in terms of paise/kWh was in vogue in North East Regional transmission system since 1992. With effect from 01.04.2007, NER system switched over from the UCPTT scheme, in which PGCIL's revenue depends on energy generated in the region (which is outside the PGCIL's control), to a scheme of annual transmission charges based on the PGCIL's investment in the regional system.

#### **Show Cause Notices issued to UPPCL and Power Development Department (PDD), J&K for failing to pay UI dues**

The capacity charge and energy charge components of tariff cover

only scheduled energy and any excess drawal is paid through UI mechanism. UI accounts are issued on a weekly cycle and as per IEGC, payment of UI charges have high priority. The concerned constituents are required to pay the indicated amount into regional pool account operated by RLDC within 10 days. The Commission observed that non-payment of UI charges amounts to extracting energy from the grid without paying for it.

The Commission noticed that the principal amount of Rs 577.99 crores and Rs 410.25 crores was outstanding against UPPCL and PDD (J&K) respectively for the period upto 2.9.2007. The Commission observed that both the utilities were continuously overdrawing from the grid and not making UI payments and the outstanding UI payments were growing at alarming level. The Commission issued show cause notices to UPPCL and PDD (J&K) to explain by 25.11.2007 that why action should not be initiated against them for recovery of outstanding dues on account of Unscheduled Inter-change (UI) charges.

#### **Levy of congestion charges to maintain grid stability**

NRLDC filed a petition in September 2007 seeking directions to the



constituents of Northern Regional Grid to honour the power transfer capability limits as specified by NRLDC and to curb overdrawal from the grid.

The synchronisation of NR, ER and WR grids has enabled the constituents of NEW (North-East-West) grid to reap the benefits on account of diversity in weather, loads, etc. However, the operating limits as specified by NRLDC on inter-regional links to ensure grid security was not adhered to by NR constituents and had violated several times.

With installed capacity of NEW grid of nearly 100,000 MW the frequency does not fall as it earlier used to and large over-drawal by the NR States cause the inter-regional links to NR to get overloaded before the frequency has come down. In other words, the frequency does not fall to a level where increased UI rate would discourage over-drawal, but the loadings on transmission corridors reach dangerous levels. It was for this reason that the UI mechanism which has worked well so far for controlling the situation was not always effective, particularly in NR, and required to be supported by a supplementary commercial mechanism.

The Commission concluded that the States do not justify unchecked overdrawals particularly when the entire grid is facing imminent collapse. Therefore, it has become imperative to introduce a commercial signal to reduce overdrawal and increase generation on the downstream of congested transmission corridor. The Commission issued directions for levy of a congestion charge on overdrawing States of the Northern Region in the event of a grid crisis with effect from 19.11.2007. While the concept of congestion charge is not new, it was applied in India for the first time.

The congestion charge is Rs 3/= per kWh for over-drawal, under-drawal as well as over/under injection for all grid constituents of Northern Region and is added to the notified frequency-linked UI rate. The time to levy congestion charge is notified by Northern Regional Load Dispatch Centre (NRLDC) at least 30 minutes in advance. It is terminated in the similar way to avoid any flip-flop.

NRLDC later confirmed that the scheme has been effective and helped in maintenance of integration of grid. On many occasions, a mere notice of intent to levy congestion charge



has brought the desired result. In view of its effectiveness, the Commission extended the levy of congestion charge.

### **Implementation of investment based Transmission Tariff in NER**

The Commission determined normal transmission charges for nine (9) sub-systems of the regional transmission system in North Eastern Region owned and operated by Powergrid. This tariff was made effective from 01.04.2007. Before finalizing the tariff, the Commission heard the nine (9) petitions (82/2006 to 90/2006) and considered the views of the stakeholders.

These petitions required a different treatment because of very special nature of the case, as briefly described below:

In North-Eastern Region, Uniform Common Pooled Transmission Tariff (UCPTT) comprising of a certain paise per kWh rate has been followed since 1991-92. The UCPTT rate was derived by adding annual transmission charges for all Central Sector lines and sub-stations and for identified State-owned lines, and dividing the sum by expected annual generation at all Central generating

stations. The UCPTT was initially fixed at 12.7 paise per kWh. After going through a few revisions, it was fixed at 35 paise per kWh with effect from 1.4.1998, and has remained at this level since then even though a number of assets have been commissioned by the petitioner after this date. The amount collected @ 35 paise per kWh was being distributed between the owners of transmission assets forming the common pool pro-rata to the capital cost of the assets of each entity. Due to the freeze on the UCPTT rate and delay in commissioning of new generating capacity, the transmission charges paid to Powergrid over the years have fallen considerably short of the revenue requirement to service its large investment in the region. The NER States have been insisting on the shortfall being made up through a 'relief package' from the Central Government, which too has not materialized.

The UCPTT rate adopted and continued in NER through mutual consent of the regional constituents did not conform to the CERC's Tariff Regulations, 2001, applicable for the period from 1.4.2001 to 31.3.2004. However, in view of the special circumstances of the case, the







this account from the beneficiaries. The total cost of the proposed operation has been estimated by Powergrid as Rs. 8.19 crore.

Powergrid stated that Northern Grid has experienced several trippings due to induced flashovers/breakdowns on account of pollution and proposed hot-line cleaning of insulators through helicopter to minimize shutdown of critical lines. The Constituents of NR have accorded consent for this. Powergrid clarified that the exercise was proposed to be implemented in collaboration with Pawan Hans Helicopter Ltd, a Government of India Enterprise, on experimental basis. The critical lines and areas prone to tripping would be identified based on past history. In the light of international experience in the field, it was anticipated that about 5 km of line could be cleaned in an hour.

The beneficiary States urged for cost-benefit analysis as it would result in saving to Powergrid towards expenditure on manual cleaning and by way of higher incentive due to increased availability of the transmission lines.

The Commission was convinced that the proposed line cleaning of insulators through helicopter is a step

forward. Apart from cost considerations, it is expected that the proposed helicopter-borne cleaning will enhance grid security during foggy periods, which in the recent years has acquired a serious dimension in Northern grid. It could reasonably be expected that the preventive measure proposed would save the Northern grid from one or two major disturbances in the coming winter months. The advantage of the proposed scheme were so obvious and tempting that Commission urged Powergrid to consider extending the preventive measure to the SEB lines, critical for regional grid security and for this purpose Powergrid may consult NRLDC.

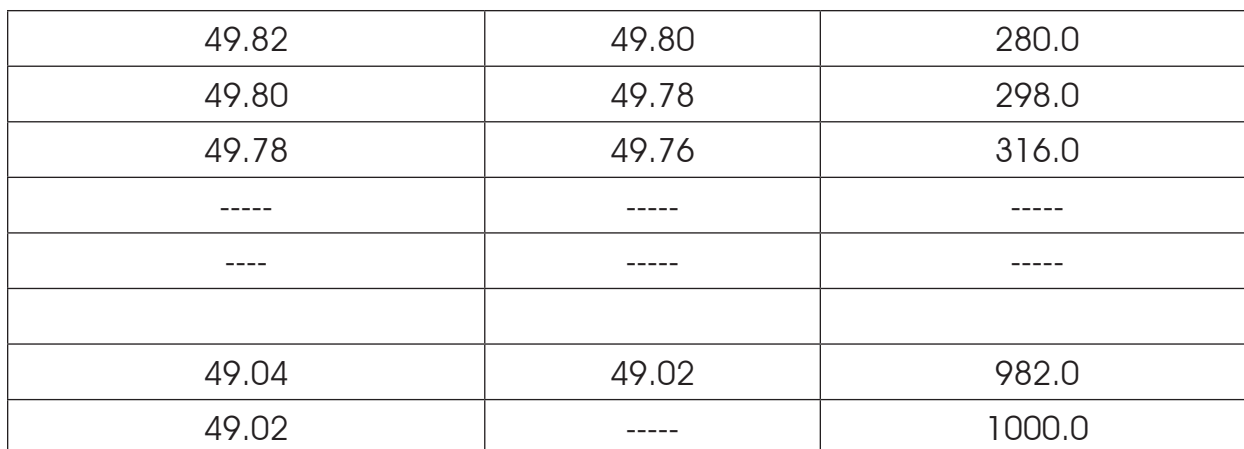
As regards the cost-benefit analysis of the proposed measure, the Commission directed that 20% of the cost be borne by Powergrid and the remaining 80% of the cost shall be shared by the Northern Region beneficiaries, in proportion to transmission charges being shared by them.

### **Review of UI price in Petition No. 154/2007**

NRLDC sought review of UI price factor to facilitate harnessing of costly/ latent/ embedded/ unrequitioned







Note- 2: Provided that in case of generating stations with coal or lignite firing and stations burning only APM gas, UI rate shall be capped at 406 paise per kWh when actual generation exceeds the scheduled generation.

## Proposed Approach for Sharing of Charges for and Losses in inter-State Transmission system

The Commission took this matter in suo-motu petition no. 85/2007. After considering views of the stakeholders a final order in the matter was issued on 28<sup>th</sup> March 2008. In this order, the Commission took first step in the direction of rationalization of transmission charge sharing, in line with the mandate of tariff Policy for bringing in distance and direction sensitivity. Following are the changes brought about by this order:

- (a) Transmission charges for all step down transformers (interconnecting CTU system with the State network) and down stream systems meant to deliver power to the beneficiary under the inter-State transmission

schemes yet to be brought under commercial operation shall be segregated from the rest of the scheme, and shall be payable only by the beneficiary directly served.

- (b) Transmission Charges for all the inter-regional assets connecting Eastern Region to other regions (except asset connecting Eastern and North-Eastern Region) shall be payable by the beneficiaries located in the other regions. Transmission charges for assets connecting Eastern and North-Eastern Region and other inter-regional assets shall be shared equally between the two regions.
- (c) Transmission charges for associated transmission system of the generating stations shall not be pooled automatically with the regional pool of transmission charges. However, beneficiaries may agree to pool transmission charges of such transmission systems with the regional pool of transmission charges.

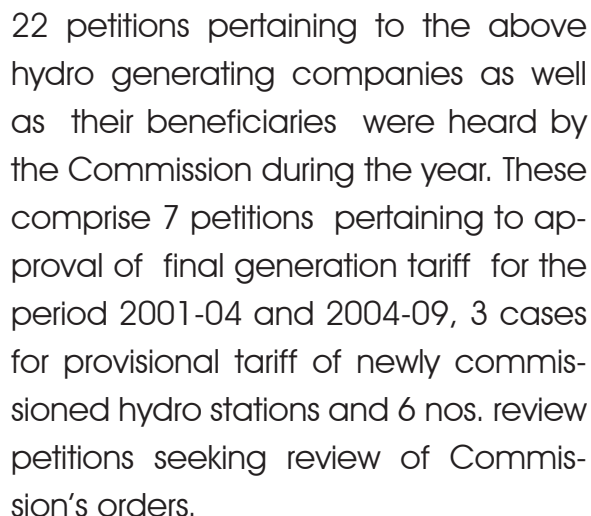
## HYDRO GENERATION

The Commission is at present regulating the tariff of following six

Central sector hydro generating companies, which are located in all the regions except Southern Region, having an aggregate installed plant capacity of 8568 MW in 23 stations :

- i) National Hydro Electric Power Corporation Ltd. ( 11 stations, 3629 MW)
- ii) Narmada Hydro Development Corporation Ltd. (2 stations, 1540 MW)
- iii) North Eastern Electricity Power Corporation Ltd. (5 stations, 755 MW)
- iv) Satluj Jal Vidyut Nigam Limited (one station, 1500 MW)
- v) Tehri Hydro Development Corporation (one station, 1000 MW).
- vi) Damodar Valley Corporation (3 stations, 144 MW)





(i) Adjudication for non-supply of legitimate share of power and non-payment of dues in respect of Rihand & Matatila hydro stations located in the State of Uttar Pradesh  
(ii) HPSEB petition for relaxation under Regulations 12 and 13 of CERC Tariff Regulations 2004 in respect of Nathpa Jhakri hydro station (iii) Discussion paper on Hydro tariff amendments to be implemented from 1.4.2008 (iv) Appeal in Delhi High Court on amendments in tariff regulation

Ranganadi H.E. station of NEEPCO in Arunachal Pradesh was commissioned in April, 2002. The provisional tariff was approved by the Commission in April, 2002. The petitioner did not file tariff petition for approval of final tariff in the period 2001-04 because the financial package considered by the GOI while according approval to completion cost of the project in June, 2001 was on the basis of debt- equity ratio of 73.44: 26.56, which was in variance to debt- equity ratio of 1:1 based on which original financial package was approved.

The restructured financial package was finally approved by MOP, GOI on 26.3.2008. The petitioner subsequently filed the amended petition as per revised financial package. Commission vide order dated 29.4.2008 approved the final tariff from 12.2.2002 to 31.3.2004. Following Annual fixed charges of the station have been approved by the Commission:

Particulars	12.2.2002 to 31.3.2002	2002-03	2003-04
AFC	28.89	251.68	250.49





iii) The Commission approved final generation tariff of following hydro stations owned by NEEPCO located in the NE Region, for the period 2004-09:

a) Kopili Stg-I(4x50 MW)

b) Kopili Stg-II (1x25 MW)

c) Khandong (2x25 MW)

d) Ranganadi (3x135 MW)

The Annual fixed charges approved are as under:

(Rs in crore)

Station	2004-05	2005-06	2006-07	2007-08	2008-09
Kopili Stg-I	54.76	55.45	56.15	56.89	57.67
Kopili Stg-II	11.22	13.81	13.65	13.30	12.95
Khandong	18.42	18.70	19.00	19.31	19.63
Ranganadi	262.86	250.36	241.55	234.62	203.41

### Approval of provisional tariff of new hydro stations

i) OmkareshwarHydroElectricProject (8 x 65 MW) of Narmada Hydroelectric Development Corporation Limited is the cascade scheme of Indira Sagar hydro electric project. First generating unit was commissioned on 20.8.2007 and station COD was subsequently achieved on 15.11.2007. Commission vide its Order dated 30.10.2007 accorded provisional tariff from COD of first unit to 31.3.2008.

At the hearing of the petition, it was submitted by the petitioner that on account of the ongoing court proceedings and the delay in shifting the project-affected families, the

reservoir of the Omkareshwar project could be filled up to EL189.0M only, compared to the Full Reservoir Level at EL 196.60 M, as a result of which the maximum output achieved on continuous basis is 50 MW per machine after conducting the requisite tests, as against the installed capacity of 65 MW per machine.

As regards the reasons for delay in Rehabilitation & Resettlement (R&R) works causing loss of peak power, the petitioner has submitted that under R & R cost being charged to the project, they have provided sufficient funds to the Govt. of Madhya Pradesh, for making necessary payments to the affected families. It has been urged by the petitioner that the Govt. of Madhya







loss of peak power from the generating station and earnestly hoped that the Govt. of Madhya Pradesh will make all out efforts to solve the R&R problems of the project-affected families, in the interest of the consumers at large.

ii) Tehri Hydroelectric Project Stage-I (4x250 MW) of Tehri Hydro Development Corporation Ltd was commissioned on 28.7.2007. Commission vide Order dated 28.3.2008 extended two part provisional tariff already in force, which was earlier approved vide Order dated 28.12.2006.

iii) Nathpa Jhakri Hydroelectric Project (6 x250 MW) of Satluj Jal Vidyut Nigam Ltd. in Himachal Pradesh was commissioned on 18.5.2004. The Commission by its Order dated 5.9.2007 in IA No. 13/2007 in Petition No. 184/2004 allowed provisional AFC of Rs. 127.81 crore for the year 2007-08 with a direction to the petitioner to file petition for final tariff for the period 2004-09, based on approved completion cost, along with report of the Standing Committee on time and cost over-run.

iv) Dulhasti H.E. project of NHPC was commissioned in April, 2007. As an interim measure, Commission vide its Order dated 20.3.2007 had approved

provisional AFC of Rs. 497.40 crore up to 31.3.2008 corresponding to saleable design energy of 1658 MU. Petitioner has further submitted that the revised sanction for completion cost is yet to be accorded by Ministry of Power and requested to extend provisional tariff up to 31.3.2009.

Commission vide its Order dated 28.3.2008, approved continuation of provisional tariff already approved dated 20.3.2007, till further orders, subject to adjustments after determination of final tariff.

v) Teesta –V HE project of NHPC in Sikkim was commissioned in April, 2008. Commission vide Order dated 31.3.2008 approved provisional single part tariff @ Rs. 1.62 per unit on scheduled saleable energy from the date of commercial operation of the generating unit/ station.

