

# 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 Centre 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 The ERC Act, 1998 has since been replaced by the Electricity Act, 2003.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 Chairman 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 A.K. Basu**  
**Chairperson and Chief Executive**  
**(April, 2002 to 23rd March, 2007)**

Shri A.K. Basu served as Chairperson from April, 2002 to 23rd March, 2007.

Shri Basu had a brilliant academic career. He was First in order of Merit among all candidates in School Final (Matriculation) Examination, West Bengal, in 1958. He stood First in the First Class in B.A. (Honours in Economics) Examination, Calcutta University in 1962, from Presidency College.

He joined the Indian Administrative Service in 1965 and was allotted West Bengal Cadre. In Government of West Bengal, he has held several important positions, including Commissioner of Calcutta Municipal Corporation, Education Secretary, Labour Secretary, and Principal Secretary, Food and Civil Supply. He was the Chief Electoral Officer of the State from 1983 to 1987.

Shri Basu has worked in various capacities in Government of India. He was Deputy Secretary, Ministry of Home Affairs during 1976-77. He worked as Special Assistant to the Union Minister of Education, Social

Welfare & Culture, during 1977 to 1980. He was Special Secretary, Ministry of Home Affairs, Government of India, during 1996-97.

Shri Basu has had a long association with industry and infrastructure sectors. He was Development Commissioner, Iron & Steel, and then Joint Secretary, Ministry of Steel, Government of India, during 1988 to 1993. He served as Additional Secretary & Advisor (Industry & Minerals), Union Planning Commission during 1995-96, dealing with Plans and Projects of nearly 20 economic and infrastructure Ministries of Government of India. He was Secretary, Ministry of Steel, Government of India, from August, 1997 to May, 2000. Shri Basu served as Secretary, Ministry of Power, Government of India from June 2000 till March 31, 2002. During this period, he pioneered several important initiatives for reforms and restructuring of the Indian Electricity Sector, including distribution reforms through the Accelerated Power Development and Reforms Programme, formulation of the Electricity Bill

2003, one-time settlement of dues of the Central Utilities, ranking study for hydro projects, energy conservation and demand side



Shri K.N. Sinha joined the Central Electricity Regulatory Commission as its Member on 11th May, 2001. Before joining the Commission, Shri Sinha was Member (Planning), Central Electricity Authority and ex-officio Additional Secretary to Government of India.

He obtained a Bachelors Degree in Electrical Engineering from Birla Institute of Technology, Ranchi in 1962. Immediately after graduation, Shri Sinha joined the then Uttar Pradesh State Electricity Board as an Assistant Engineer and was assigned the job of design and engineering of Ramganga Multipurpose River Project. He joined the Central Power Engineering service in 1964. Shri Sinha continued academic pursuit to upgrade his professional skills and obtained a Masters' Degree in Economics from the University of Himachal Pradesh in 1989, and a Post Graduate Diploma in Financial Management from Indira Gandhi National Open University, New

management, restructured programme for rural electrification etc.

**Shri K.N. Sinha**  
**Member**  
**(May, 2001 – May, 2006)**

Delhi in 1995. In 1980, he was awarded a UN Fellowship for training in Management of Thermal Power Stations and basic modern management course on Rural Electrification at National Rural Electric Co-operative Association, Washington, USA.

Shri Sinha has made significant contribution in the power development of the country. In his early days of his career, as an Executive Engineer with the Government of Manipur, he introduced "Spot billing" and "Cash collection at the doors" – concepts relevant in a hilly region of the country where the consumers live in far flung areas. As Member-Secretary of the 13th Electric Power Survey Committee and Chairman of 16th Electric Power Survey Committee, he brought out the 13th and 16th Electric Power Survey Reports, both being path-breaking documents introducing new concepts and approach, making the electrical energy demand projections more meaningful and

realistic. He was part of the group responsible for designing the technical and techno-financial framework of legislation for inviting Private Sector participation in power generation. As Member (Planning), CEA, he finalised two landmark documents – "The Fuel Map of India" and "Power on Demand by 2012", both the documents being the basis for power planning in the country in the time frame up to 2012. Shri Sinha has been responsible for introducing / redesigning a series of systems and publications in the Central Electricity Authority. He set up the procedure, methods

and framework of examination and vetting of tariff proposals of Central PSUs in the power sector. He was the co-chairman of the Indo-Nepal Power Exchange Committee dealing with the tariff charges for international exchange of power between India and Nepal. He streamlined the procedure for project appraisal and techno-economic clearance to power schemes – a statutory function of the CEA under Electric (Supply) Act, 1948. He was Chairman of the Standing Committee on Project Appraisal and co-chairman of Standing Committee on Firm Financial Package Appraisal.





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

Shri Bhanu Bhushan joined the Central Electricity Regulatory Commission as a Member on 4th 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 Bhushan 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 Akbar Hameed Jung**  
**Member**  
**(February, 2005 – February, 2007)**

Shri Akbar Hameed Jung joined the Central Electricity Regulatory Commission as a Member on 18th February 2005. Before joining the Commission Shri Jung was Secretary, Ministry of Civil Aviation and Chairman, Air India Limited w.e.f 1st June 2000 to 28th February 2002. He served as Special Secretary, Ministry of Power from 20.12.1999 to 31.5.2000.

Shri Jung acquired one year training at Birmingham University, U.K. for Development Administration and Dynamics of Change. He has done a two-month Training Course in Public Enterprise Management at Harvard, USA. He has also done Personnel Management in IIPA and Administrative Staff College in Public Enterprise and Project Financing conducted by the Economic Development Institute of the World Bank.

While Shri Jung was Additional Secretary and

Financial Adviser, Ministry of Steel & Mines from August 1997 to 19th December, 1999, he remained on the Board of SAIL, Kudremukh Iron Ore Company, Vizag Steel Plant, NALCO, BALCO, Hindustan Zinc Limited and Hindustan Copper Ltd. His responsibilities involved Disinvestment of PSUs, Financial Restructuring, Trade & Purchase of vast amount of raw material, finalization of contracts. As Financial Adviser, responsibilities, inter-alia involved financial and business restructuring of Public Enterprises, Budgetary control and offering finance advice to the Secretaries/Ministries on important proposals.

He held the post of Additional Deputy Comptroller & Auditor General from August 1996 to July 1997 and supervised Accounts of the States & Centre & In-charge of Revenue Audit-Direct Taxes of the Government of India mainly Income Tax & States Sales Tax. He served as Joint Secretary, Ministry of Power

from July 1991 to July 1996 and remained on the Board of NTPC, PFC, and Power Grid Corporation. During this tenure his job was to look after Transmission (Power Grid) and Power Generation (NTPC), DVC, Coordination of coal movement for SEBs. He was In-charge of management of the five Power Grids. He had close interaction with World Bank.

Shri Jung was Social Security Adviser to Government of Afghanistan for three years

between 1984-1987. He was Accountant General – Maharashtra and Director General, Central Revenues, New Delhi. He worked as FA & CAO & later as Central Provident Fund Commissioner under the Ministry of Labour. He also served as Deputy Secretary in the Ministry of Home Affairs – In-charge of Para Military Forces like BSF, CRPF, ITBP, CISF and IB. In CAG Office he was In-charge of Personnel and was posted to London for Audit of European Missions.



**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 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 2006-07 are given below in Table-1 and 2 :

**Table - 1**  
**SANCTIONED/FILLED/VACANT POSTS IN THE COMMISSION**  
**AS ON 31 MARCH, 2007**

<b><u>S. No.</u></b>	<b><u>Name of the Post</u></b>	<b><u>No. of Posts sanctioned</u></b>	<b><u>No. of Posts Filled</u></b>	<b><u>Vacant Posts</u></b>
1.	Secretary	1	-	1
2.	Chief	4	3	1
3.	Joint Chief	5	4	1
4.	Deputy Chief	13	6	7
5.	Integrated Financial Advisor	1	-	1
6.	Assistant Chief	16	9	7
7.	Bench Officer	2	2	-
8.	Assistant. Secretary	2	1	1
9.	Pay & Accounts Officer	2	2	-
10.	Principal Private Secretary	4	4	-
11.	Private Secretary	5	5	-
12.	Assistant	6	5	1
13.	Personal Assistant	7	5	2
14.	Stenographer	4	3	1
15.	Receptionist-cum-Telephone	1	1	-

	Operator			
16.	Senior Peon/Daftry	2	-	2
17.	Peon	4	2	2
18.	Driver	4	4	-
	<b>TOTAL</b>	<b>83</b>	<b>56</b>	<b>27</b>

### Recruitment Status during the year 2006-07

Table - 2  
RECRUITMENT DURING 2006-07

<b>S.No.</b>	<b>Name of the Post</b>	<b>No. of posts filled</b>
1.	Joint Chief	1
2.	Deputy Chief	2
3.	Assistant Chief	3
4.	Pay & Accounts Officer/Senior Accounts Officer	2
5.	Personal Assistant	1
	<b>Total</b>	<b>9</b>



# REGULATORY PROCEDURES AND PROCESSES

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

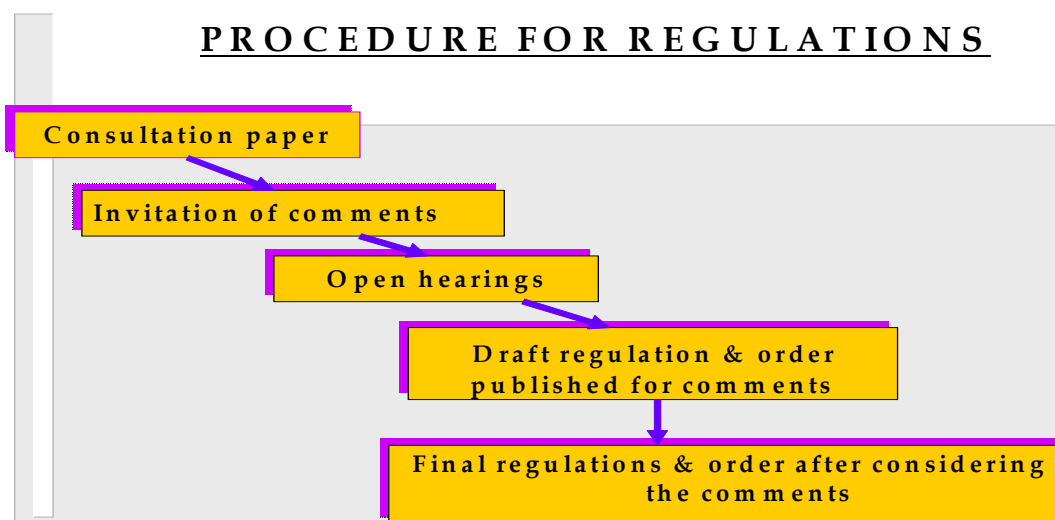
1. Notifies Regulations
2. Issues orders on petitions relating to
  - o Grant of licence
  - o Determination of tariff
  - o Review and miscellaneous petitions.

## 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 for comments from the stakeholders. It is only after receipt and consideration of the comments that the Regulations are finally published/notified in the Gazette of India and a statement of reasons is posted separately.

## 2. Procedure for orders on petitions



Petitions/Applications are made before the Commission primarily for

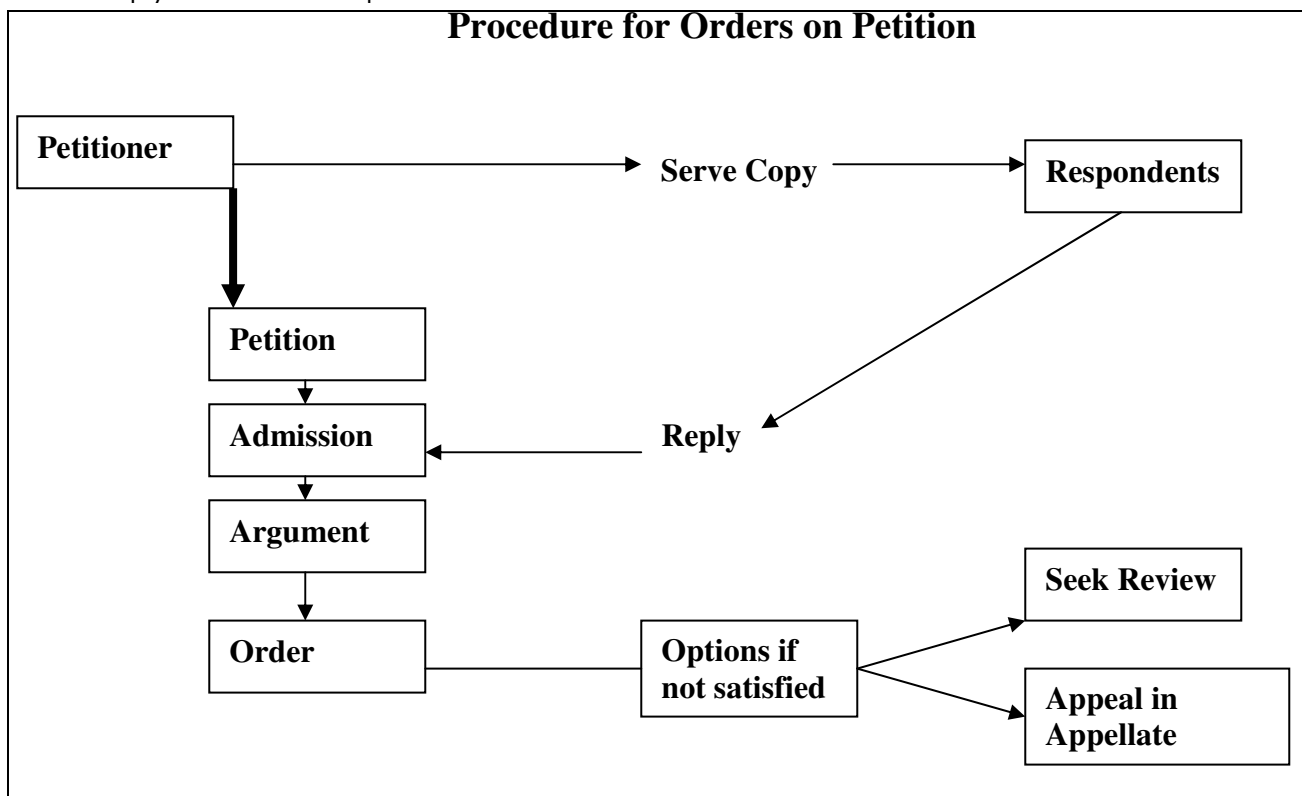
- tariff determination for generation and transmission;
- grant of licence for inter-State Transmission and inter-State trading in electricity.

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

- Miscellaneous Petition
- Review Petition

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. 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 of capacity charges for a hydro generating station is linked to achieving target availability corresponding to water availability called the Capacity Index. The concept of Capacity Index ensures use of storage type hydro generating stations during peak hours and discourages spillage of water in case of run of the river hydro generating stations. The notional variable charge for the hydro generating station is the average least variable cost of the thermal generating stations in the region. This facilitates full despatch of hydro generating stations in merit order.

Scheduling of all inter-State generating stations regulated by CERC is done by the Regional Load Dispatch Centers on day-ahead basis as per the following time line :

09.00 A.M.	:	Declaration of availability for the next day by Generating Station.
10.00 A.M.	:	RLDC informs the entitlement to each beneficiary to the respective SLDC.
03.00 P.M.	:	SLDC send their requisitions along with bilateral to RLDC.
05.00 P.M.	:	RLDC issues dispatch schedule of each Generating Station and drawal schedule of each beneficiary.
10.00 P.M.	:	Deadline for requesting changes in the schedules.
11.00 P.M.	:	RLDC issues final dispatch and drawal schedules.
Midnight	:	The schedules come into effect.

Any real time deviations from the above schedules are treated as "Unscheduled Interchanges" (UI). The commercial settlement for real time deviations/inter changes is done through a variable frequency linked rate called the UI rate. The mechanism is unique to India and provides an innovative and effective commercial mechanism for inducing grid discipline in the absence of spinning reserves.

The utilities are also entitled to incentive for the station performance as per the incentive formula. Failure to provide

availability below the pre-set target attracts pro-rata penalty.

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) Interaction with Hon'ble Minister of Power

An interaction of Chairpersons and Members of all Regulatory Commission with the Hon'ble Minister of Power was held on 20th – 21st April 2006 at New Delhi. The Central Commission coordinated this meeting in which the Regulators shared their experiences on the on.

functioning of the Regulatory Commissions. The Hon'ble Minister of Power was apprised of the various significant steps taken, orders/regulations issued by the Regulatory Commissions towards implementation of the provisions of the Electricity Act, 2003. The Regulators also shared the problems being faced by them in discharging their functions as an independent instituti



Interaction with Hon'ble Minister of Power





Forum of Regulators Meeting with the Hon'ble Minister of Power

## (ii) 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, 4th Main
6. Shri C.P. Jain, 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 A. J. Engineer, Director, Tata Power Company Ltd., Mumbai
- 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
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 Sanjay Bhatia, Managing Director, Maharashtra State Electricity Distribution Co. Ltd., Mumbai
16. Shri S.C. Mahapatra, Chairman & Managing Director, GRIDCO Ltd., Bhubaneswar
17. Shri Ashok K. Khurana, 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



Central Advisory Committee Meeting

The 7th meeting of the Central Advisory Committee (CAC) was held on 29th May, 2006 at India Habitat Centre

(IHC), New Delhi to discuss the important Orders/Regulations issued by CERC on "Terms and Conditions of Tariff", "Open Access in Inter-State Transmission" and "Inter-State Trading" and also to deliberate on the emerging issues of Market Development. In particular, the following issues were discussed :-

01. Discussion on various important orders/regulations, issued by the CERC in discharge of its functions.

02. Issues relating to trading and development of market in electricity.

03. Measures to strengthen the consumer's advocacy in the electricity sector.

04 Grid Discipline.

05. Advance Against Depreciation.

06 Norms for grid interactive renewable power.



Central Advisory Committee Meeting



### **(III) MOUs/Bilateral Agreements with Foreign Governments / International Organisations**

#### **A. Memorandum of Understanding (MOU):**

- (i) between Central Electricity Regulatory Commission (CERC) and Massachusetts department of Telecommunications and Energy (MDTE),
- (ii) MOU between CERC and US Energy Association (USEA); and
- (iii) MOU between CERC and Federal Energy Regulatory Commission (FERC).

The CERC, MDTE and FERC agreed to participate as partners in the India Energy Partnership Program (IEPP). The USEA entered into a co-operative Agreement with the U.S. Agency for International Development (USAID) Office of Energy, Environment and Technology, whereby USEA agreed to organise and implement an India Energy Partnership Program (IEPP). The IEPP recognises the mutual interest between FERC & CERC and MDTE & CERC in exchange of information and experience. The IEPP is designed for mutual transfer of experiences and information back and forth

between FERC & CERC and MDTE & CERC in an effective and efficient manner and to foster long-term sustainable relationships between the partners. It may involve all aspects of regulatory operations and administration such as management, restructuring, finance and accounting, independent power marketing, customer service, bulk power transactions, telecommunications, strategic planning and other necessary areas of expertise.

Two delegations from CERC - one led by Chairperson, CERC and other led by Chief (Engg.) visited USA and Johannesburg (South Africa) as part of the exchange programme. The delegation led by Chief (Engg.) visited Johannesburg under the Peer Exchange Programme of USAID during 26<sup>th</sup> - 30<sup>th</sup> June, 2006. The delegation led by Chairperson, CERC visited USA for the bilateral discussion with Michigan Public Service Commission and also attended a meeting of World Forum on Energy Regulation-III during 05<sup>th</sup>-10<sup>th</sup> October, 2006.

The delegation led by Ms. Marjorie Philips (Vice-President of Regulatory Affairs), from Constellation, visited CERC on 05<sup>th</sup> December, 2006 and interacted with the officials of CERC and discussed issues relating to Energy Trading and their experience on it in U.S.

The delegation led by Mr. Wendell Holland, Chairman, Pennsylvania Public Utility Commission (PaPUC), U.S.A. visited CERC on 13<sup>th</sup> December, 2006. During the visit, they interacted with the officials of CERC and discussed issues relating to Consumer Choice and Trading.

#### **B. Interaction with Afghanistan delegation:**

An executive exchange visit was arranged by USEA to CERC on 20<sup>th</sup> December, 2006 (under the USAID Energy Partnership Programme for Afghanistan). A delegation of top executives/managers of the Ministry of Energy & Water of Afghanistan interacted with the officials of CERC to learn about the achievements of the Indian energy and electric power sector in the country.

#### **C. Interaction with the delegation from Sri Lanka :**

Officers and Engineers from Public Utility Commission and Ceylon Electricity Board, Sri Lanka visited CERC on 12<sup>th</sup> October, 2006 and interacted with the officials of CERC. They were given exposure on the Regulatory Reforms/Practices in the Electricity Sector in India, Terms & Conditions of Generation Tariffs and Open Access in inter-State Transmission etc.

#### **D. Interaction with the delegation from Ethiopia :**

Ethiopian delegation visited India and interacted with the officials of CERC on 16<sup>th</sup> June, 2006. They were given exposure on the Electricity Act, and reforms in the Electricity Sector in India.

#### **E. 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 has played a pivotal role in building consensus amongst the electricity regulators in the country, on several issues of critical importance facing the power sector. During the year 2006-07, four meetings were held.

#### **(iv)Seminar/Conferences/Training /Exchange Programmes**

The details of Seminar / Conferences / Training / Plant visits / Exchange Programs attended by the Chairperson, Members, Secretary and Staff of

the Commission are provided in

**Annexure III and Annexure IV.**

### **Notifications Issued during the Year (2006-07)**

The Commission during the year 2006-07 has issued following notifications:

#### **NOTIFICATIONS**

<b>S. No.</b>	<b>Notification No. &amp; Date</b>	<b>Subject</b>
01.	Issue No.63 dated 13.04.2006	The manner of Billing of Charges by the Central Power Sector Utilities.
02.	Issue No.64 dated 13.04.2006	CERC (Procedure, Terms and Conditions for Grant of Trading Licence and other related matters) (Amendment) Regulations, 2006.
03.	Issue No.81 dated 17.05.2006	Rates for the purpose of Bid Evaluation for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees.
04.	Issue No.98 dated 08.06.2006	CERC (Terms and Conditions of Tariff) (First Amendment) Regulations, 2006.
05.	Issue No.123 dated 28.08.2006	Amendment to Electricity Grid Code.
06.	Issue No.151 dated 09.10.2006	Provisional Billing of Charges upto 31.03.2007.
07.	Issue No.171 dated 22.11.2006	Notification of Escalation Rates, Inflation Rate, Discount Rate and Dollar - Rupee Exchange Rate as per Competitive Bidding

Guidlines for October 2006 - March 2007.			
08.	Issue No.185 dated 13.12.2006	(a) CERC (Payment of Fee) (Amendment) Regulations, 2006. (b) Indian Electricity Grid Code (Second Amendment), 2006. (c) CERC (Open Access in inter-State Transmission) (Amendment) Regulations, 2006. (d) CERC (Procedure for making of Application for Determination of Tariff, Publication of the Application and other related matters) (Amendment), Regulations, 2006.	
9.	Issue No.60 dated 14.03.2007	CERC (Terms and Conditions of Tariff) (Amendment) Regulations, 2007.	
10.	Issue No.62 dated 16.03.2007	Billing Charges of CPSUs upto 30.09.2007.	