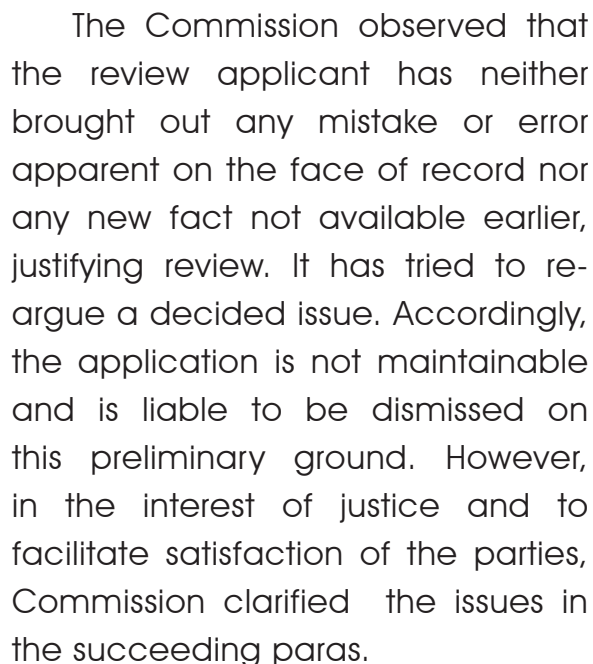
### ***Review petitions***

The Commission heard and disposed off following Review petitions against the Commission's orders:

i) Review petition filed by NHPC for review of Commission's Order dated 4.10.2006 for approval of tariff of Loktak HE Project for the period from 1.4.2004







of the orders issued by the Hon'ble High Court of Madhya Pradesh, which have not been vacated by the Hon'ble Supreme Court of India with regard to reservoir level not to be filled beyond EL 189 M, on account of rehabilitation measures to be taken up by the concerned authorities of the State Government and NHDC. In this case, the dam is complete to get the reservoir filled up to FRL of EL 196.6 M and correspondingly generate so as to achieve the maximum peaking of 65 MW per machine but NHDC has been constrained to restrict the filling up to EL 189 M to generate 50 MW. Thus, failure to provide peak power is attributable to reasons beyond the control of NHDC. Hence, there is no justification for application of PI/P formula while deciding the provisional tariff for the generating station. As NHDC is not held responsible for the failure to achieve peak power, it is entitled to recover full annual fixed charges. The Commission, in its Order dated 30.10.2007 had only expressed its hope that the State Government would make all out efforts to solve the Resettlement and Rehabilitation problems of the project affected families in the interest of consumers at large.





In the above table, 36.47% allocation to Govt. of Himachal Pradesh comprise of :

- I. 12% free power to the home State (180 MW)
- II. HP State's share corresponding to its 25% contribution in equity of the project. It works out to 22% power (330 MW) in the remaining 88% capacity of the station.
- III. 2.47% share of the State (37 MW) in the remaining power available after taking into account I & II above as per the allocation formula based on Central Plan Assistance etc.

CERC (Terms and Conditions of Tariff) Regulations, 2004 deal, inter alia, with the billing and payment of the capacity charges in the case of Hydro generating stations and are governed under Regulation 48. The petitioner has submitted that the formula provided in the CERC Tariff Regulation-48 can be applied only subject to the following pre-conditions :

- a) There is firm allocation of the capacity by the Central Government or under the agreement in favour of different purchases;

- b) The firm allocation of capacity is uniform throughout the year, namely, the same percentage share in the total capacity remains throughout the year and such percentage does not vary on monthly or seasonal basis

HPSEB has submitted that if the above two conditions are duly satisfied, the determination of month wise capacity charges payable by the HPSEB and other respondents to SJVNL calculated on a cumulative basis and aggregated as annual capacity charges as per the formula given in the Regulation 48 would be appropriate, just and proper. However, if the allocation of capacity to different purchasers varies on a seasonal or monthly basis, the application of the above formula of calculating month-wise capacity charges on cumulative basis would be totally unjust, arbitrary and un-inequitable.

Accordingly, there is a need for the Hon'ble Commission to remove the difficulty which has arisen in giving effect to the Regulations for determining the capacity charges forming part of the tariff for generation and sale of electricity from SJVNL to the different



purchasers. The Hon'ble Commission should also relax the rigour of any of the regulations to meet the requirement of fixing appropriate capacity charges payable by HPSEB and Government of Himachal Pradesh for the energy made available from SJVNL to it during the period from November 2004 to March, 2005 and between the period from November 2005 to March 2006.

HPSEB has further submitted that out of the allocation of 12% free power and 25% share in the balance 88% capacity in the Nathpa Jhakri HE project, GOHP had re-allocated power to HPSEB in the following manner during the periods April to Oct & Nov to March in the years 2004-05 and 2005-06.

S. No	Period	Allocated by GOHP to HPSEB
1	April 2004 to Oct 2004	3.31%
2	November 2004 to March, 2005	28.31%
3	April 2005 to March, 2006	2.807% to 4.08%
4	Nov 2005 to March 2006	24.167% to 25%

The petitioner has submitted that the since capacity allocation to HPSEB was not firm throughout the year , the capacity charges payable by them should be worked out based on the non-cumulative basis (monthly basis). The petitioner has contended that total capacity charges would work out as Rs. 90.12 crore and Rs. 24.23 crore for the year 2004-05 and 2005-06 respectively, against Rs. 139.88 crore and 26.21 crore billed by SJVNL. Therefore, petitioner is stated to have incurred a loss of Rs. 49.76 crore in the year 2004-05 and Rs 1.98 crore in 2005-06.

SJVNL has made following submissions at the hearing -

i) Allocation are changing three to four times in a year and even on time-slot basis within a day, due to re-allocation of 15% un-allocated share. The formula set forth in the CERC Regulations is accurately accounting for the changing capacity allocations. Even NRPC, taking due care of the Regulations in its monthly REA, depicts only cumulative weighted average entitlements of beneficiaries up to end of any month. No difficulty has been experienced either in billing with any beneficiary.



ii) It was the sole decision of the petitioner to contract the share of Govt. of Himachal Pradesh only in winter months. It was their responsibility to analyse the cost aspects of power with reference to CERC Regulations in vogue before contracting the power.

iii) Contentions of HPSEB for the FY 2005-06 are untenable as the power has been contracted by HPSEB from Govt. of Himachal Pradesh through PTC directly.

The representative of the Punjab State Electricity Board submitted that-

i) The relief sought in the prayer can be obtained only if the Regulations are changed. However, with the existing regulations in force it is not possible / admissible. Since no change in Regulation has been prayed for, the petition is liable to be dismissed as no calculation procedure can be adopted for capacity charges which is violative of Regulations.

ii) The prayer has been made regarding the capacity charges payable by the "Government of Himachal Pradesh". It is not clear in what capacity the petitioner HPSEB is making a prayer involving "Government of

Himachal Pradesh" while Government of Himachal Pradesh has been made Respondent No. 11.

iii) In case HPSEB assessed that Nathpa Jhakri HE project power was costly during winter, then HPSEB was at liberty to refuse it. Having availed the power in winter knowing the regulations and their applicability there is no justification at all to seek a change in the methodology in calculating fixed charges which is not in accordance with the Regulations.

Based on the submissions of the petitioner & beneficiaries and arguments put forward by them at the hearings, Commission has made following observations:

i) Govt of India, MOP vide letter dated 26.03.2003 has made specific allocation of 36.47% of power (547 MW) from the 1500 MW Nathpa Jhakri HE Project, to the State of Himachal Pradesh as under:

- a) 12% free power to the home State (180 MW).
- b) 22% power (330 MW) in the remaining 88% capacity of the plant against the State's agreed share on account of its 25% equity contribution.





- c) 2.47% share (37 MW) of the State in the remaining power available after taking into account free power, share of HP and unallocated quota.

Also, there has been no change in capacity allocations by the GOI in respect of various States / Uts, including for Himachal Pradesh, except for those which come under 15% unallocated category.

ii) Commission vide Order dated 13.2.2007 has sought the advise of Ministry of Power on the scope of Para-3 of the MoP letter dated 26.03.2003, particularly the authority competent to re-allocate power declared surplus by any State. No reply has been received from the MOP.

iii) GOHP out of its firm allocation made by GOI in the said letter dated 26.3.2003, has further re-allocated power to the States of Haryana, Punjab, Delhi and also to HPSEB during monsoon and lean months of the years 2004-05 & 2005-06. Some of these directions are summarized below -

- a) GOHP vide letter No. MPP-F (2) 53/2002 dated 17.4.2004 had directed SJVNL to trade 34% of

its power share in Nathpa Jhakri HEP during the period 1.4.2004 to 31.10.2004 at its level.

- b) GOHP vide letter No. MPP-F (2) 53/2002 dated 30.10.2004 further directed SJVNL to sell 12% free power and its corresponding share in lieu of 25% equity contribution in the project through LC to HPSEB as per CERC approved rates.
- c) GOHP vide letter No. MPP-F (2) 53/2002 dated June, 2005 conveyed to SJVNL to allocate its corresponding share in lieu of 25% equity contribution in the project through LC to DTL (6.5%), HPGCL (9%) and to PSEB (6.5%) as per CERC approved rates, from 1.7.2005 to 31.10.2005.
- d) GOHP vide letter No. MPP-F (2) 53/2002-vol II dated 27.10.2005 conveyed to the Member Secretary, NREB to allocate power in lieu of State's equity in the project to HPSEB through PTC wef 1.11.2005 to 31.3.2006.

Petitioner has submitted that the since capacity allocation to HPSEB was not firm throughout the year, varying from minimum of 2.807% to maximum up to 25% in winter months, as shown



in the table at para-5.6 above, the capacity charges payable by them should be worked out based on the non-cumulative basis (monthly basis). The petitioner has contended that total capacity charges would work out as Rs. 90.12 crore and Rs. 24.23 crore for the year 2004-05 and 2005-06 respectively, against Rs. 139.88 crore and 26.21 crore billed by SJVNL. Petitioner is stated to have incurred a loss of Rs. 49.76 crore in the year 2004-05 and Rs 1.98 crore in 2005-06.

The Commission is aware of the fact that allocation of power in a Central Govt. owned power project is made in favour of various States of the region according to Gadgil formula. In the case of Nathpa Jhakri hydro station, GOI has made specific allocation of power in the name of GOHP and not HPSEB and other beneficiaries of the project. Further re-allocation of HP State's share either in favour of HPSEB or other States of the region have been made by GOHP to incur financial gains in the process. It has been observed that GOHP has sold power to HPSEB even through trading process. Thus, if re-allocation of State Govt.'s share has resulted in loss to the HPSEB, this has to be settled between GOHP and

HPSEB. HPSEB is not the entity which is direct beneficiary of the project, has no locus standi of filing the petition and seek relief to change the methodology in calculating the capacity charges, which is not in accordance with the CERC Regulations.

There is no merit in the argument of the representative of HPSEB that there is large disparity between per unit capacity charge levied on the petitioner and the representative beneficiaries during the periods mentioned above. Recovery of two part hydro tariff is in the form of capacity charge and energy charge. Comparison of per unit capacity charge levied on the petitioner and the beneficiaries is a hypothetical analysis and has no relevance in this case.

The Commission is convinced with the argument put forward by the respondent PSEB that in case GOHP/HPSEB had assessed that Nathpa Jhakri power was costly during winter months, then HPSEB was at liberty to refuse it. Having availed the peak power in winter knowing the Regulations and their applicability, there is no justification at all to seek a change in the methodology in calculating the capacity charges,





which is not in accordance with the CERC Regulations.

In view of above, Commission does not find merit in petitioner's submission for giving relaxation under Regulations 12 and 13 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, in the Regulation-48 for computation of capacity charges as per petitioner's requirement.

However, orders were kept reserved till 31.3.2008.

#### **5. Amendment of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 – Hydroelectric Generating Stations.**

Commission vide Order dated 8.2.2008 circulated a Discussion paper to cause Amendment of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 in respect of Hydroelectric Generating Stations

#### **Need for Amendments**

Chairman, Assam SEB, in a representation dated 22.11.2006 to the Commission has pointed out the

following aspects of the present tariff regulations, applicable to hydro-electric generating stations of NEEPCO, of which ASEB is one of the beneficiaries.

i) Two consecutive monsoon failures in North-East India have caused large shortfalls in power generation from the Central sector hydro-electric generating stations. As hydro tariff mainly consists of annual fixed charges, which have to be paid even if actual generation is low, due to hydrology failure, the beneficiaries have to pay a higher cost per unit of power generated by these hydro-electric generating stations (Kopili, Khandong, Ranganadi & Doyang HEPs).

ii) To meet the power demand caused by shortfall from hydro-electric generating stations, the beneficiaries have to buy substitute power from traders at much higher cost @ Rs. 6.40 per kWh (including transmission charges and open access charges), causing additional financial burden of about Rs. 20 crore per month.

iii) In a year of more than average rainfall, hydro-electric generating stations have an extra income on account of secondary energy, whereas in a deficient rain situation full annual



fixed charges are still payable by the beneficiaries.

iv) The concept of Capacity Index needs to be reviewed because it only protects the generating company from loss of revenue when energy generated is less due to shortage of water. Consequently, when the water availability is less, the beneficiaries have to pay higher per unit cost. In addition, generating company is entitled to incentive based on Capacity Index, in case it is able to achieve machine availability higher than those specified by the Commission, even when actual generation is low because of reduced inflows of water.

v) ASEB has represented to the Commission to have a mid-term review of the present tariff regulations applicable to hydro-electric generating stations, to have an equitable distribution of risks between the generating company and the beneficiaries, the State utilities. On a review of the present tariff regulations applicable to the hydro-electric generating stations in totality, it is noticed that it is definitely tilted in favour of the generating companies. Therefore, Commission proposed to set this right, by passing a part of the

hydrological risk to the generating companies.

In the course of proceedings for determination of tariff for Nathpa Jhakri HEP and Tehri HEP during the last three years, the Commission has noticed a tendency on the part of generating companies to avoid peaking operation, on one pretext or the other. It is clear that the generating companies prefer operation of their generating stations at a constant MW throughout the day, and are very reluctant to shut off the machines during off-peak hours and to run them up during peak-load hours, which is essential for the required peaking support to the grid. Though their operating pattern has somewhat improved under pressure from NRLDC and the Commission, we feel that if properly incentivised, the generating companies would on their own plan for and endeavour to maximize the peaking support for the grid.

Further, in the pleadings of the generating companies concerned and during hearings for approval of tariff for Indira Sagar HEP and Nathpa Jhakri HEP, it has come to the notice of the Commission that when the generating units were commissioned





have been declared had the present regulations been strictly applied. On the other hand, the commercial operation declaration was essential for starting the recovery of the huge investment in the generating station, since only infirm energy rate can otherwise be charged for hydro-electric generation up to the date of commercial operation, as per the present regulations. The Commission had to deviate from the regulations and go beyond their provisions to overcome the dilemma, by accepting the date of commercial operation but allowing a lower annual fixed cost, proportionate to available head.

In the case of Tehri HEP, the situation was reverse. Here the dam was complete upto FRL. However, due to constraints on filling water as per CWC guidelines for newly constructed dams already mentioned, MCR could not be achieved/demonstrated for the newly commissioned generating units due to low head. To address this problem, the definition of date of commercial operation as given in clause (ix) of Regulation 31 is required to be changed. It is also necessary to specify how the tariff would be determined for a partially commissioned hydro-electric generating station.

Thus, the three major issues which need to be addressed urgently are:

- (i) An equitable sharing of hydrological risks and gains,
- (ii) Enhanced incentive for providing peaking support, and
- (iii) Treatment of a situation where commercial operation is to start but the dam is only partly constructed and/or reservoir is only partially filled, and MCR or installed capacity cannot be demonstrated.