## ANNUAL STATEMENT OF ACCOUNTS

1. 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 2006-07, the budgetary support extended to the Central Commission as grants-in-aid was Rs.5.65 crore against which expenditure incurred was Rs.7.17 crore. The major share of expenditure was on Rate, Rent and Taxes (RRT) followed by salary. The deficit of Rs.1.52 crore has been met from the receipt of CERC. The annual accounts of CERC for the year 2005-06 duly audited by the C&AG were placed before both Houses of Parliament.

## ACTIVITIES DURING THE YEAR

During the year 2006-07, the Commission dealt with 335 petitions - 157 petitions carried forward from the previous year and 178 petitions filed during 2006-07. Of the total, 231 petitions were disposed of during 2006-07. Details of Petitions are documented in [Annexure-V](#).

### IMPORTANT ORDERS AND REGULATIONS DURING 2006-07

#### THERMAL GENERATION

##### 1. 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

- (i) Escalation rate for domestic coal. (Separately for evaluation and payment)
- (ii) Escalation rate for domestic gas. (Separately for evaluation and payment)
- (iii) Escalation rates for different escalable sub-components of energy charge for plants based on imported coal. (Separately for evaluation and payment)
- (iv) Escalation rate for different escalable sub-components

1.1 The Ministry of Power (MOP), vide its Notification dated, 19.01.2005, issued *Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees*. These guidelines have been amended on 30.03.2006 and 18.08.2006. These guidelines provide that the CERC shall notify and update 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.

1.2 The clause 5.6(vi) of the guidelines provide for following escalation rates to be notified by CERC every six months separately for the purpose of bid evaluation and payment:

- of energy charge for plants based on imported gas. (Separately for evaluation and payment)
- (v) Inflation rate to be applied to indexed capacity charge component.
- (vi) Inflation rate to be applied to indexed energy charge component in cases of captive fuel source.
- (vii) Discount rate to be used for bid evaluation.
- (viii) Dollar-Rupee exchange variation rate. (For the purpose of evaluation)



1.3 The Commission published the draft escalation rates on 29.09.2006 on its website seeking Comments/suggestions of the stakeholders including State Regulatory Commissions in respect of the above rates excluding (i), (ii) & (iv). The Commission was assisted by the Consultants Earnest & Young on deriving the escalation rates/indices for the imported coal and captive mine coal. After taking into consideration the comments of the stakeholders, Commission notified the Escalation Rate on 26.10.2006 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 in respect of the above rates excluding (i), (ii) & (iv). The Commission amended the Notification on 22nd November 2006 after correcting certain inadvertent errors in data considered and methodology adopted for the computations of escalation rates/indices for the purpose of payment.

1.4 The escalation rates/indices notified as per the Notification dated 22.11.2006 are as follows:

**I : Annual Escalation Rates for Bid Evaluation for the period Oct. 2006 - Mar. 2007**

<b>S.No</b>	<b>Description</b>	<b>Annual Escalation Rates for Bid Evaluation</b>
<b>1</b>	Inflation rate to be applied to indexed capacity charge component	5.37%
<b>2</b>	Discount rate to be used for bid evaluation	10.60%
<b>3</b>	Dollar-Rupee exchange variation rate (for the purpose of bid evaluation)	1.07%
<b>4</b>	Escalation rates for different escalable sub-components of energy charge for plants based on imported coal (Separately for evaluation and payment)	
<b>4.1</b>	Escalation Rate for coal sub-component	3.46%
<b>4.2</b>	Escalation Rate for transportation sub-component	9.08%
<b>4.3</b>	Escalation Rate for inland handling sub-component	5.37%
<b>5</b>	Inflation rate to be applied to indexed energy charge component in cases of	6.61%

	captive coal mine source.	
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**II: Annual Escalation Rates applicable for payment purpose as per the Power Purchase Agreement for the period between October 01, 2006 and March 31, 2007.**

S.No	Description	Annual Escalation Rates for Payment
1	Inflation rate to be applied to indexed capacity charge component.	2.93%
2	Escalation rates for different escalable sub-components of energy charge for plants based on imported coal (Separately for evaluation and payment)	
2.1	Escalation Rate for coal sub-component	43.60%
2.2	Escalation Rate for transportation sub-component	16.71%
2.3	Escalation Rate for inland handling sub-component	2.93%
3	Inflation rate to be applied to indexed energy charge component in cases of captive coal mine source.	2.86%

## **2. TARIFF DETERMINATION**

### **2.1 Tariff of Thermal Generating Stations of National Thermal Power Corporation**

#### **2.1.1**

The National Thermal Power Corporation (NTPC) has a total Installed Capacity of 25412 MW as on 31.03.2007 consisting of 21395 MW on coal and 4017 MW based on Natural gas/Liquid fuel. A new capacity of 710 MW have been added during the current financial year i.e. a 500 MW Unit each at Rihand STPS in Stage-II (2nd unit of stage-II) and at Vindhyachal STPS in Stage-III (1st unit of stage-III) and at FGUTPP in Stage-III. A capacity of 705 MW is added due to acquisition of Badarpur TPS. 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:

Sl. No.	Name of the Generating Station	Installed Capacity as on 31.03.2007	COD of the Station
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### Coal Based Thermal Generating Stations of NTPC

<b>A.</b>	<b><u>Pit head Generating Stations</u></b>		
1	Rihand STPS St-I	1000.00	01.01.1991
2	Rihand STPS St-II	1000.00	01.04.2006
3	Singrauli STPS	2000.00	01.05.1988
4	Vindhyachal STPS St-I	1260.00	01.02.1992
5	Vindhyachal STPS St-II	1000.00	01.10.2000
6	Vindhyachal STPS St-III	500.00	15.07.2007
7	Korba STPS	2100.00	01.06.1990
8	Ramagundam STPS St-I & II	2100.00	01.04.1991
9	Ramagundam STPS St-III	500.00	25.03.2005
10	Talcher TPS	460.00	01.07.1997
11	Talcher STPS St-I	1000.00	01.07.1997
12	Talcher STPS St-II	2000.00	01.08.2005
	<b>Sub-Total</b>	<b>14920.00</b>	
<b>B.</b>	<b><u>Non-Pit-head Generating Stations</u></b>		
1	FGUTPP TPS St-I	420.00	13.02.1992 (Date
			of Take over)
2	FGUTPP St-II	420.00	01.01.2001
3	FGUTPP St-III	210.00	01.01.2007
4	NCTP Dadri	840.00	01.12.1995
5	Farrakka STPS	1600.00	01.07.1996
6	Tanda TPS	440.00	14.01.2000 Date
			of Take over)
7	Badarpur TPS	705.00	01.04.1982
8	Kahalgaoon STPS	840.00	01.08.1996
9	Simhadri	1000.00	01.03.2003
	<b>Sub-Total</b>	<b>6475.00</b>	
	<b>Total Coal</b>	<b>21395.00</b>	

<u>Gas /Liquid Fuel Based Stations of NTPC</u>			
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
		<b>4016.64</b>	
	<b>Total NTPC (Coal+Gas)</b>	<b>25411.64</b>	

2.1.2 Determination of impact of additional capital expenditure incurred during 2001-04:

Having completed the process of tariff determination for the NTPC stations for the period 2001-04, Commission was required to take up the tariff determination process for the period 2004-09 based on new terms and conditions of tariff. Since the tariff for the period 2001-04 was awarded based on the capital cost as on 01.04.2001, Commission was required to firm up the capital cost as on 01.04.2004. Commission therefore, dealt with 15 petitions of revised fixed charges on account of additional capitalization first and passed the final orders during the financial year 2005-06. In these petitions Commission admitted additional

capital expenditure after applying prudence check and arrived at the capital cost to be considered for the purpose of tariff for the period 2004-09 in respect of NTPC's stations namely Kayamkulam GPS, FGUTPP Stage-II, Vindhayachal STPS Stage-II, Faridabad GPS, Simhadri TPS, Dadri GPS, Vindhayachal Stage-I, Farakka STPS, Rihand STPS, Ramagundam STPS, Anta GPS, NCTPS Dadri, Singarauli STPS, Korba STPS and Tanda STPS. The additional capital expenditure in respect of these stations with the exception of Tanda TPS was less than 20% of the capital cost as on 31.03.2001 admitted by the Commission for the purpose of tariff. Therefore, in terms of clause 1.10 of the notification dated 26.03.2001, the Commission decided not to revise the fixed charges for the period 2001-04. However, the Commission went

into the admissibility of capital expenditure to be included in the capital base as on 01.04.2004 for the purpose of tariff for the period 2004-09. In case of Tanda TPS, Commission decided to additional capital expenditure was more than 20% of the admitted cost.

The Commission had concluded the hearing in four other petitions for the revision of fixed charges, in respect of Talcher TPS, Kahalgaon TPS, Gandhar GPS and Kawas GPS on account of additional capitalization for the period 2001-04 during 2005-06.

Commission passed the final orders for these stations during 2006-07 after admitting additional capital expenditure after applying prudence check and arrived at the capital cost to be considered for the purpose of tariff for the period 2004-09. In case of Talcher TPS, Commission also revised the annual capacity charges for the period 1999-2000 to 2003-04 vide order dated 24th October, 2005 as the admitted additional capitalization on account of R&M was more than the 20% of the admitted capital cost. The revised capacity charges are as follows:

(Rs. in lakhs)

Particulars	2000-01	2001-02	2002-03	2003-04
Revised capacity charges	15020	17294	18119	19835

The Commission after the prudence check allowed following additional capitalization excluding FERV for the period 2001-04 in respect of NTPC

generating stations to be included in the capital base as on 01.04.2004 as indicated in the table below:-

Sl. No.	Name of the Generating Station	Installed Capacity as on 01.04.2007 (MW)	Capital cost as on 1.04.2001 Rs. Crore	Additional capitalisation during 2001-04 Rs. Crore	Capital cost as on 01.04.2004 Rs. Crore
<b>Coal Based thermal generating Stations of NTPC</b>					
<b>A. Pit head Generating Stations</b>					
1	Rihand STPS St-I	1000.00	2372.27	59.73	2432.00
2	Singrauli STPS	2000.00	1086.96	50.93	1137.89
3	Vindhyachal STPS St-I	1260.00	1398.49	59.67	1458.16
4	Vindhyachal STPS St-II <sup>1</sup>	1000.00	2392.11	55.22	2447.33
5	Korba STPS	2100.00	1473.89	213.02	1686.91
6	Ramagundam STPS St-I & II	2100.00	2235.28	14.08	2249.36

7	Talcher TPS <sup>1</sup>	460.00	431.83	264.18	696.01
8	Talcher STPS St-I	1000.00	2511.48	0.00	2511.48
	<b>Sub-Total</b>	<b>10920.00</b>			
<b>B.</b>	<b>Non-Pit head Generating Stations</b>				
9	FGUTPP TPS St-I	420.00	940.70	4.52	945.22
10	FGUTPP St-II	420.00	1234.82	23.13	1257.95
11	NCTP Dadri	840.00	1641.81	72.35	1714.16
12	Farrakka STPS	1600.00	3017.32	18.25	3035.57
13	Tanda TPS <sup>1</sup>	440.00	607.00	177.47	784.47
14	Kahalgaoon STPS	840.00	1959.75	55.22	2014.97
15	Simhadri <sup>1</sup>	1000.00	3180.76	128.36	3309.12
	<b>Sub-Total</b>	<b>5560.00</b>			
	<b>Total Coal</b>	<b>16480.00</b>			
<b>Gas /Liquid Fuel Based Stations of NTPC</b>					
<b>A. Using Natural Gas as Fuel</b>					
16	Dadri CCGT	829.78	866.32	13.41	879.74
17	Faridabad	431.00	902.90	38.01	940.91
18	Anta CCGT	419.33	451.67	1.02	452.69
19	Auraiya GPS	663.36	724.15	3.26	727.41
20	Gandhar GPS	657.39	2425.05	-20.44	2404.61
21	Kawas GPS	656.20	1513.19	0.76	1513.94
22	Kayamkulam CCGT	359.58	1125.31	10.08	1135.39

- Note:
1. Capital cost in respect of Tanda TPS is as on date of take over i.e., 14.01.2000.
  2. Capital cost in respect of Simhadri STPS is as on 01.04.2003

revise the fixed charges because the 2.1.3 As regards tariff petitions for the period 2004-09, NTPC had sought additional time to submit the audited accounts up to November 2004. Commission allowed the time to NTPC for the same. NTPC revised the tariff petitions based on the admitted additional capitalization. Commission undertook process of tariff determination for the period 2004-09 thereafter. The

Commission awarded the tariff (Annual capacity charges and base energy charges) in various tariff Petitions of NTPC for the period 2004-09 in respect of its coal based and Gas/Liquid fuel based thermal generating stations after giving due opportunity to all concerned to file their comments and after due consideration of comments made in the written submissions and during the hearings. The details of tariff awarded is placed

in the **Appendix - A**. Apart from the above, the Commission has also concluded the hearing in case of tariff petitions of new

stations of NTPC namely Talcher TPS stage-II, Rihand stage-II and Ramagundam stage-III.

## 2.2 Tariff of thermal generating stations of Neyvelli Lignite Corporation

2.2.1 The Neyvelli Lignite Corporation (NLC) has a total Installed Capacity of 2490 MW as on 31.03.2006 based on lignite fuel. The Installed Capacity and the date of commercial

operation of each of the generating station of NLC

Sl. No.	Name of the Generating Station	Installed Capacity as on 31.03.2007	COD of the Station
<b>Lignite Based thermal generating Stations of NLC1</b>			
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
	<b>Total Lignite</b>	<b>2490.00</b>	

2.2.2 Thermal Power Station-I supplies power to single State of Tamil-Nadu whereas, Thermal Power station- II Stage-I & II and Thermal Power Station-I (Expansion) are regional stations supplying power to the constituents of Southern Region in the ratio of pre-specified

allocation. Commission vide order dated 26th September, 2006 awarded the tariff for the Thermal power station-I for the period 2004-09 on net fixed asset concept and based on lignite transfer price as per earlier BPSA with the TNEB.

Sl. No.	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Annual capacity Charge (Rs. in lakh)</b>						
1	Interest on Loan	97	58	48	47	45
2	Interest on Working Capital	1755	1765	1776	1790	1798
3	Depreciation	1359	1359	1359	1359	1359
4	Advance Against	0	0	0	0	0

	Depreciation					
5	Return on Equity	2093	1961	1789	1607	1428
6	O & M Expenses	9120	9486	9864	10260	10668
	<b>TOTAL</b>	<b>14425</b>	<b>14630</b>	<b>14835</b>	<b>15063</b>	<b>15299</b>

**Energy Charge (Paise/kWh) Ex-bus: 132.11**

Energy Charge is subject to adjustment for fuel price and GCV.

### **2.2.3 Tariff of NLC Thermal Power Stations-II stage-I and stage-II.**

The Commission was unable to undertake the tariff determination for the thermal power station-II of NLC due to stay granted by the Tamil Nadu High Court on the CERC regulation for the period 2001-04. The Commission undertook the tariff determination process for the project after vacation of stay by Delhi High Court after transfer of case from Tamil Nadu High Court to Delhi High Court. Commission decided to continue with the Net Fixed Asset (NFA) concept.

The lignite transfer price was a major issue for the NLC station. Under the direction of Ministry of Coal, NLC was determining lignite transfer prices in the respective year on their own which were not acceptable to the Southern Region beneficiaries. The Commission's approach was to allow time to both NLC and TNEB to resolve the lignite transfer price issues among themselves. But when the matter was not resolved the Commission directed that the matter be reviewed by Ministry of Coal after

taking due consideration of the views of the beneficiaries. Ministry of Coal after going into the concerns expressed by beneficiaries finalized the detailed principles and norms for the determination of lignite transfer price vide their order 30th January, 2006. NLC based on the above order of Ministry of Coal worked out the revised lignite transfer prices, which were still not acceptable to the beneficiaries. The Commission therefore had constituted a Single Member Bench under Shri A.H. Jung, Member to reconcile the difference and make suitable recommendations to the Commission. The Bench deliberated various issues involved in lignite transfer pricing of NLC mines after hearing the parties concerned and submitted his recommendations vide order dated 08.01.2007. Commission deliberated on the recommendations of the Single Member Bench with regard to lignite transfer price and tariff for the station on 22.02.2007 and awarded the final tariff for the station after deciding the lignite transfer price vide order dated 23.03.2007. The lignite transfer



price decided by the Commission are as follows:

The tariff allowed by the Commission for period 2001-04 is as follows:

(Rs./MT)			
Name of Mine	2001-02	2002-03	2003-04
Mine-II Stage-1	661	691	719
Mine-II Stage-2	570	599	628
Mine-I (Expansion)			1749
Mine-IA			1024
Pooled Price			977

The tariff allowed by the Commission for period 2001-04 is as follows:

Particulars	TPS-II Stage I (3x210 MW)			TPS-II Stage II (4x210 MW)		
	2001-02	2002-03	2003-04	2001-02	2002-03	2003-04
Annual Fixed Charges (Rs. in lakh)						
Interest on Loan	0	0	0	0	0	0
Interest on Working Capital	1257	1305	1685	1611	1672	2337
Depreciation	725	725	725	1148	1148	1148
Advance Against Depreciation	0	0	0	0	0	0
Return on Equity	2358	2242	2126	5122	4938	4755
O & M Expenses	6307	6685	7087	8446	8953	9490
<b>TOTAL</b>	<b>10647</b>	<b>10957</b>	<b>11623</b>	<b>16327</b>	<b>16711</b>	<b>17730</b>
<b>Energy charge (Paise/kWh)</b>						
	<b>84.33</b>	<b>88.04</b>	<b>123.37</b>	<b>73.09</b>	<b>76.68</b>	<b>123.37</b>

#### 2.2.4 Tariff of Thermal Power Station-I (Expansion) of NLC in Southern Region :

The Thermal Power Station-I (Expansion) was commissioned on 5th September, 2003.

Commission had passed the final tariff order for the tariff period 2001- 04 in respect of NLC STPS-I expansion (2x210 MW) vide order dated 07.04.2005. The tariff was based on Net Fixed Asset (NFA) concept as prevailing in other

NLC stations. Thereafter, NLC filed the tariff Petition for the period 2004-09. Commission after following the due process of hearing giving opportunity to all the beneficiaries and generator and considering their written and

oral submissions before the Commission filed tariff order for the period 2004-09 vide order dated 23.03.2007. The tariff awarded by the Commission is as follows:

#### Annual Fixed Charges (Rs. in lakh)

Sl. No	Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
1	Interest on Loan	1825	1369	915	567	439
2	Interest on Working Capital	1497	1503	1509	1518	1521
3	Depreciation	5287	5287	5287	5287	5287
4	Advance Against Depreciation	0	0	0	0	0
5	Return on Equity	13883	13875	13865	13726	13276
6	O & M Expenses	4368	4544	4725	4914	5111
	<b>TOTAL</b>	<b>26860</b>	<b>26578</b>	<b>26300</b>	<b>26011</b>	<b>25634</b>

#### Energy Charges (Paise/kWh)

Commission allowed a base energy charge of 114.01 Paise/kWh based on pooled lignite transfer price of Rs. 977/MT for the year 2003-04 which is subject to fuel price adjustment in subsequent years.

#### 2.3 Tariff of Thermal Generating Stations of North-Eastern Electric Power Corporation

2.3.1. The North-Eastern Electric Power Corporation (NEEPCO) has a thermal Installed Capacity of 375 MW as on 31.03.2006 based on Natural gas as fuel. The Installed capacity and the date of commercial operation of each of the generating station of NEEPCO are given below:

Sl. No.	Name of Station	Capacity (MW)	Commercial operation Date
1	Agartala GPS <sup>1</sup>	84.00	01.08.1998
2	Assam GPS <sup>1</sup>	291.00	01.04.1999

### 2.3.2 Tariff of Agartala Gas Power Station and Assam Gas Power Station in North Eastern Region:

The Agartala Gas Power Station and Assam Gas Power Station in North Eastern Region were commissioned in August 1998 and April 1999 respectively. Both these stations supplies 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 gas turbines. Commission earlier vide order dated 5th February, 2003 had confirmed the single part tariff of 225 paise/kWh and 190 paise/kWh respectively for these stations for the period up to 31.03.2003 with a direction to file tariff petition for the period 2003-04. NEEPCO filed the tariff petition for the determination of tariff for

the year 2003-04 in respect of these two stations in June 2003. Commission passed the tariff orders in respect of Assam GPS and Agartala GPS vide order dated 22nd August, 2005 and 9th September, 2005 respectively for the year 2003-04. NEEPCO filed review petitions for the reconsideration of capital cost and review of tariff in respect of above projects for the year 2003-04. Commission vide order dated 14.12.2006 in case of Assam GPS, revised the annual fixed charges to Rs. 29584 Lakh. In case of Agartala GPS, Commission rejected the review petition.

Subsequent to this, NEEPCO filed the petitions for the revision of fixed charges on account of additional capitalization. Commission after applying prudence check, allowed following additional capitalisation during the year 2003-04:

Sl. No.	Name of the Generating Station	Installed Capacity as on 01.04.2007	Capital cost as on 01.04.2003	Additional capitalisation during 2003-04	Capital cost as on 01.04.2004
	Units	(MW)	Rs. Crore	Rs. Crore	Rs. Crore

1	Assam GPS	291	1453.36	10.25	1463.61
2	Agartala GPS	84	319.10	0.17	319.27

## 2.4. Tariff of Badarpur Thermal Power Station

2.4.1 The Badarpur Thermal Power Station is owned by Government of India and operated by NTPC under an Operation & Maintenance contract. The station has got a capacity of 705 MW consisting of three units of 95 MW and two units of 210 MW. The entire power from the station is supplied to the State of Delhi. The tariff of the station was on single

part basis since its inception and was last revised by Gol in 1987. The revised single-part tariff of 61.38 paisa/kWh was based on Net Fixed Asset concept and consisted of capacity charge of 17.64 paisa/ kWh & energy charge component of 43.71 paisa/kWh based on following relaxed norm of plant load factor, station heat rate, auxiliary energy consumption and specific fuel oil consumption.

Parameters	Unit	Norm
Plant Load Factor (PLF)	%	57.08
Station Heat rate	kCal/kWh	3189.00
Auxilliary Energy Consumption	%	12.00
Specific Fuel Oil Consumption	ml/kWh	22.50

2.4.2 Government of India filed the tariff petition for the first time in April 2004 for the determination of tariff for the period 2004-09. The terms and conditions for determination of tariff applicable from 01.04.2004 to 31.03.2009 notified by the Commission did not specify the operational norms to be applied to BTPS. Commission therefore, directed Gol to file performance data of the station for the last five year to take a view on the

operational norms and certain other information. In the meanwhile, Commission also decided to bring the station under the purview of Availability Based Tariff by awarding provisional two-part tariff.

2.4.3 After furnishing of operational data and additional information/clarification, the Commission vide order dated 29th April, 2005 constituted a Single Member Bench under Shri

A.H.Jung, Member CERC to resolve certain preliminary issues namely whether to follow the “net fixed assets” concept or “gross fixed assets” concept; Debt-equity ratio to be considered; Gross block to be considered as on 01.04.2004; R&M expenditure and the expenditure to meet environmental norms to be considered; O&M expenses to be considered in tariff; and Operational norms of gross station heat rate, auxiliary energy consumption, specific fuel oil consumption and target availability/PLF to be applicable, before the Commission takes up the exercise of actual determination of tariff.