### **Proposed Amendments**

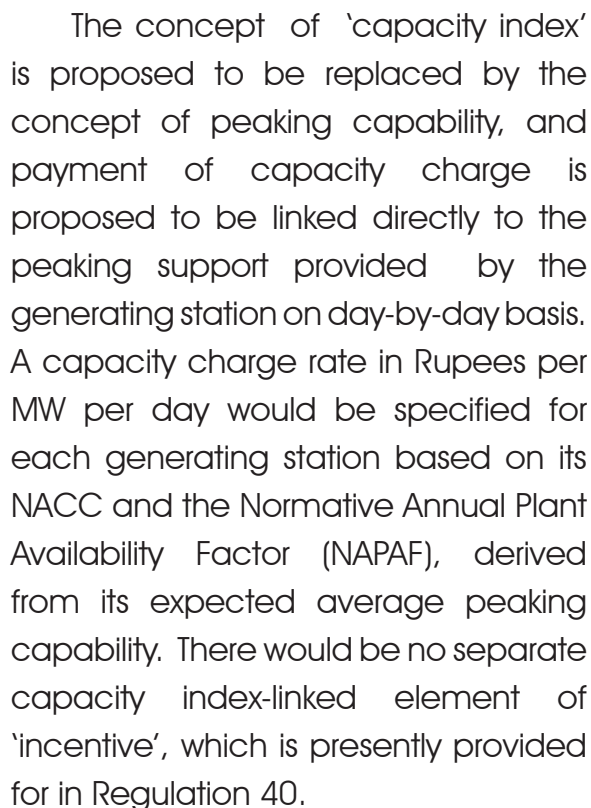
The problems described above are arising frequently, and the remedial measures cannot be deferred on the pretext of the present tariff period continuing upto 31.3.2009. It is, therefore, proposed to make the amendments in respect of hydro tariff in the present regulations with effect from 1.4.2008 as discussed in the succeeding paras.

The date of commercial operation of a generating unit is presently linked to demonstration of maximum continuous rating (MCR) or installed capacity (IC) through a successful

trial run. It is now proposed to be linked to the generating unit reaching the stage of stable operation (after successful commissioning and trial operation) wherein it can operate on a scheduled basis, as per the provisions of Regulation 45. The definition of date of commercial operation specified in clause (ix) of Regulation 31 is, therefore, proposed to be amended as follows :

“(ix) ‘Date of Commercial Operation’ or ‘COD’ in relation to a generating unit means the date declared by the generating company from which, after notice to the beneficiaries, scheduling process in accordance with Regulation 45 shall be fully implemented, and Capacity Charge and Energy Charge would be payable along with adjustment for Unscheduled Interchange, and in relation to a generating station, the date of commercial operation means the date declared by the generating company after demonstrating the peaking capability corresponding to the Installed Capacity (IC) of the generating station through a successful trial run, after notice to the beneficiaries.”

The annual fixed charges of a hydro-electric generating station are worked out by aggregation of five (5) components listed in clause (ii) of Regulation 37, and as detailed in Regulation 38. No change is proposed in these. The bifurcation of annual fixed charges between capacity charge and energy charge components is presently linked to the primary energy rate, depending on which capacity charge could even be zero. A low or zero capacity charge means that the generating company has little incentive for providing peaking support. To avoid such a situation, the annual fixed charge is now proposed to be bifurcated into two components, respectively termed as Normative Annual Capacity Charge (NACC) and Normative Annual Energy Charge (NAEC) in 50 :50 ratio, unless specified otherwise by the Commission in appropriate cases, duly considering the proposal and reasoning submitted by the concerned generating company. The objective would be to maintain a balance between the two components, so that every hydro-electric generating station gets a significant revenue under capacity charge head, and is thereby incentivised to provide maximum peaking support.



"(i) Normative Annual Plant Availability Factor (NAPAF) :

- (i) During first year of commercial operation - 75%
- (ii) After first year of commercial operation - 80%

(b) For Purely Run-of-river power stations :

The Normative Annual Fixed Charge determined under these regulations shall be bifurcated into two (2) parts, namely Normative Annual Capacity Charge (NACC) and Normative Annual Energy Charge (NAEC), for notional recovery as the capacity charge and the energy charge respectively, in the ratio of 50 : 50.

Provided that the Commission may in appropriate cases and for reasons to be recorded in writing specify a





different ratio for bifurcation of the Normative Annual Fixed Charge.”

The capacity charge payable to the generating company for a day shall be :

$(\text{Capacity Charge Rate} \times \text{Declared Capacity in MW for that day} \times 0.88),$

where

$\text{Capacity Charge Rate (in Rupees per MW per day)} = \text{NACC} / (\text{Normative Saleable Capacity in MW} \times \text{NAPAF} \times 365).$

The energy charge payable to the generating company for a day shall be:

$(\text{Energy Charge Rate} \times \text{Scheduled Energy in MWh for that day} \times 0.88),$

where

$\text{Energy Charge Rate (in Rupees per MWh)} = \text{NAEC} / \text{Normative Annual Saleable Energy in MWh}.”$

The present tariff regulations provide for “deemed generation” to protect the generating company from loss of revenue on account of spillage due to reasons beyond his control, such as non-availability of transmission lines and backing down instructions. In line with

the new approach of more equitable sharing of risks and gains between the generating company and the beneficiaries, it is proposed to remove the provision of “deemed generation” presently specified in Regulation , and substitute it by the following provision to specify the capacity charge rate and energy charge rate prior to the achievement of commercial operation of the generating station as a whole.

Commission proposed to introduce the above amendments w.e.f. 1.4.2008. However, almost all the hydro generating companies requested to postpone it for one year in view of commencement of new regulations for the period 2009-14, from 1.4.2009. Commission decided to defer the proposed amendments.

*Petition has been filed by M.P. Power Trading Company Ltd. under Section 86 of the Electricity Act, 2003 for direction to U.P. Power Corporation Limited for payment of compensation amount to MPTRADECO due to retention of MP's share of power / non supply of it from Rihand and Matatila Hydel Power Stations to MPSEB and resumption of MP's share of power from Rihand and Matatila Hydel Power Stations.*



The applicant is a company regulating transfer and vesting of the function, properties, interest, rights and obligations of the M.P. State Electricity Board relating to Bulk purchase and Bulk supply of electricity along with the related agreements and arrangements in the State Government and re-transfer and re-vesting thereof by the State Government in M.P. Power Trading Company Limited in accordance with the Government of Madhya Pradesh notification dated 3.6.2006.

The petitioner, MP Power Trading Company has made following submission in the petition:

(a) Rihand Hydel Power Station having total installed capacity of 300 MW came into commercial operation in the year 1962 and Matatila Hydel Power Station having total installed capacity of 30 MW came into commercial operation in the year 1965. Both Hydel Power stations are situated in the State of Uttar Pradesh. The allocation of power from both projects to Madhya Pradesh arose because the land, trees, forests, houses etc. under Rewa District (MP) in respect of Rihand Project and Datia District (MP) in respect of Matatila Project were submerged on construction of these hydro projects.

(b) The Central Council under the M/O Home Affairs, GOI in its meeting held on 2.7.1963 decided that MPSEB has 15% share based on energy available at Rihand power station. The power will be supplied by UPSEB at cost price + 5% which will be worked out subsequently by a Committee. Similarly, from Matatila HPS, MP has one third of power as its share based on energy available at cost price + 5% to be worked out by a Committee.

(c) A Committee headed by Mr. M.R. Sachdeva as Chairman, Chairman CW&PC, was set up in July, 1963 to work out the cost price of power in respect of Rihand and Matatila to Madhya Pradesh, in lieu of compensation.

The Committee in the meeting held on 19.9.1964, after hearing the representatives of the two States decided to fix the rates as follows:

#### **Supply of power from the Rihand Station to Madhya Pradesh:**

Power supply will be at the rate of 3.5 Paise/kWh (cost of generation plus 5%) upto a ceiling of 15% of the saleable energy during the year in terms of the decision of the Zonal





Council. A surcharge, should it any time be found necessary in the event of compulsory war risk insurance being imposed, shall be charged in addition on the basis of the actuals. Power to Madhya Pradesh has to be supplied at the State border and the M.P. Electricity Board will have to bear an annual charge amounting to Rs.1.5 lakhs to cover interest, depreciation, operation and maintenance of the transmission line from the Rihand Power Station to the Madhya Pradesh border. This was acceptable to the representatives of both UP and MP Electricity Boards.

#### **Supply of power from the Matatila Power Station to Madhya Pradesh:**

Power will be supplied at the average rate of 6.5 paise/kWh (average cost of generation of available energy both firm and secondary energy, plus 5%) upto a ceiling of 33% of the saleable energy available during the year in terms of decision of the Zonal Council. A surcharge, should it at any time be found necessary in the event of any compulsory war risk, insurance being imposed, shall be charged in addition on the basis of the actuals. The above rates, both in the case of Rihand and Matatila, shall be in terms

of the Zonal Council meeting, subject to review after ten years.

Although more or less supply of power was made by UPSEB from Matatila HPS against MP's share, but no power supply was made from Rihand HPS from Nov. 1992 onwards. Till October 1992, there was power supply of only 626.84 MUs from Rihand against MP's share (15%) of 3510.61 MUs. Similarly, from Matatila HPS till September 1992, UPSEB had supplied 763.28 MUs against MP's 1/3<sup>rd</sup> share of 977.72 MUs.

From Nov 1992 till 2005-06, UPSEB has not supplied any quantum of power against MPSEB's legitimate share of 1752.93 MUs (i.e. 15% of sent out) from Rihand HPS whereas from Matatila HPS 522.64 MUs of energy was supplied by UPSEB against MP's share of 593.66 MUs.

In totality from 1962-63 to 2005-06 i.e. during the span of 44 years, MPSEB has received meager power supply of 626.84 MUs (i.e. 12% of total share) against total share of 5263.55 MU from Rihand HPS. Similarly from Matatila, 1285.93 MUs (i.e. 82% of total share) of energy was supplied against legitimate share of 1571.38 MUs.



Due to short supply of power by UPPCL to MPSEB from Rihand and Matatila HPS and discontinuance of same from Rihand HPS w.e.f Nov. 1992, an amount Rs. 20.09 crore was outstanding against UPPCL towards retention of MP's share of power upto October, 1992. The compensation amount against UPPCL towards retention of MP's share of power from Rihand and Matatila HPS has further accumulated to whopping Rs. 365.70 crore for the Hydrological year upto 2005-06.

(d) In the meeting dated 8/9<sup>th</sup> Sept, 2005 between Govt of UP, UPPCL, UPJVNL & MPTRADECO held at Lucknow, UPPCL have categorically committed that MP's share of power supply from Rihand should be commenced by 15.10.2005 positively. It was also assured that UPPCL will make 15% more supply from Rihand to clear accumulated outstanding. For outstanding amount UPPCL had agreed to reconcile the amount within three months and to pay the same after reconciliation.

Despite aforesaid commitment, UPPCL has neither resumed MP's share of power from Rihand HPS nor made any payment.

e) Meeting dated 7/8<sup>th</sup> June, 2007 held between UPPCL, UPJVNL & MPTRADECO at Lucknow :-

This meeting was held for persuasion of implementation of the decision taken in the meeting held on 8/9<sup>th</sup> Sept, 2005. Despite UPPCL's commitment towards resumption of share from Rihand HPS and payment of compensation amount, no action has been taken by UPPCL regarding the same till date.

The petitioner has submitted that despite the decision taken at the level of the Governors/ Energy Minister, UPPCL has neither resumed MP's full share of power from Rihand and Matatila HPS nor released due compensation due to retention of power. UPPCL has paid only meager amount of Rs. 21.25 Crs during the period 1994-95 to 1999-2000. Thereafter, no payment has been made to MPSEB till date.

The petitioner has submitted that despite every efforts, i.e. correspondences, meetings, taking up the matter at Chief Minister's level, Central Zonal Council meetings etc no result could be brought and under such circumstances, the MPSEB is left with no



alternative except to file this petition before Hon'ble Central Electricity Regulatory Commission to intervene in the matter and appropriate direction to the Respondents.

Commission vide its Order dated 27<sup>th</sup> Feb, 2008 has directed as follows:

Based on the above discussion, we sum up our conclusions as under:

- (a) The State of Uttar Pradesh has an obligation to supply electricity from the power stations to the State of Madhya Pradesh, in the agreed proportion.
- (b) Supply of power as aforesaid involves inter-State transmission of electricity.

U.P. Power Corporation Ltd has contended that the matter ought have to be left to a Civil Court. We are not moved by the argument. Once it is established that the Commission has jurisdiction to adjudicate the dispute, it is improper to relegate the parties to civil proceedings since that will amount to abdication of statutory function by the Commission. A view similar to the above was taken by the Commission in its Order dated 18.10.2007 in Petition No.9/2003, as extracted below:

U.P. Power Corporation Ltd has also raised indirectly the issue of share of power from the jointly owned Rajghat Power Station. Commission in the said order has stated that these proceedings are not concerned with that dispute, moreover, there is no factual ground for taking note of this dispute. However, U.P. Power Corporation Ltd may initiate proceedings to enforce its right if any in accordance of the law.

Commission vide above order has further stated that dispute in this case is in regard to matter connected with regulation of inter-State transmission of electricity as prescribed in clause 79 (1) and therefore adjudication of any dispute which is related to above is within the jurisdiction of this Commission under Clause 79 (1) (f) of the Act. Commission further vide para 21 of the Order has directed as follows :

Under the transfer scheme notified by the State Govt. of UP, UPJVNL is to supply electricity to the second respondent after honouring commitments of supply of power to the State of Madhya Pradesh in Rihand HPS and Matatila HPS. However, it transpires that under a Memorandum of Understanding signed by it with the



second respondent, the entire energy generated by the power stations is being supplied to the second respondent. The third respondent has relied upon clause 2.01 of the Memorandum of Understanding dated 18.2.2000 signed between the two, and reproduced below:

Commission further directed the petitioner and U.P. Power Corporation Ltd to immediately interact with NRLDC and WRLDC to formalize the scheduling procedure and resume the power supply latest by 1.4.2008. In case any difficulty is foreseen in the above matter by any party, it may be brought to the notice of the Commission latest by 14.03.2008. Thus the matter regarding immediate release of share of supply from the Rihand and Matatila power stations has been disposed off and question regarding compensation

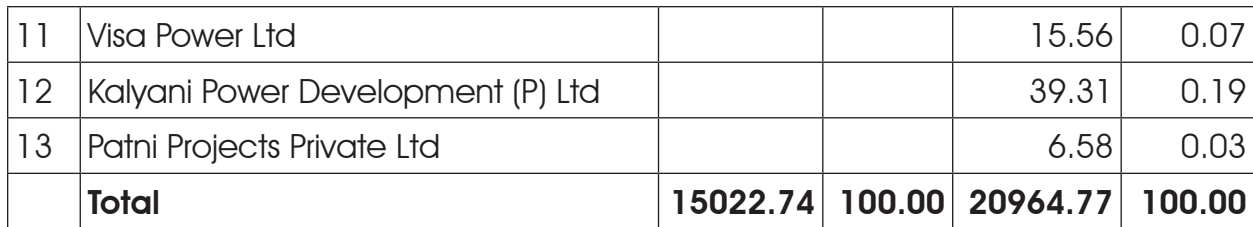
claimed by the petitioner for non supply of power in the past is yet to be considered.

## INTER-STATE TRADING IN ELECTRICITY

1. **Introduction:** The Commission had notified the Central Electricity Regulatory Commission (Procedure, Terms & Conditions for grant of Trading Licence and other related matters) Regulations, 2004, dated 30.1.2004 followed by an Amendment dated 3.4.2006. As on 31<sup>st</sup> March 2008, the Commission has awarded trading licenses to 28 applicants for inter-State trading in electricity. Of the total, 13 trading licenses were awarded during the year 2004-05 followed by 6 licenses during 2005-06, 3 licenses during 2006-07 and 6 licenses during 2007-08. The licenses issued during the year 2007-08 are provided in the following Table :

Table-1: TRADING LICENSE ISSUED DURING 2007-08			
S. No.	Name of the Trading Licensee	Licence issued dated	Category of Licence
1	Visa Power Ltd	28.06.2007	B
2	Kalyani Power Development Pvt Ltd	21.08.2007	F
3	Patni Projects Pvt Ltd	23.08.2007	F
4	Ispat Energy Ltd	30.08.2007	F
5	Sri Balaji Biomass Power (P) Ltd	22.01.2008	A
6	Vandana Global Ltd	20.02.2008	C





percentage to the total electricity generation in India was 2.41% in 2006-07 and 3.15% in 2007-08. Growth in the volume of electricity traded by the licensees can be seen from the following Table and Chart.