2.4.4 The Single Member Bench vide order dated 7th July, 2005 after hearing the parties made the recommendations to

the Commission on the above issues. Commission considered the recommendations of the Single Member Bench in light of written and oral submissions made by the parties concerned. Commission accepted most of the recommendations of the Bench and specified improved operational norms. Commission awarded tariff for the period 2004-09 based on Net Fixed Asset (NFA) concept and specified norms vide order dated 9th May, 2006.

Commission allowed a base energy charge of 165.28 paise/kWh based on prices and GCV of fuel in the month of January, February and March, 2004 which is subject to fuel price adjustment on month to month basis.

The Operational norms specified by the Commission are as follows:

Parameters	Unit	Norm
Target Availability	%	75
Plant Load Factor (PLF)	%	75
Station Heat rate	kCal/kWh	2885
Auxilliary Energy Consumption	%	11
Specific Fuel Oil Consumption	ml/kWh	2.6

#### Annual Fixed Charges (Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	265	101	10	0	0
Depreciation	1559	1559	1559	1559	1559
Advance Against Depreciation	0	0	0	0	0
Return on Equity	3276	3276	3180	2975	2757

O & M Expenses	14275	14275	14275	14275	14275
Interest on Working Capital	2879	2879	2879	2885	2878
<b>TOTAL</b>	<b>22255</b>	<b>22091</b>	<b>21903</b>	<b>21694</b>	<b>21469</b>

### Energy Charges (Paise/kWh)

Commission allowed a base energy charge of 165.28 Paise/kWh based on prices and GCV of fuel in the month of

January, February and March, 2004 which is subject to fuel price adjustment on month to month basis.

## 2.5 Tariff for the Generating stations and Transmission system of Damodar Valley Corporation

2.5.1 The Damodar Valley Corporation (DVC) is a Corporation established under the Damodar Valley Corporation Act, 1948 enacted by the Parliament. DVC is a body promoted by the Central Government in consultation with the provincial Governments, namely, Government of West Bengal and the Government of Bihar. After the re-organisation of the State of Bihar, the provincial Governments of Bihar was replaced with the Government of Jharkhand. The representatives of the provincial Governments of Jharkhand and West Bengal are on the Board of DVC. In terms of provision of DVC Act, the three participating Governments had contributed a sum of Rs. 214.72 Crs up to the year 1968-69. Thereafter, DVC has ploughed back the surplus revenues earned by it from its operation instead of

distributing the same to the participating Governments.

2.5.2 DVC has multifarious functions in the Damodar Valley. DVC has the obligation to undertake development of Damodar Valley, which falls in the provinces of West Bengal and Jharkhand. The activities of DVC are not restricted to generation and sale/supply of electricity. The functions of the DVC include promotion and operation of schemes for irrigation, water supply and drainage, flood control and improvement of flow conditions in the Hooghly river, navigation in the Damodar river and its tributaries and channels, afforestation and control of soil erosion in the Damodar Valley and promotion of public health and agricultural, industrial, economic and general well being in the Damodar Valley under its areas of operation.

2.5.3 The petition for the determination of tariff was filed by the DVC on 10.06.2005 on the direction of the Commission in

petition No.168/2004 (Suo-motu) vide order dated 29.03.2005. The order of the Central Commission in petition No.168/2004 (Suo- Motu) held as follows:

*"The respondent is a statutory authority constituted under Section 3 of the Damodar Valley Corporation Act, 1948. Its functions, inter alias, include promotion and operation of schemes for the generation, transmission and distribution of electrical energy. In terms of Section 79 of the Electricity Act, 2003, the tariff for sale of electricity by the respondent and the inter-state transmission of electricity undertaken by it is to be regulated in accordance with the terms and conditions for determination of tariff notified by the Commission. The respondent was, therefore, advised to make an appropriate application for determination of tariff."*

The Commission had further held as follows:

*"The Commission also makes it clear that it has no intention of fixing consumer tariff for distribution as it is within the domain of respective SERCs."*

2.5.4 Prior to this, the charges for supply of electrical energy were being determined by DVC itself under section 20 of DVC Act. The DVC had made the Petition under sections 61, 62 and

86 of the Electricity Act, 2003 for approval of the revenue requirements and for determining the matters concerning the tariff for electricity activities undertaken by them.

2.5.5 Since there were number of complicated issues involved, the Commission constituted a one Member Bench under Shri K.N.Sinha, Member to examine various tariff issues and make recommendations to the Commission by mid December, 2005. Single Member Bench after hearing the stakeholders made his final recommendation in May, 2006. Commission considered the Single Member Bench recommendation in the light of written and oral submissions of the parties concerned.

2.5.6 Before proceeding to determine tariff, Commission dealt with the special factors pertaining to the petitioner Corporation viz. its statutory status, multifarious responsibilities, the tariff fixation procedure hitherto followed, and the past financial and other commitments with the legitimate expectations borne out of the earlier procedures for tariff fixation.

2.5.7 DVC had prayed that without prejudice to other contentions, a transition period may be allowed to enable them to get into the new dispensation and had requested for continuation of the existing Tariff



till the year 2007-08. The DVC had further prayed that the Plant Operational Norms for the year 2004-05 and 2005-06 as fixed by the One-Member Bench of the Commission for the existing units be made applicable from the years 2007-08 and 2008-09 respectively and onwards. According to the petitioner, requisite improvement would be possible only from the year 2007-08, after the augmentation and improvement of the existing thermal units which has been initiated during the year 2006-07.

2.5.8 Commission appreciated the need for such a transition period. In the past, the Commission had recognized the need for such transition for Central Sector Utilities such as NTPC Limited, NHPC, Power Grid Corporation Limited for the period till 31.03.2001. It is also noteworthy that the above mentioned companies were commercial entities and were not carrying any social and other activities as is the case with the DVC in the instant case.

2.5.9 Commission came to the conclusion that the DVC requires an overall Extension & Improvement of the old generating station. Under this situation, adoption of tariff based on the 2004 regulations since 01.04.2004 will unsettle the position already settled and therefore, the DVC should be allowed to continue with the

existing tariff for a reasonable period to readjust itself with the tariff norms before enforcement of generation and inter-State transmission tariff under the prevailing norms. Commission was of the view that in the absence of such a special dispensation, the DVC was likely to suffer substantial loss and this would not be in public interest, especially in the light of the socio-economic activities entrusted to the DVC.

2.5.10 Commission after giving thoughtful consideration to the issue found merit in the contentions of the DVC. Firstly, that it would not be possible for the DVC to rationalize O&M expenses from the back date or to improve norms from the back date. These were possible only prospectively. Further, it was felt that in the light of the sudden change in the approach and methodology of tariff setting by applying the Commission's Regulations, with effect from 01.04.2004, it would not be possible for the DVC to make amends for the loss in revenue if any, by cutting costs. However, Commission was not convinced that the prevailing tariff should be allowed to continue till 2007-08. It was because as early as in June 2005, the DVC was aware that it would be regulated by Commission so far as its generating stations and transmission system were concerned. The norms applicable, being contents of

public documents, were also known. Commission also found that the DVC has already initiated steps to bring about improvements in operational norms. This was evident by the improvement in norms suggested by it in its own submission which were considered by the One-Member Bench. In view of above, Commission allowed the DVC to continue the prevailing tariff till 2005-06. The tariff with effect from 01.04.2006 was determined based on the terms and conditions duly taking into account the deliberations before the Commission and the recommendations in the One-Member Bench Order dated 05.05.2006.

2.5.11 The Commission finalized the tariff accepting most of the recommendation of the Single Member Bench. Commission also

approved the creation the actuarial fund of Rs.1700 Crore in order to meet the pension & gratuity liability of DVC employees. 60% of this actuarial fund requirement was built into the tariff. The balance 40% was to be contributed by DVC on their own. For the purpose of tariff, Commission considered the cost of generation and inter-state transmission assets in use. Cost of inter-State transmission assets and distribution assets were bifurcated in the ratio of 87:13 ratio. In case of thermal stations, O&M charges were not provided with any annual escalation during the tariff period allowing the DVC to rationalize their O&M expenses to a reasonable level.

2.5.12 Commission awarded the following tariff for the DVC generating stations and the inter-State transmission system:

(Rs. in lakh)

ANNUAL FIXED CHARGES FOR THERMAL STATIONS			
	2006-07	2007-08	2008-09
<b>BOKARO</b>			
Interest on Loan	0.00	0.00	0.00
<b>Interest on Working Capital</b>	1409.22	1461.01	1524.02
Depreciation	1986.41	1986.41	1986.41
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	2317.48	2317.48	2317.48
O & M Expenses	11167.00	11167.00	11167.00
<b>TOTAL</b>	<b>16880.10</b>	<b>16931.90</b>	<b>16994.90</b>
<b>CHANDRAPURA</b>			

Interest on Loan	0.00	0.00	0.00
Interest on Working Capital	810.48	813.38	855.17
Depreciation	851.69	851.69	851.69
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	993.64	993.64	993.64
O & M Expenses	11382.00	11382.00	11382.00
<b>TOTAL</b>	<b>14037.80</b>	<b>14040.71</b>	<b>14082.50</b>
<b>DURGAPUR</b>			
Interest on Loan	0.00	0.00	0.00
Interest on Working Capital	932.72	938.80	972.06
Depreciation	625.00	0.00	0.00
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	784.77	784.77	784.77
O & M Expenses	9508.00	9508.00	9508.00
<b>TOTAL</b>	<b>11850.49</b>	<b>11231.57</b>	<b>11264.83</b>
<b>MEJIA</b>			
Interest on Loan	4444.53	3749.96	2962.07
Interest on Working Capital	1802.10	1762.91	1708.25
Depreciation	5672.41	5672.41	5672.41
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	6617.81	6617.81	6617.81
O & M Expenses	6880.00	6880.00	6880.00
<b>TOTAL</b>	<b>25416.86</b>	<b>24683.09</b>	<b>23840.55</b>
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	221.09	221.09	221.09
O & M Expenses	1092.00	1136.00	1181.00
<b>TOTAL</b>	<b>1228.83</b>	<b>1268.98</b>	<b>1262.37</b>
<b>ANCHET</b>			
Interest on Working Capital	44.80	45.98	47.08
Depreciation	136.08	136.08	136.08

Interest on Working Capital	30.31	31.38	32.53
Depreciation	125.70	125.70	125.70
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	205.42	205.42	205.42
O & M Expenses	722.00	750.00	780.00
<b>TOTAL</b>	<b>1083.43</b>	<b>1112.50</b>	<b>1143.65</b>
<b>TILAIYA</b>			
Interest on Loan	2.29	1.57	0.85
Interest on Working Capital	8.82	9.16	9.51
Depreciation	6.50	6.50	6.50
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	10.63	10.63	10.63
O & M Expenses	314.00	327.00	340.00
<b>TOTAL</b>	<b>342.24</b>	<b>354.86</b>	<b>367.48</b>

#### ANNUAL TRANSMISSION CHARGES FOR TRANSMISSION SYSTEM

	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on Loan	577.57	412.01	244.19
Interest on Working Capital	241.62	246.65	252.04
Depreciation	1473.15	1473.15	1473.15
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	2062.41	2062.41	2062.41
O & M Expenses	4319.00	4490.00	4668.00
<b>TOTAL</b>	<b>8673.75</b>	<b>8684.23</b>	<b>8699.79</b>

#### TOTAL FIXED CHARGES

	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on Loan	5253.04	4372.46	3389.42
Interest on Working Capital	5280.08	5309.28	5400.66