Year	Volume of Electricity Traded (BUs)	Growth in the volume of electricity traded (%)	Total Electricity Generation (BUs)	Volume of Electricity Traded in Total Generation (%)
2004-05	11.85	-	548.12	2.16%
2005-06	14.19	20%	578.82	2.45%
2006-07	15.02	6%	624.50	2.41%
2007-08	20.96	40%	666.01	3.15%





## 6. Price of Electricity Traded:

During the year 2007-08 some of the transactions taken place through swapping or banking arrangement and these transactions do not contain price information (i.e. 3639.40 MUs of the total volume of 20964.77 MUs traded during

the year). Therefore, price analysis has been made excluding the volume traded through swapping or banking arrangement. The weighted average sale price has been increased from Rs.2.32/kwh in 2004-05 to Rs.4.52/kwh in 2007-08 which can be seen from the following Table.

<b>Table-4: WEIGHTED AVERAGE PRICE AND TRADING MARGIN</b>			
<b>Year</b>	<b>Weighted Average Purchase Price (Rs/kwh)</b>	<b>Weighted Average Sale Price (Rs/kwh)</b>	<b>Trading Margin (Rs/kwh)</b>
2004-05	2.26	2.32	0.06
2005-06	3.14	3.23	0.09
2006-07	4.47	4.51	0.04
2007-08	4.48	4.52	0.04

**7. Trading Margin:** It was a voluntary practice during the year 2004-05 that the trading margin charged by the licensees was 5 paise/kwh or less. However, the weighted average trading margin charged by the licensees during the year 2005-06 has gone up to 10 paise/kwh (April-Sept 2005-06). Keeping this in view and other factors, the Commission, vide notification dated 26.1.2006, has issued the CERC (Fixation of Trading Margin) Regulations fixing the trading margin of 4 paise/kwh. As a result of these trading margin regulations, the licensees have charged the trading margin of 4 paise or less during the following years. The weighted average trading margin

charged by the licensees during 2004-05 to 2007-08 is provided in Table-4.

**Notification of Escalation Rate for Coal and Gas, Inflation Rate based on WPI and CPI, Discount Rate and Exchange Variation Rate, for the purpose of bid evaluation as well as for payment**

As per the Ministry of Power Notification dated 19.01.2005 and amendments dated 30.03.2006 and 18.08.2006 on **"Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees**, the Central Electricity Regulatory Commission is





required to update and notify every six months the Escalation Rate for Coal and Gas, Inflation Rate based on WPI and CPI, Discount Rate and Exchange Variation Rate, for the purpose of bid evaluation as well as for payment. The Commission has notified these rates vide notification dated 4.4.2007 applicable for the period from April 2007 to September 2007, notification dated 24.9.2007 applicable for the period from October 2007 to March 2008 and notification dated 31.3.2008 applicable for the period from April 2008 to September 2008.

## OUTCOME OF REGULATORY PROCESS IN TERMS OF BENEFITS TO CONSUMERS AND DEVELOPMENT OF SECTOR

### Tariff Regulation under the Electricity Act, 2003

After the enactment of Electricity Act, 2003, Commission notified the 'Terms & Conditions of tariff' in March 2004 for the period **2004 to 2009**.

The tariff of Central generating stations and transmission systems continued to be based on actual capital expenditure duly audited by the Auditors. In case of new projects, only the actual expenditure incurred and paid is considered for fixation of tariff instead of the gross block which includes unpaid liabilities as well.

The above regulations provide for furnishing of information regarding execution of projects namely details of contract packages, manner of execution i.e. competitive bid/deposited work/negotiated, number of bidders, cost of work whether firm or with escalation and actual cost incurred on completion etc. Commission examines closely the contracted packages where sufficient competition is lacking.

It has been seen that actual capital cost on completion of projects has been lower than the original estimates/ Gol approvals in case of recently executed following projects:

Name of station/ Capacity (MW)	COD	Estimated completed cost (Rs. crore)	Capital cost admitted as on COD (Rs. crore)
Simhadri STPS (1000 MW)	1.3.2003	3796.88	3243.58
Ramagundam Stage-III (500 MW)	25.3.2005	1658.80	1313.56
Talchar Stage-II (2000 MW)	1.8.2005	5697.57	4375.28
Rihand Stage-II (1000 MW)	1.4.2006	3006.00	2646.74



### **In principle approval of capital cost of private sector projects**

The Commission has granted in-principle approval of the following private sector power projects:

- Capital cost of Rs. 4299.82 crore for Nagarjuna thermal power project (1015 MW) at Mangalore based on imported coal, which is under execution and is expected to be Commissioned in 2008-09. The capital cost of this project is comparable with capital cost of Simhadri STPS commissioned in 2003-04 after making suitable adjustment for site specific features like FGD, Jetty etc.
- Capital cost of two gas based projects namely Sugan Combined Cycle Power Project (1128 MW) by Torrent Power Ltd. and Hazira Combined Cycle Power Project (1500 MW) by Essar Power Limited in Gujarat.
- The capital cost of Sugan project has been worked out at Rs.2.77 crore per MW and that of Essar Power is Rs. 2.60 crore per MW.
- The capital cost of gas based projects is much lower than the

other IPP projects in late nineties which were of the order of Rs. 3.85 crore per MW. This reduction in capital cost are also attributable to change in market conditions and execution of projects through competitive bid packages.

- **The benefit of competition in execution of projects and regulatory oversight are getting passed on to the beneficiaries. The regulatory oversight and accountability has kept the prices under check so far.**

Section 63 of the Act, 2003 provides for adoption of tariff by CERC if it is determined through the process of competitive bidding as per the guidelines of Government of India.

The CERC has played an active role and has advised Ministry of Power from time to time in finalizing competitive bidding guidelines and its notification in January, 2005 and subsequent amendments. In line with the competitive bidding guidelines, the equivalent levelised tariffs discovered have shown a remarkable trend as was seen in the case of

- i) Sasan UMPP based on captive mine coal: Rs. 1.19/kWh



- ii) Mundra UMPP based on imported coal : Rs. 2.26/kWh
- iii) Krisnapattnam UMPP based on imported coal : Rs.2.33/kWh

The petition seeking adoption of tariff for the Krisnapattnam UMPP proposed through competitive bidding is under consideration of the CERC.

The actual tariff shall be based on escalation rate notified by the CERC from time to time.

#### **Role of CERC in extending benefits to consumers**

Significant benefits have accrued to the consumer due to the initiatives of CERC and achieving of efficiency in operation of utilities through regulations of CERC.

From a consumer's perspective, the Electricity Act, 2003 has twin objectives of benefiting the consumers through reasonably determined regulated tariffs and reducing the cost of supply by bringing about competition in various segments of the electricity supply industry.

The Central Commission has been proactive in implementing the intent

of the Act on both above-mentioned fronts.

The following regulations of CERC have the potential of reduction in bulk electricity tariff of Central generating station under the new Terms & Conditions for the period 2004-09:

- (i) *Reduction in Return on Equity (ROE)*

**Reduction in ROE from 16% to 14% for the tariff period 2004-09 has reduced the fixed component of the tariff.**

- (ii) *Adoption of Debt Equity Ratio of 70:30 for the New Investment*

The capital investment of the old projects of the Central generating companies was being serviced on debt equity ratio of 50:50. The new Terms & Conditions provide that the new investment on or after 1.4.2004 shall be serviced in the ratio of 70:30 and in case the equity deployed is less than 30%, the actual equity is to be considered for the purpose of tariff. **Since the equity fetches a higher return than the loan, the reduction in the equity components will reduce the cost of production of the Central generating stations.**



(iii) *Rationalization of Depreciation*

The accelerated rate of depreciation of 7.5% allowed to thermal generating station by the GOI has been dispensed with.

**This was with a view to reducing front loading of tariff and reducing price of electricity to the SEBs/ DISCOMs.**

(iv) *Higher Benchmarks of Performance*

The norms of station heat rate, secondary fuel oil consumption and auxiliary energy consumption for coal/lignite/gas based station have been revised with a view to achieving economy and improving efficiency and reducing bulk tariff.

Consequent to renovation and modernization of Tanda TPS (4 x 110 MW), after its acquisition by NPTC, Talchar TPS (460 MW), Badarpur TPS (705 MW) the Commission has tightened its norms of performance and operation  
**Revision in operating norms has the potential of reducing the variable charge component of tariff.**

(v) *Norms for loss of coal in transit*

In the tariff regulations for the period 2004-09, normative transit

and handling losses as percentage of the quantity of coal dispatched by the coal supply company during the month have been specified

(vi) *Norms for O&M expenses*

In the tariff regulations for the period 2004-09, the Commission has adopted normative approach towards O&M expenses to be allowed for thermal generating stations. This encourages the generating companies to economize their O&M expenses and keep the cost of generation under control.

Similar norms have been set for lignite fired thermal stations as well as gas turbines / combined cycle generating stations.

(vii) *Target Availability / Capacity Index*

The general norm of target availability for thermal generating station was adopted as 80% and for lignite-based stations TPS-II the norm was 72% for the period 2001-04. The target availability norm for thermal generating station has been retained as 80% for the period 2004-09, while the norm for lignite-based stations has been raised to 75%.



In case of hydro stations, capacity index norms for the Run of the River type hydro stations have been raised to 90% from 85%. **The raising of availability norms has positive impact on reliability of power supply.**

### **Role of CERC in Development of Sector**

1. The following changes in the new terms & conditions of tariff for 2004-05 are providing an investor friendly environment conducive to power development through light handed regulation incorporating system of in built rewards for efficiency of operation:

#### **(a) Normative Interest on Working Capital**

The old Terms & Conditions for the period 2001-04 provided for computation of interest on working capital based on norms of fuel stock, fuel consumption etc. and were subject to actual. However, under the new Terms & Conditions for the period 2004-09, any reference to actual has been removed and interest on working capital has to be computed on the normative fuel stock and fuel consumption etc.

**This has the potential of incentivising generators to optimise their resources and bringing in more efficiency in operation.**

#### **(b) Normative O&M for Thermal**

The O&M cost norms were earlier based on 5 years actual. In the Terms & Conditions of tariff, the O&M cost for thermal have been specified in Rs./MW terms. **This enables the generators to know their O&M expenses recovery in advance and incentivise them to optimise their resources.**

#### **(c) Normative Performance Benchmarks**

The Terms & Conditions of the tariff for 2001-04 provide for computation of energy charges based on norms but the same were subject to adjustment if the actual were lower than the normative operational parameters of stations heat rate, specific fuel oil consumption and auxiliary energy consumption. There was no incentive for the generators to bring about efficiency in operation or to conserve specific fuel oil.

The above dispensation of actual or norm whichever is lower have now been removed in the new Terms &



Conditions of tariff for the period 2004-09 and the norms have been lightened. **The normative operational parameters now incentivise generators to operate its plant efficiently and in optimum manner.**

#### **(d) Uniform norms of O&M for inter-State Transmission System**

The O&M expenses for inter-state transmission system for the period 2001-04 were based on actual or linked to capital cost for new transmission system. The regulation on terms & condition of tariff for the period provide for a uniform O&M norms based on Rs.per Km line or Rs.per substation bay to be applied for working out regional O&M charges for the inter-state transmission system.

#### **(e) Open Access in Inter-state Transmission and market development**

In pursuance of the Electricity Act-2003, the Regulations for implementing Open Access in transmission were finalized by CERC indigenously without help of any consultant, for the first time in the country in February 2004. These were operationalised with effect from 06.05.2004. With open access

mechanism in place, eligible customers, generating companies and licensees can avail open access to inter state transmission system in accordance with the specified procedure.

The Open Access (OA) Regulations in interstate transmission have facilitated and streamlined electricity trading. The number of OA transactions increased from 778 in 2004-05 to 5933 in 2006-07. Presently, the OA transactions are mostly among distribution utilities of surplus and deficit regions. It is possible to trade power across different regions of the country. As and when intra-state special energy meters are in place and SLDCs are geared up, it would be possible to harness captive and other intra State sources of generation and the depth of the electricity market would be further extended.

The Commission has issued the guidelines for setting up of the Power Exchange. It is hoped that the setting up of Power Exchange would bring about equity and transparency and efficiency in electricity trading resulting in better resource optimization and providing stronger signal for investment.

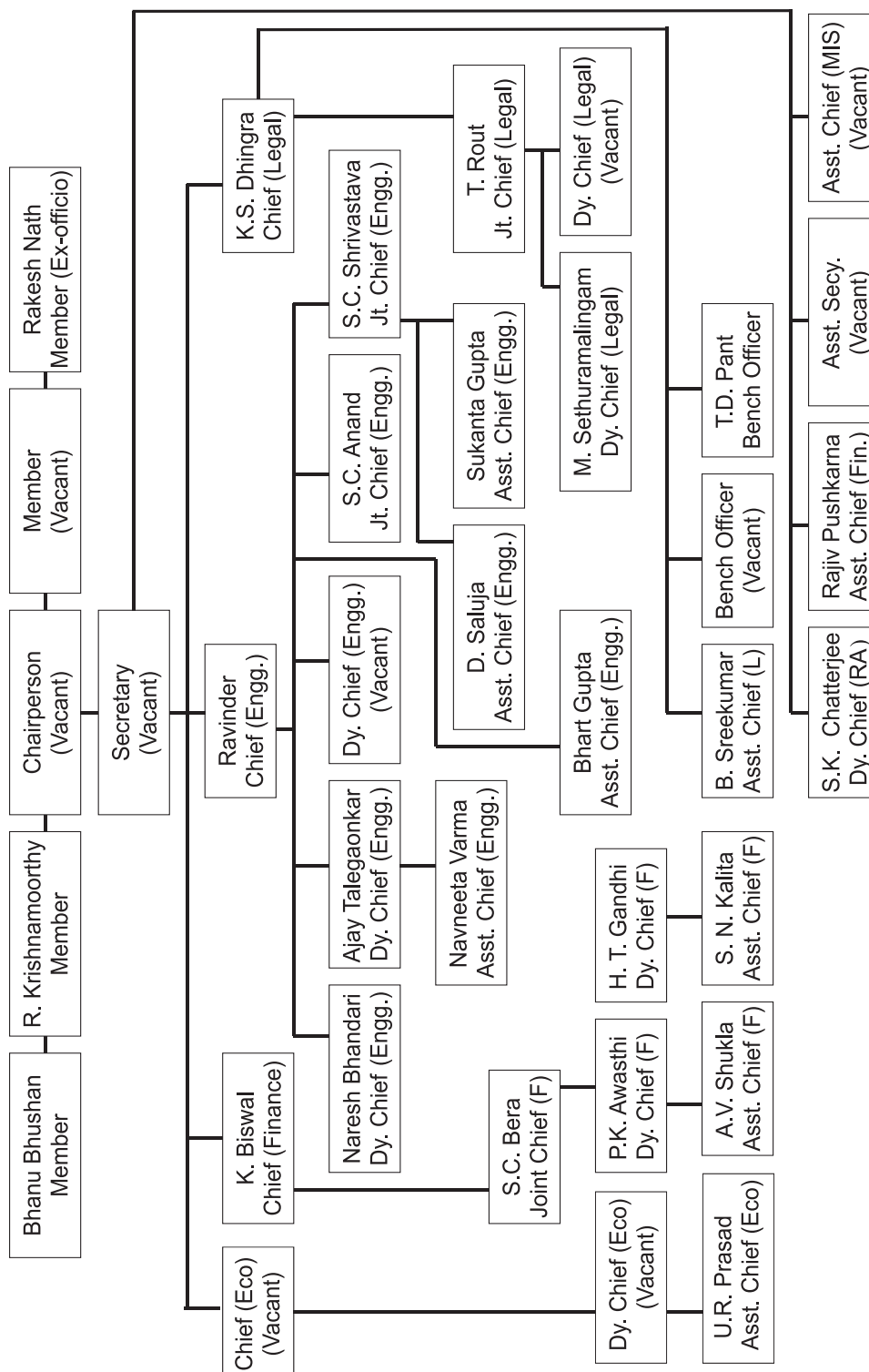


- 106



# ANNEXURES







## Annexure II

### E-Mail ID and Phone Numbers of the Chairperson, Members and Staff of the Commission (As on 31.03.2008)

	Name	Designation	Phone No.	E-mail
		Chairperson	2436004	chairman@cercind.org
	Bhanu Bhushan	Member	24361259	bhanubhu@del3.vsnl.net.in
	R. Krishnamoorthy	Member	24361235	krishh18@gmail.com
	K.S. Dhingra	Chief (Legal)	24363174	ks_dhingra@hotmail.com
	Ravinder	Chief (Engg.)	24364960	ravinderveeksha@hotmail.com
	K. Biswal	Chief (Finance)	24364898	k-biswal@hotmail.com
	S.C. Bera	Joint Chief (Finance)	24363395	subha.bera@yahoo.com
	S.C. Anand	Joint Chief (Engg.)	24363395	anandsca@hotmail.com
	S.C. Shrivastava	Joint Chief (Engg.)	24364895	scschandra@hotmail.com
	Trilochan Rout	Joint Chief (Legal)	24363327	rout_T6@yahoo.com
	P.K. Awasthi	Deputy Chief (Finance)	24364895	awasthi_prabhat@yahoo.com
	H.T. Gandhi	Deputy Chief (Finance)	24364895	h_t_gandhi@yahoo.com
	Naresh Bhandari	Deputy Chief (Engg.)	24364826	nbjalaj@yahoo.com

	Ajay Talegaonkar	Depty Chief (Engg.)	24364826	ajay_tal@hotmail.com
	M Sethuramalingam	Deputy Chief (Legal)	24364826	msr_sethu@yahoo.co.in
	S.K. Chatterjee	Deputy Chief (RA)	24361145	asstsecy@cercind.gov.in
	Rajeev Pushkarna	Assistant Chief (Fin.)	24361145	pushkranaraj@yahoo.com
	Devendra Saluja	Assistant Chief (Engg.)	24364960	devendrasaluja@yahoo.co.in
	Smt. Navneeta Verma	Assistant Chief (Engg.)	24364895	verma_neeta@indiatimes.com
	Sukanta Gupta	Assistant Chief (Engg.)	24363338	gupta_sukhanta@yahoo.com
	Bharat Gupta	Assistant Chief (Engg.)	24364895	bharatgupta_cerc@yahoo.com
	A.V. Shukla	Assistant Chief (Engg.)	24361145	avshuklacea@yahoo.com
	B. Sreekumar	Assistant Chief (legal)	24361145	bskumar102@rediffmail.com
	U.R. Prasad	Assistant Chief (Eco)	24363338	uppaluri123@rediffmail.com
	S.N. Kalita	Assistant Chief (Fin.)	24361145	satyenkalita@yahoo.co.in
	T.D. Pant	Bench Officer	24361145	tdpant_law@yahoo.com



**SEMINARS / CONFERENCES / EXCHANGE PROGRAMME ATTENDED  
BY OFFICERS / STAFF OF THE COMMISSION  
(OUTSIDE INDIA )**

S. NO.	NAME & DESIGNATION OF OFFICERS DEPUTED	NAME OF SEMINAR / CONFERENCE / PROGRAMME & DURATION	COUNTRY VISITED
01.	Shri Kulamani Biswal Chief (Finance)	8th SAFIR Core Course on "Infrastructure Regulation" during 01st - 08th April, 2007	Kalutara, Sri Lanka
02.	Shri Ajay Talegaonkar Dy. Chief (Engg.)	Training on "Technology Improvement program in Grid Operation during 21st April to 27th May 2007	Canada, USA, Norway, U.K, Belgium & France.
03.	Shri A. D Mirajkar Dy. Chief (Engg.)	Executive Peer Exchange Programme with the South East European Market during 28th May, 2007 to 01st June, 2007	Germany
04.	Shri Ravinder Chief (Engg.)	Asia Pacific Partnership (APP)- Energy Regulatory and Market Development Forum - First Meeting of the Steering Committee hosted by Australia during 30th – 31st, August, 2007	Queensland, Australia



## Annexure IV

### IMPORTANT PROGRAMMES ATTENDED BY OFFICERS OF THE COMMISSION ( IN INDIA )

S. No.	NAME OF HOSTING INSTITUTION	NAME OF PROGRAMME & DURATION	NAME & DESIGNATION OF OFFICERS DEPUTED
01.	Institute of Cost & Works Accounts of India (ICWAI), New Delhi.	ERP Professional Training for the Members of ICWAI (April, 2007)	Shri K. Biswal Chief (Finance)
02.	India Infrastructure Publishing Pvt. Ltd., New Delhi	Sixth Annual Conference on "IT in Power : Enabling Process Transforming Utilities during September 11-12, 2007 at New Delhi	Shri Rajeev Pushkarna Asst. Chief (Fin.)
03.	IIT, New Delhi	Workshop on Environment Management in Thermal Power Stations during October 03 -05, 2007	Shri Bharat Gupta Asst. Chief (Engg.)
04.	Indian Railways Institute of Logistics & Materials Management, New Delhi	Seminar on Arbitration & Alternative Disputes Resolution Methods during 29-30 October, 2007	Shri T Rout Jt. Chief (Legal)
05.	Solar Energy Society of India, New Delhi	International Congress on "Renewable Energy" during 27-28 November, 2007 at New Delhi	Shri S.N. Kalita Asst. Chief (Fin.)
06.	Hydro Training Institute, TNEB Kuthiraikalmedu, Tamil Nadu	National Level Training programme on Abnormal Occurrences in Hydro Power Stations, Ooty, TN, during 20-22, November, 2007	Shri Devendra Saluja Asst. Chief (Engg.)





07.	ISTD New Delhi	Workshop on RTI Act at ISTD during 03 - 05 December, 2007	Shri. M. Sabarethinam Assistant
08.	Institute of Cost & Works Accounts of India (ICWAI), New Delhi.	Global Summit on Repositioning the Management Accountant during 10th -12th January, 2008 at New Delhi	1. Shri S.C. Bera Jt. Chief (Fin.) 2. Shri P.K. Awasthi Dy. Chief (Fin.) 3. Shri H.T. Gandhi Dy. Chief (Fin.)
09.	Institute of Cost & Works Accounts of India (ICWAI), New Delhi.	ICWAI 49th National Convention of Cost & Management Accountants during 07th - 09th March, 2008 at New Delhi	1. Shri Rajeev Pushkarna Asst. Chief (Fin.) 2. Shri A.V. Shukla Asst. Chief (Fin.)



## Annexure V

### (A) STATUS OF PETITIONS FILED BEFORE CERC (1.4.2007 TO 31.3.2008)

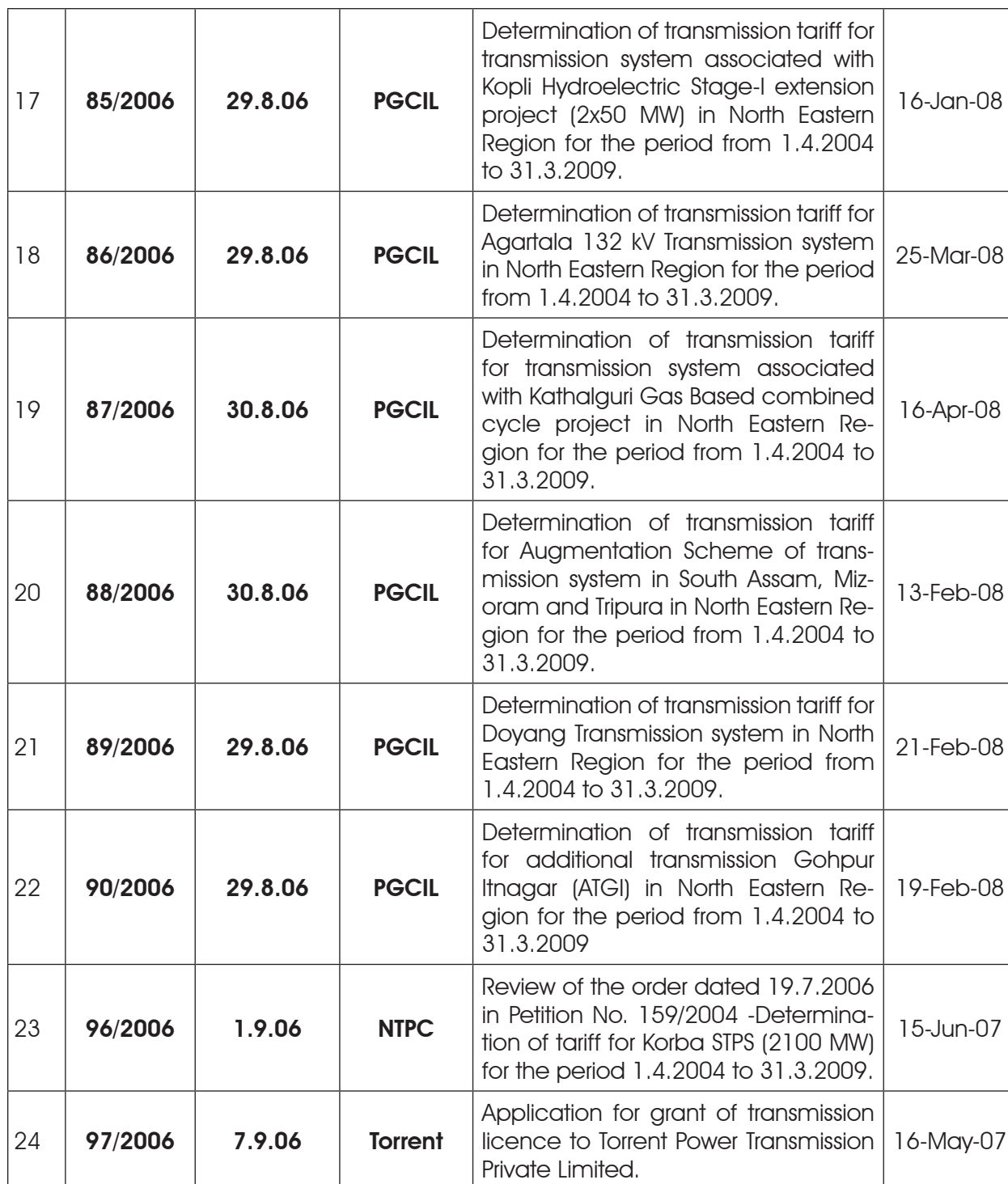
Carried forward from last year (2006-2007)	No. of Petitions received during 2007-2008	Total	Disposed of	Pending as on 31.3.2008
104	173	277	128	149

### Details of Petitions disposed of during 2007-2008

Sl. No.	Petition No.	Date of Filing	Filed by	Subject	Date of Disposal
1	127/2002	2.12.02	NTPC	Review of Order dated 4.10.2002 in Petition No.30/2002.	30-Nov-07
2	9/2003	7.3.03	GRIDCO	Payment of outstanding dues by AP-TRANSCO to GRIDCO for the period from January 2001 to July 2001	18-Oct-07
3	179/2004	25.11.04	NTPC	Approval of tariff of Talcher Super Thermal Power Station, Stage II (2000 MW) for the period 1.4.2004 to 31.3.2009.	31-Jan-08
4	40/2005	27.4.05	NPCL	Approval of tariff of Nagarjuna Power Corporation Limited (1015 MW) for the period 1.9.2008 and onwards.	14-Jun-07
5	116/2005	27.9.05	NRLDC	Bringing Bhakara Beas Management Board (BBMB) Power station under the purview of Unscheduled Interchange (UI) mechanism at the Regional level.	25-Sep-07
6	119/2005	27.9.05	NHDC	Approval of generation tariff of Indira Sagar Project for the period 1.4.1.2004 to 31.3.2009.	6-Feb-07
7	135/2005	8.11.05	NEEPCO	Approval of tariff in respect of Agartala Gas Turbine Power Project (84MW) for the period 1.4.2004 to 31.3.2009.	20-Feb-08



8	<b>140/2005</b>	<b>11.11.05</b>	<b>NTPC</b>	Approval of tariff of Ramagundum Super Thermal Power Station Stage-III (500 MW) for the period 25.3.2005 to 31.3.2009.	15-Oct-07
9	<b>22/2006</b>	<b>13.4.06</b>	<b>NRLDC</b>	Ensuring secure the reliable operation of Northern Regional Grid by maintaining the regional grid frequency above 49.0 HZ..	3-Jul-07
10	<b>35/2006</b>	<b>30.5.06</b>	<b>PGCIL</b>	Petition for reimbursement of additional expenditure towards deployment of special security forces (CISF & TSR) at Bongaingaon & Kumarghat sub-station for the year 2004-05 in North Eastern Region.	25-Sep-07
11	<b>63/2006</b>	<b>21.7.06</b>	<b>THDC</b>	Generation tariff of Tehri Hydro Electric Power Project (HPP) Stage -I (4X250 MW) for the period from 6.7.2006 to 31.3.2009.	28-Mar-08
12	<b>67/2006</b>	<b>24.7.06</b>	<b>RGPL</b>	Approval of one time tariff for Ratnagiri Gas and Power Private Limited during interim period pending the implementation of revival of Ratnagiri Gas and Power Project with LNG as Fuel.	18-Jan-07
13	<b>70/2006</b>	<b>31.7.2006</b>	<b>NEEPCO</b>	Fixation of tariff in respect of sale of power from Kopili Hydro Electric Project- Stage -II (1x25 MW) of NEEPCO, Shillong for the period from 26.7.2004 to 31.3.2009.	1-Jan-08
14	<b>82/2006</b>	<b>30.8.06</b>	<b>PGCIL</b>	Determination of transmission tariff for Rangandi-Ziro transmission system in North Eastern Region for the period from 1.4.2004 to 31.3.2009.	31-Dec-07
15	<b>83/2006</b>	<b>30.8.06</b>	<b>PGCIL</b>	Determination of transmission tariff for Loktak transmission system in North Eastern Region for the period from 1.4.2006 to 31.3.2009	10-Mar-08
16	<b>84/2006</b>	<b>30.8.06</b>	<b>PGCIL</b>	Determination of transmission tariff for Ranaganadi transmission system in North Eastern Region for the period from 1.4.2004 to 31.3.2009.	7-Mar-08





25	<b>103/2006</b>	<b>11.9.2006</b>	<b>Suo-motu</b>	Re-organization of State Electricity Boards under Section 131 of the Electricity Act, 2003	3-Jul-07
26	<b>106/2006</b>	<b>26.9.06</b>	<b>NTPC</b>	Approval of tariff of Rihand Super Thermal Power Station, Stage-II (1000 MW) for the period from 1.4.2006 to 31.3.2009.	15-Oct-07
27	<b>107/2006</b>	<b>25.9.06</b>	<b>NHPC</b>	Approval of generation tariff of Dhauli-ganga HE Project Stage-I for the period from 1.10.2005 to 31.3.2009.	13-Dec-07
28	<b>144/2006</b>	<b>23.11.2006</b>	<b>NHPC</b>	Review of the order dated 4.10.2006 in petition No. 171/2004-Approval of generation tariff of Loktak HE Project for the period 1.4.2004 to 31.3.2009.	5-Sep-07
29	<b>145/2006</b>	<b>17.11.2006</b>	<b>SLDC</b>	Ensuring secure and reliable operation of Southern Region Grid by maintaining the grid frequency above 49.0 Hz and review of UI price vector.	3-Jul-07
30	<b>146/2006</b>	<b>7.12.2006</b>	<b>TNEB</b>	Seeking directions for the method of charging transmission charges in case extending supply from the existing power grid sub-station and for LILO of existing transmission line for laying and establishment of new lines and sub-stations by State Sector investing its own resources.	27-Jun-07
31	<b>147/2006</b>	<b>7.12.2006</b>	<b>PGCIL</b>	Direction to the respondents to agree for "modification works in controllers of Rihand HVDC station associated with Rihand-Dadri HVDC terminals" and consequential applicable tariff on completion of the modification work to be decided in accordance with CERC (Terms & conditions of Tariff) Regulations, 2004	27-Mar-08
32	<b>152/2006</b>	<b>7.12.2006</b>	<b>IELTD</b>	Application for grant of inter-state trading licence in electricity.	30-Aug-07



33	<b>153/2006</b>	<b>22.12.06</b>	<b>MPPTCL</b>	Review of the order dated 16.11.2006 in Petition No. 79/2005 -Approval of tariff in respect of Kawas Gas Power Station for the period 1.4.2004 to 31.3.2009.	25-May-07
34	<b>01/2007</b>	<b>4.1.2007</b>	<b>PGCIL</b>	Approval of final transmission tariff of LILO of Kolaghat-Rengali 400 kV S/C line at Baripada and establishment of new 400/220/132 kV sub-station at Baripada in Eastern Region for the period from 1.7.2005 to 31.3.2009.	15-Oct-07
35	<b>02/2007</b>	<b>4.1.2007</b>	<b>PGCIL</b>	Determination of final transmission tariff for 400 kV D/C Rihand-Allahabad, Allahabad-Mainpuri & Mainpuri-Ballabgarh transmission line with associated bays, ICT-I & II at Patiala sub-station, LILO of one circuit of Nallagarh-Hissar transmission line at Kaithal, LILO of one circuit of Nallagarh-Hissar line at Patiala, 400 kV S/C Patiala-Malerkotla transmission line, ICT-III at Abdullapur sub-station and provisional transmission tariff for 400 kV S/C Dadri-Panipat transmission line with associated bays and 2 nos of bays at Abdullapur sub-station under Rihand Stage-II Transmission System in Northern Region for tariff block 200-09 period.	27-Sept.07
36	<b>03/2007</b>	<b>4.1.2007</b>	<b>PGCIL</b>	Determination of transmission tariff for Fixed and Thyristor controlled Series Compensation for 400 kV D/C Raipur-Rourkela Transmission Line at Raipur in Western Region for the period from 1.11.2004 to 31.3.2009.	31-Oct-07
37	<b>04/2007</b>	<b>8.1.2007</b>	<b>NTPC</b>	Review of the order dated 16.11.2006 in petition No. 79/2005-Approval of tariff of Kawas Gas Power Station for the period 1.4.2004 to 31.3.2009.	29-Jun-07