Depreciation	10876.14	10251.14	10251.14
Advance against Depreciation	0.00	0.00	0.00
Return on Equity	13213.24	13213.24	13213.24
O & M Expenses	45384.00	45640.00	45906.00
<b>TOTAL</b>	<b>80006.50</b>	<b>78786.13</b>	<b>78160.47</b>

<b>PENSION LIABILITY</b>	<b>30689.80</b>	<b>30689.80</b>	<b>30689.80</b>
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<b>TOTAL FIXED CHARGES INCL. PENSION LIABILITY</b>	<b>110696.30</b>	<b>109475.93</b>	<b>108850.27</b>
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### Operational Norms for the Thermal Generating Stations of DVC

2.5.13 In case of Thermal Generating Stations, Commission specified the following Operational norms:

<b>Operational Parameter</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>Bokaro TPS "B" (3x 210 MW)</b>			
Target Availability (%)	55	65	75
Target PLF (%)	55	65	75
SHR (kCal/kWh)	3250	2900	2700
AEC (%)	10.5	10.25	10.00
SFC (ml/kWh)	3.5	2.75	2
<b>Chandrapur TPS (3x130 MW)</b>			
Target Availability (%)	55	55	60
Target PLF (%)	55	55	60
SHR (kCal/kWh)	3100	3100	3100
AEC (%)	11.5	11.5	11.5
SFC (ml/kWh)	3	3	3
<b>Durgapur TPS (350 MW)</b>			

Target Availability (%)	60.5	67	74
Target PLF (%)	60.5	67	74
SHR (kCal/kWh)	3100	2940	2820
AEC (%)	11.5	10.7	10.55
SFC (ml/kWh)	4.4	2.85	2.4
<b>Operational Parameter</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
<b>Mejia TPS (3x 210 MW)</b>			
Target Availability (%)	78	80	80
Target PLF (%)	78	80	80
SHR (kCal/kWh)	2625	2550	2500
AEC (%)	11	9.6	9
SFC (ml/kWh)	3.5	2.5	2

#### 2.5.14

Based on the above operational norms, Commission awarded following base energy charges based on prevailing prices in January, February, and March, 2004 which are subject to fuel price adjustment on month to month basis.

Description	2006-07	2007-08	2008-09
<b>Bokaro TPS</b>	<b>103.63</b>	<b>91.48</b>	<b>83.82</b>
<b>Chandrapur TPS</b>	<b>78.53</b>	<b>78.53</b>	<b>78.53</b>
<b>Durgapur TPS</b>	<b>111.88</b>	<b>102.29</b>	<b>97.23</b>
<b>Mejia TPS</b>	<b>98.63</b>	<b>92.38</b>	<b>89.01</b>

## 2.6. Miscellaneous Petitions

### 2.6.1 In principle approval of capital cost and financing plan for the proposed (1128 MW) for

#### the SUGEN project of Gujarat Torrent Power.

2.6.1.1 M/s Torrent Power Generation Limited, made the application for 'in principle' approval of the capital cost and financing plan for 1100 MW power project proposed to be installed in Surat Distt., State of Gujarat. The application was made under Regulation 17 of the CERC (Terms and Conditions of Tariff) Regulations 2004, as amended. According to proviso to Regulation 17, any person intending to establish, operate and maintain a generating station may make an application before the Commission for 'in principle' acceptance of the project cost and financing plan in accordance with the procedure

specified in the Central Electricity Regulatory Commission (Procedure for making application for determination of tariff, publication of the application and other related matters) Regulations, 2004.

2.6.1.2 The proposed SUGEN power project will consist of 3 x 376 MW modules having advance class gas turbine (Siemens make) along with associated WHC recovery boilers, generator with single shaft configuration. The project is proposed to be set up at Akhakhol Village, Kamrej Taluka Surat District, Gujarat. The site located at a distance of approx. 2.5 kms off the National Highway No.8, connecting Mumbai and Delhi and is about 28 kms from Surat city.

2.6.1.3 The proposed project have received all necessary approvals/clearances for the setting up of the project like approval of Govt. of Gujarat, Environments clearances of Gujarat Pollution Control Board and Ministry of Environment and Forests (MoEF), Clearance of State Forest Deptt., Pollution Clearance from the Chimney Height etc. Project has also been accorded a Mega Power vide MoP letter dated 01.09.05.

2.6.1.4 The petitioner has entered into PPAs for the supply of power for the proposed project with the above three

entities namely TPAEC, TPSEC and PTC. The PPAs with the beneficiary have been vetted by Gujarat Electricity Regulatory Commission (GERC) and their observations have also been incorporated through supplementary PPAs with the two distribution companies.

2.6.1.5 The capital cost of the project was indicated as US \$ 349.58 Million plus Rs.1508.30 Crore including IDC and financing charges of Rs.194.40 Crore equivalent to Rs.3096.0 Crore at a FE rate of Rs.45.42/US\$.

2.6.1.6 Commission after going through the process of hearing and after affording opportunity to all concerned, accorded "In-principle" approval for a capital cost comprising of US\$. 339.436 million + Rs. 1448.43 crore including interest during construction (IDC) and financing charges(FC).

2.6.1.7 Commission also held that this in-principle clearance relates only to the capital cost and financing charges. As far as cost of fuel (gas) is concerned, the Company shall make all efforts to ensure a cost effective long-term supply agreement.

**2.6.2 In principle approval of capital cost and financing plan for the proposed (1500 MW) for the Combined Cycle project of Essar Power Ltd.**



2.6.2.1 M/s. Essar Power Ltd. made the application for 'in principle' approval of the capital cost and financing plan for 1500 MW power project proposed to be installed in Hazira, Gujarat.

2.6.2.2 The generating station would consist of two modules of 750 MW having advanced class FA technology for gas turbines along with associated Waste Heat Recovery Boilers, and generators in multi-shaft configuration. The power generated is proposed to be sold to PTC India Limited through a long-term Power Purchase Agreement. In turn, PTC would enter into Power Purchase Agreements with different States. PTC reportedly sent proposals to the States of Gujarat, Maharashtra and Madhya Pradesh for off-take of power. It was stated that Madhya Pradesh State Electricity Board has given its "in principle" consent for off-take of power from the generating station and that the MSEDCL, had also shown interest in procuring power from the generating station.

2.6.2.3 The capital cost of the proposed generating station was estimated to be Rs. 3906.74 Crore comprising of 491.17 Million USD + Rs. 1534.13 Crore at foreign exchange rate of Rs.48.305/USD and including IDC & FC & WCM of Rs.255.63 Crore. The WCM was of the order of Rs. 60.37 Crore. The Capital cost excluding

WCM was Rs. 3846.37 Crore (Rs. 2.62 Crore/MW). The Capital cost corresponding to the FE rate of Rs. 45.25/US \$ was Rs. 3696.30 Crore (Rs. 2.52 Crore/MW).

2.6.2.4 It was submitted that the generating station shall be executed with debt-equity ratio of 70:30 through domestic funding. Since there was no foreign funding, the capital cost would be subjected to FERV on account of payment to EPC contractor during the construction period alone.

2.6.2.5 The arrangement for the long-term supply of 4.97 to 6.6 MMSCM of natural gas per day corresponding to generation from 80%-100% PLF was being discussed with GSPCL for concluding a definitive Gas Sale and Purchase Agreement (GSPA).

2.6.2.6 Commission accorded its "in principle" approval to the project capital cost of USD 491.17 M + Rs.1534.13 crore (including Working Capital Margin of Rs.60.37 crore).

### **2.6.3 Petition for the adoption of tariff under section 63 of the Electricity Act 2003 in respect of 2000 MW Thermal Power Station proposed to be established by ISN International Company Pvt. Limited**

2.6.3.1 M/s ISN International Company Pvt. Limited had filed an affidavit on 30.09.2006 with a

prayer to take the final Power Purchase Agreement (PPA) dated 14.09.2006 signed with MP Power Trading Company Limited and the PPA dated 28.09.2006 executed with Ajmer Vidyut Vitran Nigam Limited (Ajmer VVNL), Jaipur Vidyut Vitran Nigam Limited (Jaipur VVNL) and Jodhpur Vidyut Vitran Nigam Limited (Jodhpur VVNL), for sale/purchase of power from 2000 MW Thermal Power Project proposed to be established by them in District Sidhi in Madhya Pradesh in compliance with para 2 (ii) of Ministry of Power letter dated 28.03.2006. When the affidavit was pending on the file of the Commission, the petitioner submitted a supplementary petition praying for adoption of the tariff in respect of the proposed power project as set out in the PPAs dated 14.09.2006 and 28.09.2006, and referred to above, under Section 63 of the Electricity Act, 2003 (the Act). The Petition was disposed of vide order dated 23rd March, 2007.

2.6.3.2 Commission deliberated on issue of adoption of tariff under Section 63 of the Electricity Act 2003 at length in various hearings and considering submissions of all concerned. Commission observed that the Act has come into effect on 10.06.2003. Section 61 of the Act empowers the Commission to specify the terms and conditions for determination of tariff. Section 62 relates to

determination of tariff by the Commission in accordance with the terms and conditions of tariff specified under Section 61. Section 63 of the Act enjoins upon the Commission to adopt tariff if such tariff has been determined through the transparent process of bidding in accordance with the guidelines issued by the Central Government. After the Act came into force, the 2005 guidelines have been issued by the Central Government as already noted. In the light of these provisions and the 2005 guidelines, we have to consider whether the present application is maintainable in the context of the petitioner's prayer for adoption of tariff under Section 63 of the Act. In order that tariff is adopted within the ambit of Section 63 of the Act, the following conditions need to be satisfied, namely –

- (a) The transparent process of bidding in accordance with the guidelines issued by the Central Government has been followed, and
- (b) Tariff has been determined through such a process.

2.6.3.3 Commission after considering all relevant factors and issues deliberated during the hearings came to a conclusion that the above two conditions are not fulfilled for invoking Section 63 of the Act and therefore, the Petition is not maintainable under Section 63.

#### **2.6.4 Revision of operational parameters and norms for the determination of tariff in respect of Tanda TPS for the period 2004-09.**

2.6.4.1 A petition was filed by the UPPCL for revision of operational parameters and norms for determination of tariff of Tanda Thermal Power Station, a generating station owned by NTPC for the period 2004-09.

2.6.4.2 Tanda Thermal Power Station was transferred by the Government of Uttar Pradesh to NTPC under the provisions of Uttar Pradesh Electricity Reforms (Transfer of Tanda Undertaking) Scheme, 2000, on 14.01.2000 for a total consideration of Rs.1000/- Crore. The power generated from the generating station is supplied exclusively to UPPCL under an agreement dated 07.01.2000, valid for a period of 25 years.

2.6.4.3 The Commission approved the tariff of the generating station for the period from 14.01.2000 to 31.03.2004 by order dated 28.06.2002 in Petition No. 77/2001 and by order dated 09.04.2003 in Review Petition No.2/2003 in Petition No.77/2001.

2.6.4.4 Meanwhile, the Commission notified the Central Electricity Regulatory Commission (Determination of Tariff) Regulations, 2004 on 26.03.2004. Regulation 16 of the said regulations laid down the

operational norms applicable to the different generating stations for the period 01.04.2004 to 31.03.2009. In case of the generating station which was under R & M, relaxed operational norms were laid down as under:

<b>Operational Parameters</b>	<b>Norm</b>
Target Availability (%)	60.00
Target PLF (%)	60.00
Station Heat Rate (kCal/kWh)	3000.00
Auxiliary Energy Consumption Norm (%)	11.00
Specific Fuel Oil Consumption (ml/kWh)	3.50

The NTPC was, however, directed to approach the Commission for revision of the operational norms of the generating station after completion of the R & M works.

2.6.4.5 Since NTPC did not make any application for revision of operational norms, the application was made by the UPPCL. The UPPCL submitted that due to extensive R & M carried out; the performance of the generating station has improved remarkably, necessitating revision of the operational norms to bring them at par with the other thermal power generating stations.