38	<b>06/2007</b>	<b>10.1.2007</b>	<b>GRIDCO</b>	Review/clarification/modification/reconsideration of the order dated 25.9.06 in Petition No. 35/2004-Approval of revised fixed charges due to additional capitalization for the year 2000-01, 2001-02 and 2002-03 for Talcher Thermal Power Station (460 MW).	4-Mar-08
39	<b>07/2007</b>	<b>10.1.2007</b>	<b>NTPC</b>	Petition for infirm power of (1x 500 MW) Unit of Kahalgaon Super Thermal Power Station, Stage-II, Phase-II for infirm power supply to the respondents.	20-Apr-07
40	<b>10/2007</b>	<b>5.2.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 200 kV S/C Meerut-Shatabdinagar Transmission line under system improvement scheme in Uttar Pradesh 1.7.2005 to 31.3.2009.	17-Jul-07
41	<b>12/2007</b>	<b>5.2.2007</b>	<b>PGCIL</b>	Determination of final transmission tariff of LILO of one circuit of 132 kV D/C Siliguri-Rangit transmission line at Gangtok in Eastern Region for the period from 1.10.2005 to 31.3.2009.	15-Oct-07
42	<b>14/2007</b>	<b>5.2.2007</b>	<b>Suo-Motu</b>	Ensuring secure and reliable operation of Regional Grid by maintaining the grid frequency above 49.0 Hz.	23-May-07
43	<b>17/2007</b>	<b>14.2.2007</b>	<b>VPL</b>	Application for grant of inter-state trading licence in electricity.	28-Jun-07
44	<b>18/2007</b>	<b>21.2.2007</b>	<b>CGPL</b>	Application under Section 63 of the Electricity Act, 2003 for adoption of tariff for the supply of electricity from the Mundra Ultra Mega Power Project of Coastal Gujarat Power Limited awarded to M/s Tata Power Company Limited based on tariff determined through a transparent and international competitive bidding process in accordance with the guidelines issued by the Central Government.	19-Sep-07

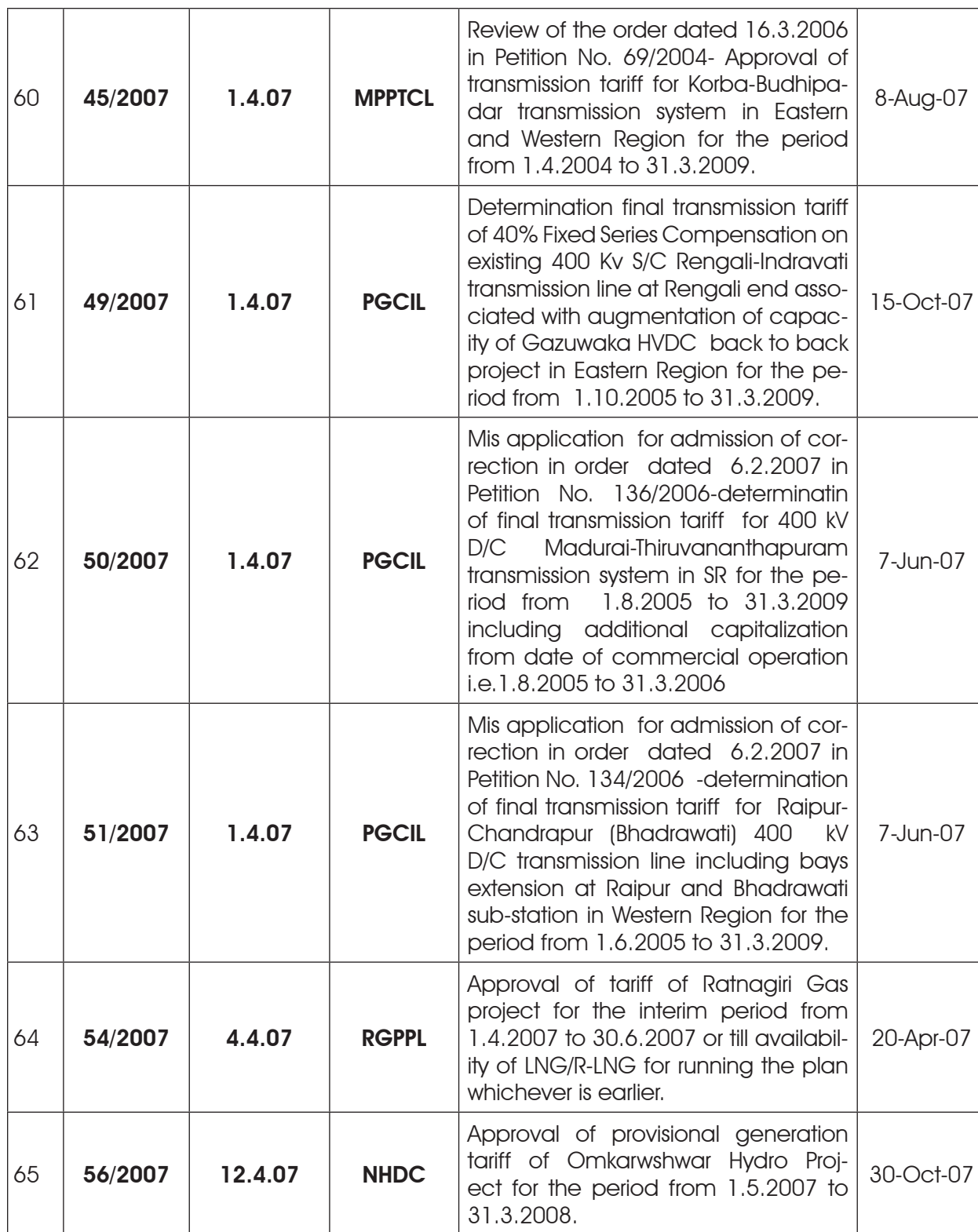




45	<b>19/2007</b>	<b>21.2.2007</b>	<b>SASAN.PL</b>	Application under Section 63 of the Electricity Act, 2003 for adoption of tariff for the supply of electricity from the Sasan Ultra Mega Power Project of Sasan Power Limited awarded to M/s Globeleq Singapore Pte and Lan-co Infratech Limited based on tariff determined through a transparent and international competitive bidding process in accordance with the guidelines issued by the Central Government.	9-Aug-07
46	<b>21/2007</b>	<b>28.2.2007</b>	<b>PGCIL</b>	Approval of final transmission tariff of integration of Sikkim transmission system with Eastern Region by LLO of Siliguri-Gangtok section of 132 kV Tangit-Siliguri transmission line at Meli in Eastern Region for the period from 1.10.2005 to 31.3.2009	15-Feb-08
47	<b>22/2007</b>	<b>28.2.2007</b>	<b>NTPC</b>	Determination of impact of additional capital expenditure incurred during 2004-05 and 2005-06 of Rihand Super Thermal Power Station (1000MW) Stage-I	10-Jul-07
48	<b>25/2007</b>	<b>2.3.2007</b>	<b>ASEB</b>	Review of the order dated 14.12.2006 in petition No. 33/2003 for approval of tariff in respect of Assam Gas Based Power Station for the period from 1.4.2001 to 31.3.2004	15-Jul-07
49	<b>26/2007</b>	<b>28.2.2007</b>	<b>NEEPCO</b>	Fixation of tariff in respect of sale of power from Kopili Hydro Electric Project-Khandong Power Station (2x25MW) of North Eastern Electric Power Corporation Limited, Shillong for the period from 1.4.2004 to 31.3.2009.	14-Jan-08
50	<b>28/2007</b>	<b>6.3.2007</b>	<b>NTPC</b>	Approval of revised fixed charges after considering the impact of additional capital expenditure incurred during 2004-05 and 2005-06 for Simhadri Thermal Power Station, Stage-I (1000 MW)	18-Jun-08



51	<b>29/2007</b>	<b>6.3.2007</b>	<b>NTPC</b>	Approval of revised fixed charges after considering the impact of additional capital expenditure incurred during 2004-05 and 2005-06 for Ramagundam Super Thermal Power Station, Stage-I (2100 MW)	30-Jul-07
52	<b>30/2007</b>	<b>6.3.2007</b>	<b>SKPCL</b>	Dispute on the payment of the amounts payable to trading of power.	5-Sep-07
53	<b>33/2007</b>	<b>19.3.2007</b>	<b>NTPC</b>	Review of the order dated 24.1.2007 in Petition No. 26/2006-Revision of operation parameters and norms for the determination of tariff in respect of Tanda TPS for the period 2004-09.	27-Jun-07
54	<b>35/2007</b>	<b>19.3.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV D/C Kanpur-Auraiya transmission line along bays at Auraiya under Northern Region system strengthening Scheme - in Northern Region for the period 2004-09.	21-May-07
55	<b>36/2007</b>	<b>21.3.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 440/220 kV Kolhapur (MSEB) sub-station (extension) under WR system strengthening-III in Western Region for 1.12.2006 to 31.3.2009	21-May-07
56	<b>37/2007</b>	<b>21.3.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff of 2nd (3x105) MVA, 200/220 kV transformer at Indravati (OPHC) Switchyard in Eastern Region for the period 1.5.2006 to 31.3.2009	26-Apr-07
57	<b>38/2007</b>	<b>21.3.2007</b>	<b>IEXL</b>	Application for grant of permission for setting up of power exchange.	31-Aug-07
58	<b>43/2007</b>	<b>28.3.2007</b>	<b>DTL</b>	Seeking clarification of order dated 9.5.2006 in petition No. 40/2004-Approval of tariff of Badarpur Thermal Power Station for the period from 1.4.2004 to 31.3.2009.	24-Jul-07
59	<b>44/2007</b>	<b>29.3.2007</b>	<b>JPL</b>	Application for grant of transmission licence to Jaypee Power grid Limited (JPPGL)	1-Oct-07





66	<b>57/2007</b>	<b>19.4.07</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV D/C Agra-Bassi transmission line (ckt III & II) along with associated bays under Northern Region System strengthening Scheme-II in Northern Region for the period 2004-09	28-Jun-07
67	<b>59/2007</b>	<b>26.4.2007</b>	<b>GRIDCO</b>	Revision of the operational parameters and norms for determination of tariff in respect of Talcher Thermal Power Station for 2004-05 to 2008-09	20-Aug-07
68	<b>60/2007</b>	<b>27.4.2007</b>	<b>KPDPL</b>	Application for grant of Inter-State trading licence in electricity to Kalyani Power Development Private Limited.	21-Aug-07
69	<b>61/2007</b>	<b>30.4.2007</b>	<b>GPPL</b>	Application for grant of Inter-State trading licence in electricity to Sri Balaji Biomass Power (P) Ltd.	22-Jan-08
70	<b>62/2007</b>	<b>30.4.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) 400 kV S/C Dulhasti-Kishenpur Transmission line with associated bays (ii) 400 kV Kishenpur-Wagoora transmission line along with associated bays at Kishenpur and Wagoora sub-station under Dulhasti combined transmission system in Northern Region for the period 2004-09 block.	16-Jul-07
71	<b>63/2007</b>	<b>30.4.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Vindhyachal STPPO-Satna 400 kV D/C line (3rd & 4th circuit) and 400/220 kV Satna (Power grid) sub-station (extension) with 1x315 MVA transformer under Vindhyachal Stage-III transmission system of Western Region for the period from 1.10.2006, 1.12.2006, 1.11.2006 to 31.3.2009.	4-Jul-07

72	<b>64/2007</b>	<b>30.4.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Neelmangala-Saomnahally 400 kV D/C transmission line along with bay extension at Neelamangala (KPTCL) and Somanahally (Power grid) under scheme for system strengthening -III of Southern Region Grid from 1.1.2007 to 31.3.2009 in SR.	16-Jul-07
73	<b>65/2007</b>	<b>3.5.2007</b>	<b>VPGL</b>	Approval of tariff of Muzaffarpur Thermal Power Station (2x110 MW) for the period 8.9.2006 to 31.3.2009.	11-Sept.-07
74	<b>67/2007</b>	<b>4.5.2007</b>	<b>ISNI</b>	Review of the order dated 23.3.2007 in Petition No. 113/2006 -Adoption of tariff in respect of 2000MW Thermal Power Station proposed to be established by ISN International Pvt. Limited in District Sidhi, Madhya Pradesh.	27-Aug-07
75	<b>68/2007</b>	<b>4.5.2007</b>	<b>MPPTCL</b>	Direction to CTU for grant of long term open access on the existing ER-WR corridor i.e. 400 kV Raipur-Rourkele line including 220 kV Korba-Budhipadar transmission for transfer of 400 MW power from DVC station at Mejia and chandrapur.	15-Jun-07
76	<b>69/2007</b>	<b>4.5.2007</b>	<b>GRIDCO</b>	Review of the order dated 23.3.2007 in Petition No. 91/2004-Approval of tariff in respect of Talcher TPS (460MW) for the period 1.4.2004 to 31.3.2009.	28-Sept-07
77	<b>70/2007</b>	<b>4.5.2007</b>	<b>NBVL</b>	Review of the order dated 7.3.2007 in petition No. 24/2007-Refusal No. 131 of 25.1.2007 by the WRLDC of the open access application filed by Tata Power Trading company Limited for transmission of 27 MW power through ERLDC and Orissa State Load Despatch Centre for Nava Bharat Ventures Ltd. on the ground of "No consent from OPTCL"	27-Aug-07



78	<b>71/2007</b>	<b>11.5.2007</b>	<b>NLC</b>	Implementation of ABT with effects from 1.1.2007 in intra-State Central Generating Station NLC-TPS I supplying power to the sole beneficiary TNEB (Seeking intervention of the Commission for appropriate remedy for the problems encountered in UI Accounting.)	14-Mar-08
79	<b>73/2007</b>	<b>21.5.2007</b>	<b>PGCIL</b>	Review of the order dated 21.3.2007 in Petition No. 138/2006, approval of final transmission tariff up to DOCO and additional capitalization from the date of commercial operation to 31.3.2006 for 400 kV D/C Dhauliganga HEP-Bareilly (UPPCL) transmission line along with its associated bays at Bareilly (UPPCL) in Northern Region for the period from 1.8.2005 to 31.3.2009.	16-Jul-07
80	<b>74/2007</b>	<b>23.5.2007</b>	<b>PPPL</b>	Application for grant of licence for inter-State Trading in electricity to Patni Project Private Limited, Mumbai.	23-Aug-07
81	<b>75/2007</b>	<b>23.5.2007</b>	<b>PGCIL</b>	Application under CERC (Terms and condition of tariff) Regulations, 2004 " power to Remove difficulties and Power to relax" respectively for reimbursement of additional expenditure towards deployment of special security forces (CISF) at Wagoora sub-station for the year 2005-06 in Northern Region.	30-Aug-07
82	<b>76/2007</b>	<b>28.5.2007</b>	<b>NEEPCO</b>	Fixation of tariff in respect of power from Kopili Hydro Electric Project-Khandong Power Station (4x25MW) of North Eastern Electric Power Corporation Limited, Shillong for the period from 1.4.2004 to 31.3.2009.	10-Feb-08



83	<b>77/2007</b>	<b>29.5.2007</b>	<b>TNEB</b>	Review of the order dated 15.3.2007 in Petition No. 128/2006-Determination of final transmission tariff for 400 kV D/C Kaiga-Narendra Transmission line and 400/220 kV Sub-station at Narendra including additional capitalization from date of commercial operation 1.11.2005 to 31.3.2006 in SR for the period from 1.9.2006 to 31.3.2009	15-Oct-07
84	<b>79/2007</b>	<b>5.6.2007</b>	<b>TNEB</b>	Review of the order dated 23.3.2007 in Petition No. 5/2002-determination of tariff of TPS-II of NLC for the period from 1.4.2001 to 31.3.2004.	11-Jan-08
85	<b>80/2007</b>	<b>18.6.2007</b>	<b>PGCIL</b>	Sharing of the transmission charges of the 400 kV Malda Bongaigaon transmission line with associated bays (under Kathalguri Project) an inter regional assets between ER & NER.	24-Sept-07
86	<b>81/2007</b>	<b>18.6.2007</b>	<b>PGCIL</b>	Application under CERC (Terms and condition of tariff) Regulations, 2004 " power to Remove difficulties and Power to relax" respectively for reimbursement of additional expenditure towards deployment of special security forces (CISF) for Salakati and Bongaigaon sub-station for the year 2005-06 in Eastern Region.	30-Aug-07
87	<b>82/2007</b>	<b>18.6.2007</b>	<b>PTC</b>	Petition Under section 35 of the CERC (Open Access in transmission) Regulations 2004 for directing the respondent to refund the sum of Rs. 50,91,511-/along with interest and other expenses to PTC India Limited	12-Oct-07
88	<b>83/2007</b>	<b>20.6.2007</b>	<b>NTPC</b>	Provisional tariff of Vindhyachal Super Thermal Power Station Stage-III (1000 MW) from the date of commercial operation to 31.3.2009.	13-Aug-07
89	<b>85/2007</b>	<b>29.6.2007</b>	<b>Suo-motu</b>	Proposed Approach for sharing of charges for the losses in inter-State Transmission System	28-Mar-08





90	<b>88/2007</b>	<b>11.7.2007</b>	<b>NEEPCO</b>	Fixation of tariff in respect of power from Doyang Hydro Electric Project (3x25 MW) of North Eastern Electric Power Corporation Limited, Shillong for the period from 1.4.2004 to 31.3.2009.	1-Oct-07
91	<b>94/2007</b>	<b>27.7.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Gooty-Raichur 400 kV D/C transmission line along with bay extension at Gooty and Raichur under Scheme for system strengthening-III of Southern Region grid from 1.5.2007 to 31.3.2009.	19-Sep-07
92	<b>95/2007</b>	<b>27.7.2007</b>	<b>TNEB</b>	Review of the order dated 15.3.2007 in Petition No.130/2006-Determination of final transmission tariff for 400 kV S/C Gooty-Neelmangala transmission line along with bay extension and equipments at Gooty and Neelmangala associated with Ramagundam-III transmission system in Southern Region for the tariff period from 1.5.2005 to 31.3.2009.	15-Oct-07
93	<b>100/2007</b>	<b>1.8.2007</b>	<b>PGCIL</b>	Petition for approval under regulations 12 and 13 of the CERC (Terms and Conditions of tariff) Regulations, 2004 'Power to Remove Difficulties and Power to relax' respectively to permit the petition to undertake hot-line cleaning of insulators in Northern Region Transmission System through use of helicopter for a period of six months on experimental basis and to allow for reimbursement of consequential expenditure incurred on this account from the respondents	28-Sep-07
94	<b>101/2007</b>	<b>6.8.2007</b>	<b>NTPC</b>	Approval of provisional tariff of Unit-I (1x500MW) of Kahalgaon Super Thermal Power Station- Stage- II from the date of commercial operation till 31.3.2009.	18-Dec.-07



95	<b>104/2007</b>	<b>14.8.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Agra-Gwalior 765 kV S/C line along with 400 kV Agra (PGCIL) switching station Extn. and 400/220 kV Gwalior (PGCIL) S/S Extn. under Kahalgaon stage-II Phase-I transmission system in Western Region and Northern Region from 1.4.2007 to 31.3.2009.	22-Oct-07
96	<b>106/2007</b>	<b>21.8.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Bina-Gwalior 765 kV S/C transmission line along with bay extensions at Bina and Gwalior under transmission system associated with SIPAT II from 1.4.2007 to 31.3.2009	19-Sep-07
97	<b>108/2007</b>	<b>3.9.2007</b>	<b>TPTCL</b>	Petition under Section 79 of the Electricity Act, 2003 read with regulations 35 of the CERC (Open Access in inter-State in transmission) Regulations, 2004	3-Dec.07
98	<b>109/2007</b>	<b>7.9.2007</b>	<b>MMPTCL</b>	Adoption of tariff for the Sasan Ultra Power Project at Sasan, District, Sidhi Pradesh	17-Oct-07
99	<b>110/2007</b>	<b>10.9.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for LILO of 400 kV Satna-Bina Ckt-I & II at Bina (Power grid) along with associated bays under Vindhya-chal Stage-III transmission system in Western Region for the period from 1.4.2007 to 31.3.2009.	18-Oct-07
100	<b>111/2007</b>	<b>10.9.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV S/C Vindhya-chal-Korba ckt-II along with associated bays equipment at Vindhya-chal and Korba switch yards in Western Region 1.6.2007 to 31.3.2009	18-Oct-07



101	<b>113/2007</b>	<b>17.9.2007</b>	<b>NTPC</b>	Approval of provisional tariff for 1st 500 MW of Sipat Super Thermal Power Station for the period from COD to 31.3.2009.	3-Dec-07
102	<b>114/2007</b>	<b>18.9.2007</b>	<b>USWL</b>	Petition under section 79 of the Electricity Act, 2003 read with regulation 35 of the Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2004	3-Dec.-07
103	<b>116/2007</b>	<b>20.9.07</b>	<b>SDKSSKN</b>	Petition under section 79 of the Electricity Act, 2003 read with regulation 35 of the Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2004	3-Dec.-07
104	<b>117/2007</b>	<b>24.9.2007</b>	<b>NRLDC</b>	Direction to constituents to honour the power transfer limits and curb the overdrawals from the grid so that the entire New electricity grid is secure.	7-Dec-07
105	<b>119/2007</b>	<b>24.9.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 44/220 kV, 315 MVA ICT-I at Gwalior sub-station associated under transmission system associated with SIPAT-II (2X500 MW) Project from 1.5.2007 to 31.3.2009 in Western Region.	31-Oct-07
106	<b>120/2007</b>	<b>26.9.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 3x105 MVA 440/220/33 kV ICT-III at Wagoora sub-station along with associated bays under Northern Region Strengthening Scheme II in Northern Region for the period 2004-09.	31-Oct-07



107	<b>122/2007</b>	<b>28.9.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV Vindhyachal-Kanpur line at Singrauli along with bays at Singrauli end (Realignment of Vindhyachal-Kanpur S/C line at Singrauli and Singrauli-Vindhyachal 2nd 400 kV ckt) and Bus coupler bay at Vindhyachal HVDC under system strengthening scheme in Singrauli-Vindhyachal corridor	29-Nov-07
108	<b>124/2007</b>	<b>8.10.2007</b>	<b>VGL</b>	Application for grant of inter-State trading licence to Vandana Global Limited	20-Feb-08
109	<b>127/2007</b>	<b>15.10.2007</b>	<b>PGCIL</b>	Determination of final transmission tariff for Neelmangala-Mysore 400 kV D/C transmission line along with 2x315 MVA, 400/200 kV Mysore sub-station and bay extension at Neelmangala (KPTCL) 400/200 sub-station from 1.5.2006 to 31.3.2009 in Southern Region including additional capital expenditure incurred during the 2006-07	19-Feb-08
110	<b>128/2007</b>	<b>15.10.2007</b>	<b>PGCIL</b>	Determination of final transmission tariff along with additional capitalization-I for Neelmangala-Somanahally 400 kV D/C transmission line with bay extension at Neelmangala (KPTCL) and Somanahally (Power Grid) under scheme for system strengthening-III of Southern Region Grid from 1.1.2007 to 31.3.2009.	8-Feb-08
111	<b>129/2007</b>	<b>19.10.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 315 MVA ICT-IV at Moga sub-station along with associated bays under Augmentation of transformation capacity at Moga and Amritsar sub-station in Northern Region for the period 2004-2009	22-Nov-07



112	<b>130/2007</b>	<b>19.10.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 50 MVAR bus reactor at Hissar sub-station (DOCO 1.7.2007) under Northern regional system strengthening scheme-III in Northern Region for the tariff period 2004-09	22-Nov-07
113	<b>139/2007</b>	<b>1.11.2007</b>	<b>VPGL</b>	Review of the order dated 11.9.2007 in Petition No. 65/2007-approval of tariff for the period 8.9.2007 to 31.3.2009 in respect of Muzaffarpur TPS.	5-Dec-07
114	<b>142/2007</b>	<b>1.11.2007</b>	<b>PGCIL</b>	Determination of final transmission tariff up to DOCO and additional capitalization from DOCO to 31.3.2007 for (i) TCSC and 2nos of 400 kv bays at Gorkhpur sub-station associated with 400 Kv Muzaffarpur-Gorakhpur line of Powerlinks (ii) 2 nos of 400 kV bays at Muzaffarpur with line reactor associated with 400 kV Muzaffarpur-Gorkhpur line of Powerlinks, under transmission system associated with Tala HEP, East-North Inter-connector and Northern Region Transmission system, an inter-regional asset between Northern Region and Eastern Region from 1.9.2006 to 31.3.2009.	28-Mar-08
115	<b>150/2007</b>	<b>8.11.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) 400 kV bays at Kanpur sub-station associated with Kanpur-Auraiya transmission line (ii) LILCO of 400 kV D/C Bareilly-Mandola transmission line along with associated bays at Bareilly and Bus reactor at Bareilly under Northern Region system strengthening scheme-I in Northern Region for the period 2004-09.	26-Dec.-7
116	<b>154/2007</b>	<b>16.11.2007</b>	<b>NRLDC</b>	Maintaining grid security of the entire North East West (New) grid through curbing over-drawls by Northern Region constituents and other measures to facilitate harnessing of all latent generation and induce Demand Side Management (DSM)	4-Dec-07



117	<b>156/2007</b>	<b>19.11.2007</b>	<b>VBL</b>	Non-approval of Open Access communicated by Southern Regional Load Despatch Centre by Letter No. SRLDC/Coml./OA dated 26.10.2007 on ground on non-receipt of consent from SLDC-OPTCL against Reliance Energy Trading Ltd Application RETL/SRLDC/142S1/1068 dated 18.10.2007 for transmission of 25 MW generated by Nava Bharat Ventures Ltd. and the reference of the application for redresses by the Eastern Regional Ltd. and the reference of the application for redressal by the Eastern Regional Power Committee to the Hon`ble CERC by letter No. ERPC/SE(C)/OA/2007/4763 dated 7.11.2007.	31-Dec.07
118	<b>158/2007</b>	<b>28.11.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for circuit IV & III of 400 kV D/C Satna-Bina transmission line under Vindhyaachal Stage-III transmission system in WR from 1.7.2007 to 1.9.2007 respectively to 31.3.2007.	23-Jan-08
119	<b>162/2007</b>	<b>13.12.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV Bina-Nagda D/C/ Transmission line along with associated bay equipment at Nagda and Bina in Western Region for the period from 1.11.2007 to 31.3.2009.	22-Jan-08
120	<b>163/2007</b>	<b>13.12.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) 400 kV D/C Kahalgaon-Patna line (including 1x 50 MVAR line reactor), 1x80 MVAR Bus reactor with associated bays at Patna sub-station, 2 nos. 220 kV line bays at Patna sub-station for BSEB sub-station and 400 & 220 kV bays for ICT-I at Patna sub-station DOCO 1.5.2007 (ii) 400 kV D/C Maithon-Ranchi line along with associated bays, 400/220 k V, 315 MVA ICT II along with associated bays at Ranchi sub-station and 220 kV Patratu and Chandli bays at Ranchi sub-station DOCO 1.6.2006 under Khalgaon Stage-II Phase-I (2x500MW) transmission system in Eastern Region for the period 2004-09	25-Feb-08



121	<b>165/2007</b>	<b>13.12.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV Bina-Nagda D/C/ Transmission line along with associated bay equipment at Nagda and Bina in Western Region for the period from 1.11.2007 to 31.3.2009.	22-Jan-08
122	<b>166/2007</b>	<b>13.12.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) 400 kV Balia-Lucknow Ckt-I & II, 400 KV Balia-Mau Ckt-I 400 kV D/C patna-Balia line including associated bays at Patna and Balia (ii) 400 kV BaliaMau Ckt-II, 40% FSC at Lucknow as 400 kV D/C Lucknow-balia line (iii) 80 MVar Bus Reactor of Biharshariff sub-station (iv) 400 kV Lucknow- Bareilly Ckt-i & II along with associated bays under kahalgau Stage-II transmission system phase-I Transmission system in Northern Region for the period 2004-09	29-Feb-07
123	<b>167/2007</b>	<b>26.12.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for LILLO of 400 kV D/C Raipur-Rourkela transmission line along with associated bays under Vindhyachal stage-III transmission system expected to be commissioned w.e.f. 1.1.2008 under Vindhyachal Stage-III transmission system in Western Region from 1.1.2008 to 31.3.2009.	10-Mar-08
124	<b>170/2007</b>	<b>20.12.2007</b>	<b>CAPL</b>	Adoption of tariff under section 63 of the Electricity Act 2003 in respect of Krishnapatnam Ultra Mega Power Project	25-Jan-08
125	<b>02/2008</b>	<b>30.12.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff of UP-gradation of Transfer capacity of Talcher-Kolar HVDC Bi-pole from DOCO (1.8.2007 to 31.3.2009) in Southern Region	26-Feb-08





126	<b>6/2008</b>	<b>21.1.2008</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) LILLO of one ckt of 400 kV D/C Ballabgarh-Dadri transmission line at Maharaniabagh GIS along with associated bays and 315 MVA 00/220/33 kV ICT-I at Maharaniabagh GIS along with associated bays (ii) 315 MVA 00/220/33 kV ICT-II at Maharaniabagh GIS along with associated bays under Tala HEP, East-North Inter-connector and Northern Region Transmission system for tariff block 2004-09.	13-Mar-08
127	<b>7/2008</b>	<b>21.1.2008</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (a) 80 MVA Reactor at Nellore (DOCO 1.7.2007), (b) 315 MVA ICT at Cuddapah (DOCO 1.8.2007), (c) 315 MVA ICT at Gooty, 3x167 MVA ICT at Gooty, 3 x167 MVA ICT at Kolar & provision of switching arrangement for existing reactor at Somanhalli (DOCO 1.9.2007), (d) 315 MVA ICT at Gazuwaka (DOCO 1.10.2007), (e) 315 MVA ICT at Munirabad (DOCO 1.11.200) and (f) 315 MVA ICT at Khammam (DOCO 1.2.2008-expected) under system strengthening of Southern Region grid from DOCO to 31. 3.2009 in Southern Region.	13-Mar-08
128	<b>9/2008</b>	<b>23.1.2008</b>	<b>NHPC</b>	Approval of provisional generation tariff of Teesta HE Project Stage-V for the period from date of commercial operation to 31.3.2009.	31-Mar-08