2.6.4.6 The NTPC in its reply has submitted that the intention of the Commission was to review

the operational norms after the performance improvement was established and sustainable. They further submitted that though the operational performance improved during the ongoing R&M works, the performance was not sustainable till R&M works were complete in all respects. It was further submitted that certain R&M works to overcome the generic problems of the generating station are currently under progress and it would be premature to revise the norms at this stage because of

2.6.4.8 As regards the reasons for high auxiliary energy consumption, NTPC stated that as a result of continuous efforts made by it since the take-over of the generating station, the auxiliary energy consumption has come down from 23.79% in 2000 to 11.88% in 2005-06 and compares with the auxiliary energy consumption of similar 110 MW units at Bhatinda and Panipat of 11.24% and 10.34% respectively. It was stated that the readings are based on the energy meter reading installed on UAT and Station Transformers and did not include the losses in generator transformer, unit auxiliary transformers, station transformers and excitation power, which were about 0.95%. The auxiliary energy consumption was high by about 0.83% on account of the three-staged pumping and bearing cooling water system provided at the

performance improvements just on completion of short and medium term works.

2.6.4.7 During the hearing held on 20.06.2006, NTPC was directed to furnish the actual operational parameters achieved by the generating station during the period 2000-05. Subsequently, NTPC was also asked to furnish the actual operating parameters achieved during the year 2005-06 and also the reasons for high auxiliary energy consumption.

generating station not applicable in case of Bhatinda and Panipat generating stations. Accordingly, NTPC sought to fix the normative auxiliary energy consumption of the generating station at 12.5%.

2.6.4.9 Commission perused the material on record and considered the submissions of the parties and observed in its order dated 24th January, 2007 that the data submitted by NTPC shows that the initial R & M works of the generating station were complete by the end of the year 2003-04. As a result of R & M actual operational parameters have substantially improved in comparison to the norms notified, except for auxiliary energy consumption. Commission therefore, felt that there was a pressing need to revise the operational norms. Commission also took notice of the fact that there was considerable increase

in capacity charges, consequent to completion of R & M, resulting in improvement in performance of the generating station on sustained basis for the last two years. Therefore, there exists a strong case that the norms for target availability, plant load factor and secondary fuel oil consumption applicable to the generating station should be

revised to bring them at par with the other coal-based thermal power generating stations.

2.6.4.10 Accordingly, Commission vide order dated 24.01.2007 decided that the following revised norms should be applicable in respect of the Tanda TPS w.e.f. 01.04.2007:

<b>Operational Parameters</b>	<b>Norm</b>
Target Availability (%)	80.00
Target PLF (%)	80.00
Station Heat Rate (kcal/kWh)	2850.00
Auxiliary Energy Consumption Norm (%)	12.00
Specific Fuel Oil Consumption (ml/kWh)	2.00

#### **2.6.5 Approval of one time tariff for Ratnagiri Gas and Power Private Limited(RGPPL) during interim period pending the implementation of revival of the project with LNG as fuel.**

2.6.5.1 An application was made by Ratnagiri Gas and Power Private Limited (RGPPL) for approval of variable cost @ 607 paise/kWh and capacity and incidental charges @ Rs.33.03 Crore per month for sale of power from Ratnagiri Gas and Power

Project to Maharashtra State Electricity Distribution Company Ltd during the period from October, 2006 to March, 2007.

2.6.5.2 Considering that the tariff claimed was on the higher side, the parties were given opportunity to mutually discuss the tariff. In view of the understanding arrived at by the parties, the Commission, by its order dated 25.10.2006, approved the tariff of Rs.5.01/kWh for the period up to 31.03.2007 for sale of infirm power. Commission

reviewed the position in January, 2007 with regard to signing of agreement for importing of naphtha and also to take stock of the possibility of generation beyond 31.03.2007, since it was expected that by that time, gas is likely to become available. The Commission had also directed the respondent Maharashtra State Electricity Distribution Company Limited to obtain clearance of Maharashtra Electricity Regulatory Commission for purchase of infirm power at the rates approved by the Commission.

2.6.5.3 Commission vide order dated 18.01.2007 directed Ratnagiri Gas and Power Private Limited(RGPPL) to make a fresh application before the Commission for supply of power, firm or infirm, beyond 31.03.2007.

**2.6.6 Approval of provisional tariff for Feroze Gandhi Unchahar Thermal Power Station Stage –III from the date of commercial operation to 31.03.2009.**

2.6.6.1 A petition was filed for approval of provisional tariff for Feroze Gandhi Unchahar Thermal Power Station Stage–III from the date of its commercial operation based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004.

2.6.6.2 The power generated from the generating station was to be supplied to the beneficiaries in the Northern Region. The generating station was synchronized on 28.09.2006, and was declared under commercial operation on 01.01.2007.

2.6.6.3 NTPC had claimed the following provisional tariff based on capital expenditure of Rs. 67362 lakh as per audited accounts as on 30.06.2006 against the approved cost of Rs. 91976 lakh:

2.6.6.4 Commission heard NTPC who submitted that the actual expenditure on date of commercial operation, that is, 01.01.2007 was higher than the expenditure till 30.06.2006 on which provisional tariff was claimed. Commission vide order dated 23<sup>rd</sup> January, 2007 allowed following provisional Annual Fixed Charges, which represent 85% of the Annual Fixed Charges claimed by the petitioner and are subject to adjustment after the tariff is finally determined by the Commission:

	2006-07	2007-08	2008-09
Annual Fixed Charges	10252	12214	11940

## 2.6.7 Tariff for infirm power supply prior to the date of commercial operation of Vindhyachal Super Thermal Power Station, Stage-III.

	2006-07	2007-08	2008-09
Annual Fixed Charges (Rs. in lakh)	12061	14369	14047
Rate for energy charges ex-bus (Paise/kWh)	128.76		



2.6.7.1 The NTPC had filed a petition for the tariff for infirm power supply prior to the date of commercial operation from unit-I and II of Vindhyachal Super Thermal Power Station, Stage-III.



2.6.7.2 The Commission vide its order dated 20.07.2006 had allowed the energy charge of 86.75 paise/kWh with fuel price adjustment for supply of infirm power for Unit-I (500 MW) of Vindhyachal Super Thermal Power Station, Stage-III.

2.6.7.3 Commission vide order dated 20.07.2006 allowed the rate of infirm power of 86.75 paise/kWh for Unit-I as well as Unit-II with fuel price adjustment from the date of synchronization to the date of commercial operation of the respective units..

## TRANSMISSION

The Commission dealt 115 petitions relating to inter-State transmission. Most of the tariff petitions filed by PGCIL were pertaining to tariff period 2004-09 including approval of additional capitalization during 2001-04 periods in some of the petitions, approval of provisional tariff in some of the petitions, etc. RLDC filed two petitions on the matter of non-payment of UI dues. NRLDC and SRLDC filed petitions for maintaining grid security and to review UI ceiling rate. There were 7 other petitions of miscellaneous nature. There were also petitions relating to trading applications for inter-State trading of power. The Commission also dealt with the petition filed by Torrent Power Transmission Private Limited for grant of transmission license.

### PETITIONS FILED BY RLDCs

#### **Penalty imposed on UPPCL for undisciplined overdrawal from the Grid :**

NRLDC had filed petition praying for rationalization of Unscheduled Interchange (UI) price and establishment of payment security mechanism for UI charges. During hearing, deep concern was expressed over deteriorating frequency condition particularly in the Northern Region. To ensure grid stability, RLDCs were granted liberty to

place before the Commission the instances of undisciplined overdrawals by State Electricity Boards and other State utilities so that situation could be dealt according to law. In reply, NRLDC prayed for penal action against Uttar Pradesh Power Corporation Ltd (UPPCL) under Section 29 and 142 of the Electricity Act 2003. NRLDC had alleged that there had been non-adherence to clauses 6.4.4 and 6.4.5 of the IEGC and overdrawals by UPPCL to the maximum extent resulting in sustained low frequency operation. NRLDC had specifically highlighted the instances of overdrawal by NRLDC. The Commission observed that if the tendency of overdrawal to meet the shortage of power is allowed and every State joins the race, then the grid would be in the imminent danger of collapsing. Commission invoked powers conferred under the provisions of Section 142 of the Act and imposed penalty of Rs One lakh on UPPCL for undisciplined overdrawal from the Northern Grid when frequency was below 49 Hz. Invoking Section 143 of the Act, the Commission appointed Shri A.H. Jung, Member, CERC as the Adjudicating Officer to hold an inquiry into the violation of the provisions of Section 29 of the Act by UPPCL.

The Adjudicating Officer observed that in view of power scarcity all the States are required

to meet their requirement through variety of means and certainly overdrawal below 49 Hz, is not one of the means for overcoming power shortages by the State utility. The Adjudicating Officer found UPPCL guilty and imposed token penalty of Rs. One lakh.

### **Bringing Bhakra Beas Management Board (BBMB) Power Stations under the purview of Unscheduled Interchange (UI) mechanism at the regional level**

NRLDC had sought an order for implementation of frequency linked unscheduled interchange mechanism on the hydro generating stations owned and operated by BBMB at the regional level for overall economy and efficiency in grid operation. The Commission proposed a methodology for energy accounting of BBMB power stations to avoid post-facto revision of schedules and to simplify the regional energy accounting computations. BBMB and its partner States did not agree with the Commission's proposal. The Commission clarified that post-facto revision in schedules dilutes their sanctity. Avoiding post-facto revision would bring transparency to energy accounting without affecting BBMB or beneficiaries financially or otherwise. BBMB and its beneficiaries agreed to review the implementation of proposed methodology of

Regional Energy Accounting. Accordingly, the Commission directed to keep the present petition pending for the present. The Commission directed NRLDC to start the dialogue with Narora and Rajasthan Atomic Power Stations being scheduled by it for implementation of proposed methodology for energy accounting of these power stations. It was noted that ERLDC is already adopting the proposed methodology in the energy accounting of Chukha and Kurichhu power stations and therefore ERLDC/ERPC Secretariat were directed to continue the same practice.

### **Non-payment of Unscheduled Interchange (UI) charges by Jharkhand State Electricity Board (JSEB)**

ERLDC filed petition and sought directions to JSEB for payment of outstanding UI charges within 15 days with interest thereon and to accord highest priority to payment of weekly UI charges. JSEB, while admitting its liability to pay UI charges claimed by ERLDC, sought to pay the outstanding dues in 20 equal installments. It was observed that in the earlier hearing JSEB had given undertaking to pay the outstanding dues in six monthly installments but it did not adhere to its undertaking. Therefore, JSEB was directed to show cause why action should not be taken under

Section 142 of the Electricity Act 2003 read with Section 144 thereof, for breach of undertaking. Thereafter, JSEB had made payments towards all pending UI charges to the ER pool. The Commission, while disposing of the petition warned JSEB that the casual attitude in complying with the undertaking given before them, in future, would be viewed strictly.

### **Non-payment of UI charges by MPSEB**

WRLDC had filed petition and sought for imposition of penalties under Section 146 and 149 of the Electricity Act 2003 on MPSEB for its failure to pay UI charges. WRLDC also sought direction for regulation of power supply of MPSEB in case of default in payment of UI charges and to open LC for future UI payments to ensure timely payment of UI charges. The Commission directed MPSEB to pay Rs.25 crore on or before 25.06.2006 and balance amount of Rs.25.7 crore by 27.07.2006. Interest payable by MPSEB on outstanding UI amount from time to time shall be worked out by WRLDC and shall be cleared by MPSEB within one month of issuance of relevant statement by WRLDC. MPSEB was directed to pay current UI charges regularly. MPSEB had complied the Commission's directions.