#### **(B) INTERLOCUTORY APPLICATION BEFORE CERC**

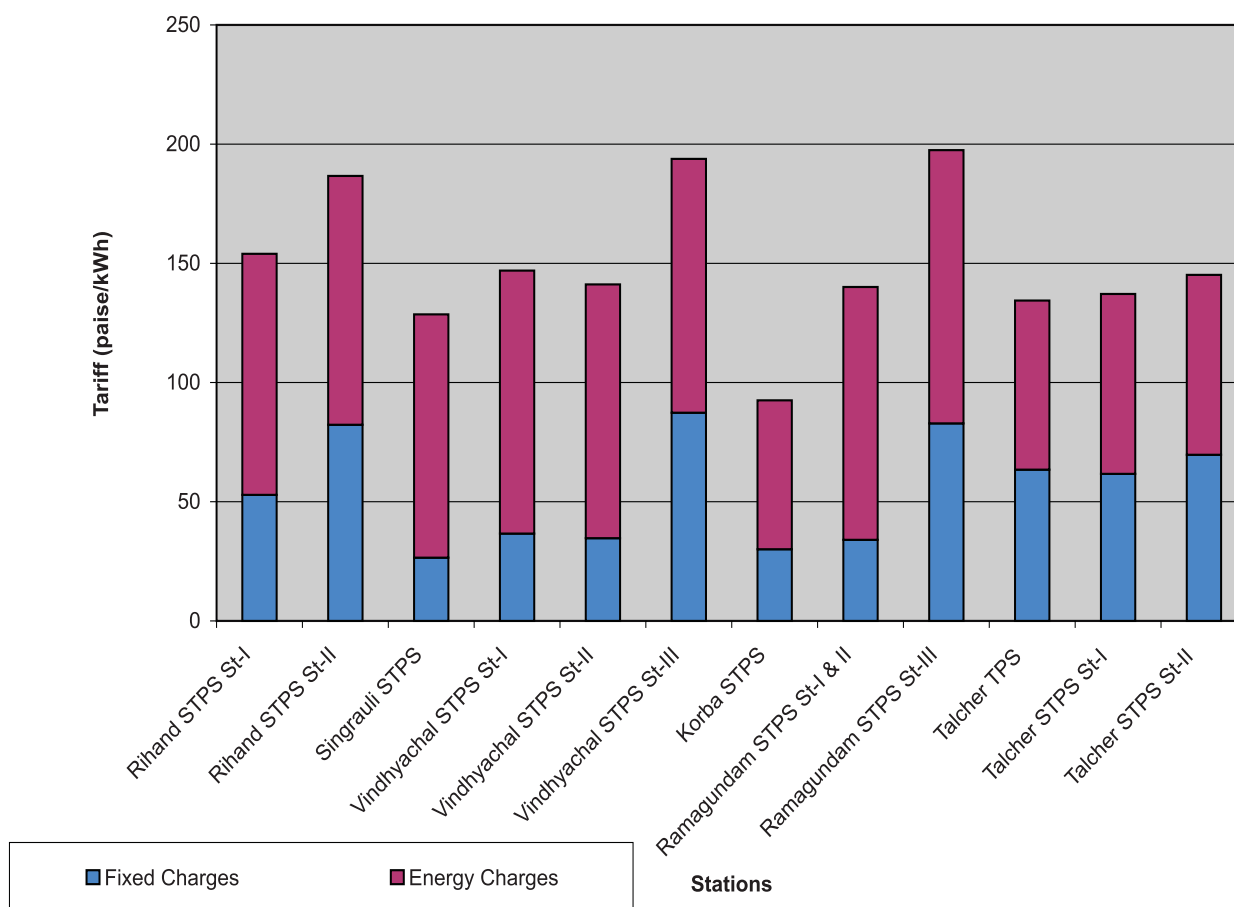
<b>No. of IA carried forward from last year (2006-2007)</b>	<b>No. of IA received during the period 2007-2008</b>	<b>Total</b>	<b>Disposed of</b>	<b>No. of IA pending on 31.3.2008</b>
<b>6</b>	<b>39</b>	<b>45</b>	<b>43</b>	<b>2</b>



Sl. No.	Name of the Generating Station	Installed Capacity as on 31.3.2007	Fixed charges	Energy Charges as in March 20072	TOTAL	Weighted Average Cost of Generation	Installed Capacity as on 31.3.2008	Fixed charges	Energy Charges as in March 20082	TOTAL	Weighted Average Cost of Generation
	Years Units	MW	paise/ kWh	2006-07 paise/kWh	paise/ kWh	paise/kWh	MW	paise/ kWh	2007-08 paise/kWh	paise/ kWh	paise/kWh
Coal Based thermal generating Stations of NTPC											
A.	Pit head Generating Stations										
1	Rihand STPS St-I	1000.00	52	95	147	134	1000.00	53	101	154	145
2	Rihand STPS St-II	1000.00	80	97	177		1000.00	82	104	187	
3	Singrauli STPS	2000.00	29	84	113		2000.00	27	102	129	
4	Vindhyachal STPS St-I	1260.00	36	104	140		1260.00	37	110	147	
5	Vindhyachal STPS St-II	1000.00	35	100	135		1000.00	70	106	176	
6	Vindhyachal STPS St-III	500.00	88	100	188		1000.00	87	106	194	
7	Korba STPS	2100.00	32	55	87		2100.00	30	62	93	
8	Ramagundam STPS St-I & II	2100.00	33	99	133		2100.00	34	106	140	
9	Ramagundam STPS St-III	500.00	83	104	187		500.00	83	115	197	
10	Talcher TPS	460.00	63	71	134		460.00	63	71	134	
11	Talcher STPS St-I	1000.00	62	72	134		1000.00	62	75	137	
12	Talcher STPS St-II	2000.00	72	72	144		2000.00	70	75	145	
	Sub-Total	14920.00					15420.00				
B. Non-Pit head Generating Stations											
13	FGUTPP TPS St-I	420.00	51	128	179	195	420.00	52	140	192	208
14	FGUTPP St-II	420.00	66	127	193		420.00	66	139	205	
15	FGUTPP St-III	210.00	103	130	233		210.00	102	139	242	
16	NCTP Dadri	840.00	60	166	226		840.00	60	161	221	
17	Farrakka STPS	1600.00	49	109	157		1600.00	49	124	173	
18	Tanda TPS	440.00	63	175	237		440.00	64	170	234	
19	Badarpur TPS	705.00	50	214	264		705.00	49	243	293	
20	Kahalgaon STPS	840.00	58	125	183		840.00	58	156	214	
21	Simhadri	1000.00	72	98	169		1000.00	72	104	176	
	Sub-Total	6475.00					6475.00				
	Total Coal	21395.00				152	21895.00				163
Lignite Based thermal generating Stations of NLC1											
1	TPS-I	600.00	43	133	182	173	600.00	43	135	182	179
2	TPS-II Stage-I	630.00	31	123	155		630.00	32	130	162	
3	TPS-II Stage-II	840.00	34	123	158		840.00	35	130	165	
4	TPS-I (Expansion)	420.00	105	114	219		420.00	104	122	226	
	Total Lignite	2490.00					2490.00				
Gas /Liquid Fuel Based Stations of NTPC											
A. Using Natural Gas/RLNG as Fuel											
1	Dadri CCGT	829.78	34	129	162	245	829.78	33	335	369	332
2	Faridabad	431.00	63	122	185		431.00	63	94	157	
3	Anta CCGT	419.33	27	135	162		419.33	27	98	125	
4	Auraiya GPS	663.36	25	161	186		663.36	25	119	145	
5	Gandhar GPS	657.39	54	223	277		657.39	83	273	356	
6	Kawas GPS	656.20	85	387	472		656.20	53	645	699	
		3657.06					3657.06				
C. Using Liquid Fuel (Naphtha/HSD) as Fuel											
1	Dadri CCGT	829.78	34	687	721	716	829.78	33	730	763	899
1	Faridabad										

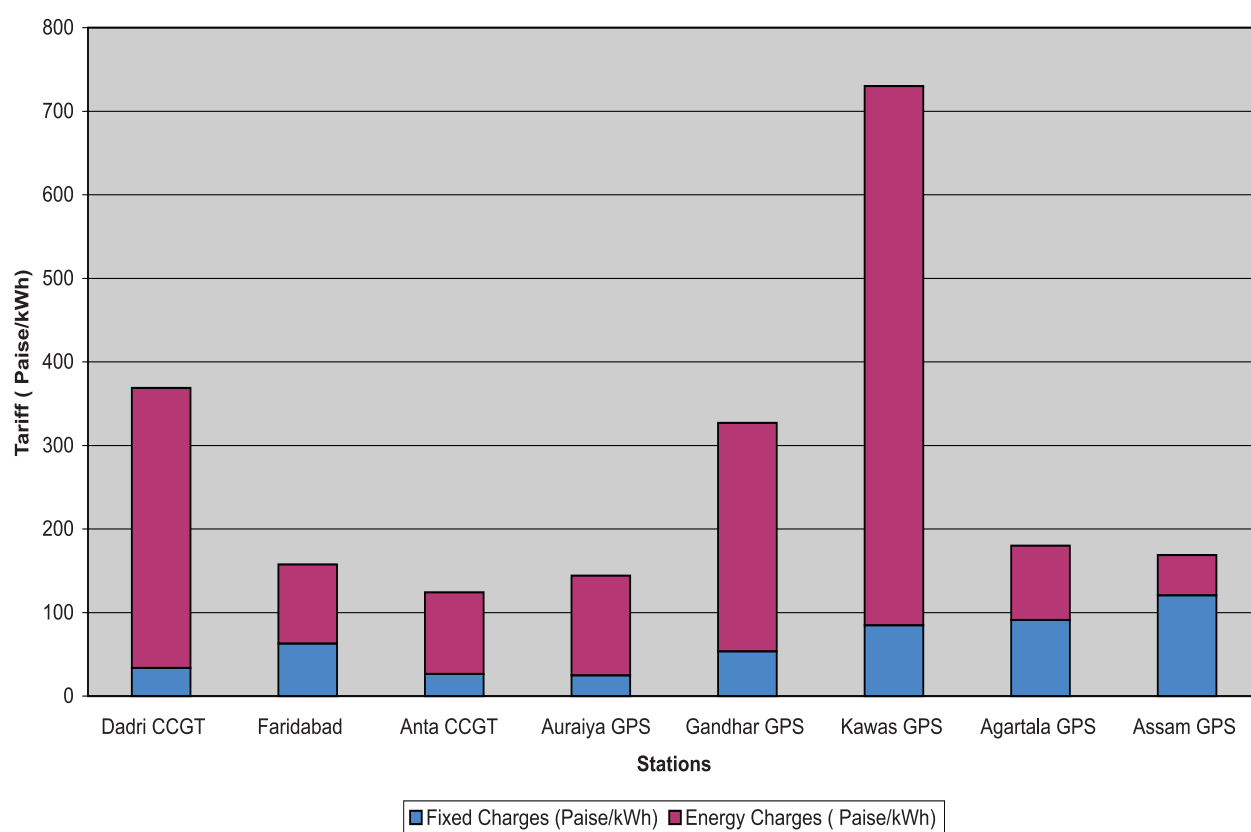
Note: 1. Normative PLF for NLC stations is considered 75%  
2. Energy charges as in March 2007 & 2008 respectively..  
3. Based on Provisional Annual Capacity charge.

**Cost of Generation of Coal Based Pit head generating Stations of NTPC in March 2008**



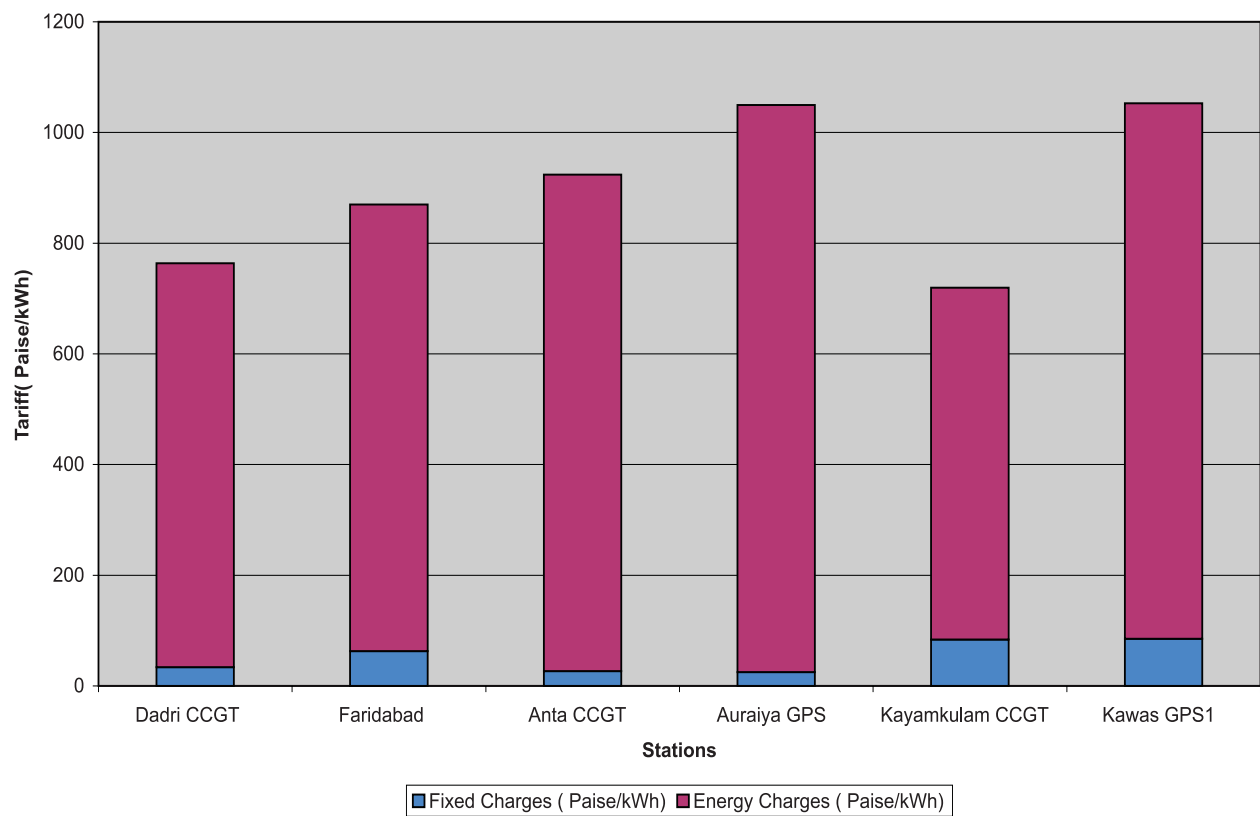


### Cost of Generation ( Tariff) on Gas/RLNG fuel of NTPC and NEEPCO Gas Based stations in March, 2008

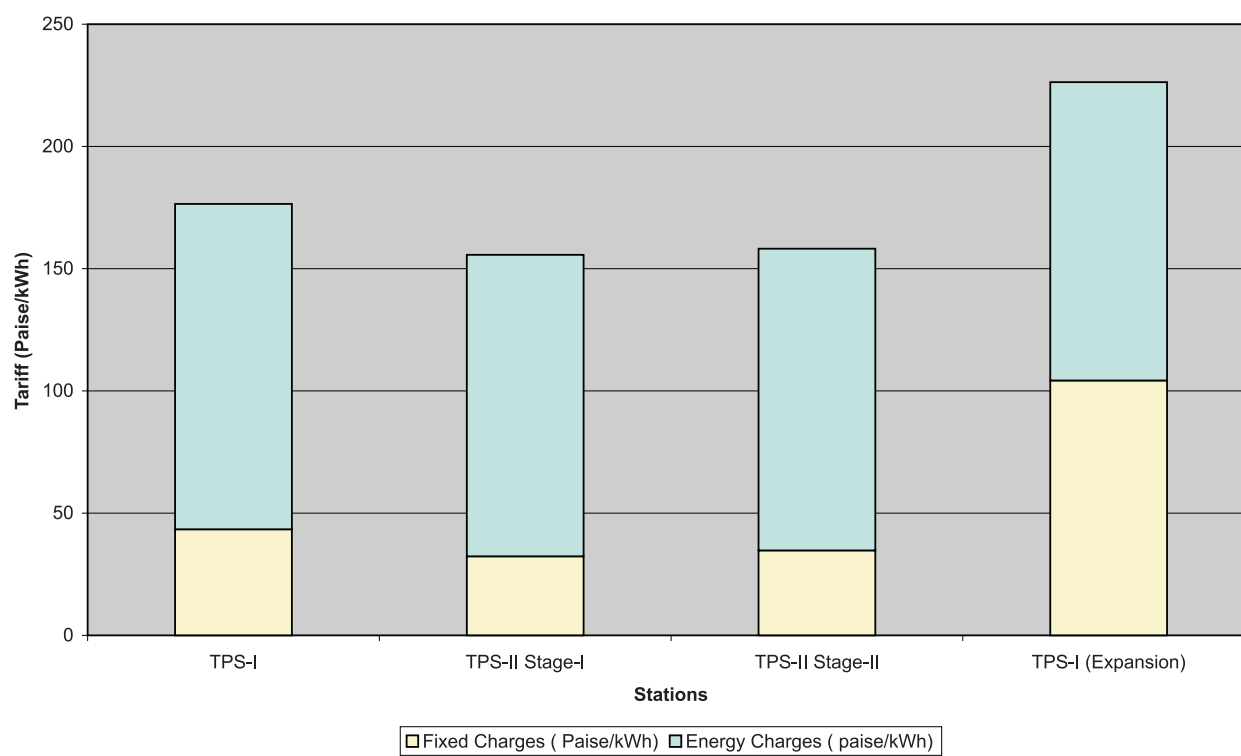




### Cost of Generation on Liquid Fuel of NTPC Combined Cycle Stations in March, 2008



### Cost of Generation on Lignite Based Stations of NLC in March, 2008









**CENTRAL ELECTRICITY REGULATORY COMMISSION**

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