### **Ensuring secure and reliable operation of Southern Regional Grid by maintaining the grid frequency above 49 Hz**

SRLDC had filed a petition seeking review of UI price and increase in UI ceiling rate matching with the prevailing liquid fuel prices and direction to the constituents of SR grid to carry out load management when the frequency falls below 49.5 Hz and requisite load shedding when the frequency falls below 49 Hz. The Commission decided to segregate the issues of Grid indiscipline and enhancement of UI price and deal it separately in Petition No. 14/2007 & 15/2007.

### **Review of UI price in Petition No. 15/2007**

Powergrid had submitted its detailed proposal for rationalization of UI price vector vide its affidavit dated 25.01.2007, which was taken up by the Commission as Petition No. 15/2007. During the hearing on 02.02.2007, the petitioner was directed to serve copies of the affidavit dated 25.01.2007 to all stakeholders and also post it in its website with an advice to all the stakeholders to file their replies, if any, directly to the Commission by 12.02.2007. The date for filing the replies was extended to 19.02.2007 by the Commission through its Order dated 12.02.2007.

The Commission has received eighteen (18) responses on the petitioner's proposal for rationalization of UI price vector.

It was seen from the responses received that none of the Eastern and North-Eastern region constituents has objected to the petitioner's proposal, and two constituents have supported it. Southern Region constituents have agreed to the UI ceiling rate of 750 paise/kWh in 2006 itself. Western Region constituents have also reconciled to the need for making the overdrawal costlier, through a penalty instead of enhanced UI rate.

The Commission deliberated the comments received from stakeholders in its order dated 05.04.2007 and same is briefly described below:

The Commission observed that UI rate, being the spot price, could serve as a bench mark for the cost of traded power, provided the parties could foresee what it would be when the contracted power is actually to be supplied. But UI rate floats and is continuously changing, with variation of frequency depending on load-generation balance in the system from time to time. Further, it can only be a bench mark, and the cost of traded power would really be dependent on the demand - supply balance, as it should be in a market. All that one could

expect is that the cost of traded power should not exceed the ceiling UI rate, normally. The very fact that the cost of traded power has breached and gone beyond the ceiling UI rate only shows that the latter has been capped at an unrealistic level. It also shows that there is an unmet demand, and utilities are prepared to pay a higher price to get extra power. By restricting the ceiling UI rate at a lower level, we are only creating a market distortion, and are giving a wrong signal to the utilities, to over-draw under UI mechanism rather than to purchase extra power through a contract. The argument that with increase of UI rate cost of traded power would go up, therefore, cannot be accepted as a reason for holding back the UI ceiling rate increase, which is in any case urgent for restoring the grid security.

The Commission did not accept the arguments like "utilities overdraw under compulsion" and that "deficit States would suffer further", for holding back the required UI ceiling rate increase. In a developed country, the overdrawals would just not be permissible. All utilities must maintain their net interchange strictly as per their schedule. UI mechanism provides flexibility to the Indian utilities, in that they can deviate from their schedules. The premise is that they pay for the deviation. The flexibility

provided cannot be stretched to a breaking point. The States have to exercise self-control, and either promptly pay for the overdrawal or not overdraw in the first place. Failure to plan for meeting their consumer demand does not entitle any State to overdraw from the grid, and thereby endanger the grid security or rob other States of their rightful share.

The Commission did not agree with the contention of many respondents about an under-drawing utility making unjustified profit since any such profit is possible only when (i) the concerned utility helps the grid/other utilities, and (ii) another utility overdraws knowing on-line the price it would have to pay. It is not a case of unwanted high-cost power being thrust on the latter utility. The other utilities (third parties) not overdrawing do not get affected by the UI price, and would not have any business to object to the UI rate at that time – whether high or low. In case the under-drawal is the result of increased load-shedding, it would be in the purview of the concerned State Commission.

The Commission accepted the suggestion that the UI price vector should be a simple curve

so that it is easy to comprehend and administer. It was proposed to retain the present UI rate for the frequency range above 49.5 Hz, i.e. zero at 50.5 Hz and above, rising in 6.0 paise/kWh steps for each 0.02 Hz fall in frequency, and reaching 210 paise/kWh for the 49.80 – 49.82 Hz step, and then rising in 9.0 paise/kWh steps for each 0.02 Hz fall in frequency till it reaches 345 paise/kWh for the 49.50 – 49.52 Hz step. Below 49.50 Hz, the UI rate shall rise in 16.0 paise/kWh steps for each 0.02 Hz fall in frequency, to reach 745 paise/kWh, the ceiling level, at 49.0 Hz, i.e. for all frequencies below 49.02 Hz to be precise. In line with this proposal, draft notification inviting suggestion or objections by 23.04.07 was issued.



**Approval of transmission tariff of transmission system associated with Tala HEP, East-North inter-connector and Northern Region transmission system for the period 2004-09.**

CERC had issued first transmission license to Powerlinks Transmission Limited (PTL), a joint venture company between Tatas and PowerGrid Corporation of India Limited (PGCIL). PTL and PowerGrid were to execute transmission system associated with Tala Hydro Electric Power, East-North inter-connector and Northern Region transmission system. The Revised copy of estimate of Rs.248388 lakh including IDC of Rs.147.44 lakh for Tala transmission system was accorded by Govt. of India, MoP vide letter dated 29.09.2005 with details given below:

(a) Power Grid portion: Rs.87210 lakh (incl. IDC of Rs.2574 lakh)

(b) Joint Venture portion (PTL): Rs.161178 lakh (incl. IDC of Rs.12170 lakh)

PTL had filed petition for approval of transmission tariff for completion of assets assigned to it with details given below:

(i) Siliguri-Purnea 400 kV D/C (quad Conductor) line

(ii) Purnea-Muzaffarpur (New) 400 kV D/C (quad conductor) line  
(iii) Muzaffarpur (New)-Gorakhpur (New) 400 kV D/C (quad conductor) line

(iv) 220 kV D/C line from Muzaffarpur 400/220 kV new S/S to Muzaffarpur 220 kV S/S (BSEB)

(v) Gorakhpur (New)-Lucknow (New) 400 kV D/C line

(vi) Bareilly (UPPCL)-Mandola 400 kV D/C line

PTL informed that some of the transmission assets were commissioned early i.e., 01.05.2006 on the request of beneficiaries as it was observed that even in the absence of Tala power, commissioning of these transmission assets would benefit system strengthening and redundancy of NR Grid. Subsequently, PowerGrid had also filed petition for approval of transmission tariff for the assets commissioned by them. The Commission approved the tariff claimed by PTL and PowerGrid provisionally.

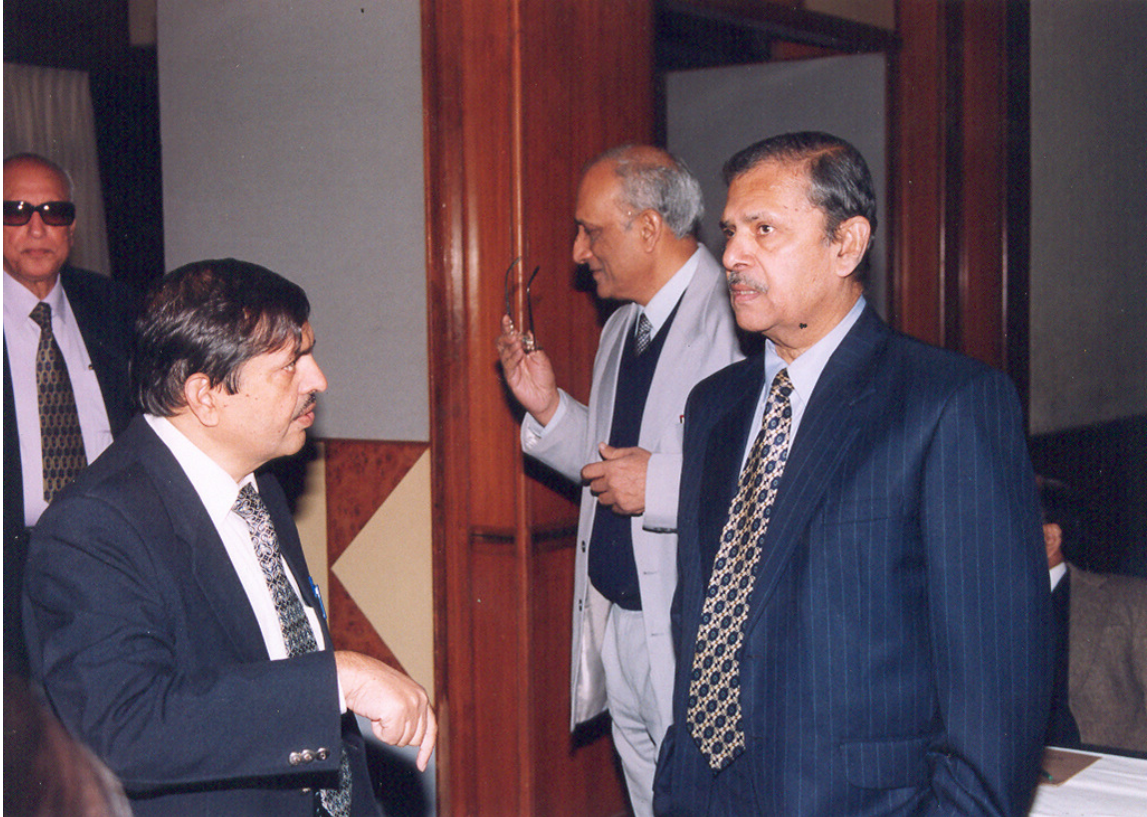




Public Hearing on Developing a Common Platform

In line with the responsibility cast under Section 66 of the Act, the Commission released Staff Paper on July 27, 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 for comments and suggestions from all the stakeholders by August 31, 2006. A public hearing was conducted on December 19, 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.

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.





### Public Hearing on Developing a Common Platform

The Commission issued guidelines for setting up of Power Exchange on February 07, 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 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.

### **Grant of transmission license to Torrent Power Transmission Private Limited**

The Torrent Power Transmission Limited (TPTL) made an application in the Commission under Section 14 of the Electricity Act, 2003 for grant of transmission license for construction and maintenance of certain

transmission lines and the facilities to be used for evacuation of power from 1100 MW SUGEN Combined Cycle Power Project (SUGEN CCPP) in the State of Gujarat.

The scope of the proposed transmission system to be executed by TPTL is as under:

#### **A. Transmission lines**

<b>Sl. No.</b>	<b>Transmission lines/facility</b>	<b>Approx. line length (kms)</b>
(i)	LILO of Gandhar – Vapi 400 kV line at Sugan CPP switchyard	26
(ii)	<p>Sugan CCPP Akhakhol – Pirana 400 kV D/C line (To be built in two phases):-</p> <p>(a) From Sugan to a point near Gandhar where LILO of the circuit of existing Gandhar-Dehgam 400 kV D/C line at Sugan will be done.</p> <p>(b) Extension of this line to Pirana and opening of LILO of Gandhar – Dehgam line near Gandhar</p>	222

#### **A. Transmission lines**

<b>Sl. No.</b>	<b>Sub-station works</b>
(a)	2 nos. 400 kV line bays at PIRANA (PG) 400/220 kV (new) sub-station.
(b)	2 nos. 50 MVAR line reactor at PIRANA (PG) 400/220 kV (new) sub-station.

It was observed that the proposed transmission system is to be connected with the Western Region ISTS of the PGCIL, which means that the system could also be utilized for inter-State transmission of electricity and therefore, the proposed transmission system becomes part of the inter-State transmission system and the Commission has the jurisdiction to grant transmission license.

It was also noted that the transmission system has been planned in consultation with the Central Electricity Authority. Considered in the light of the clarification given by Ministry of Finance and Ministry of Power, the project is not required to be processed through the PPPAC as provided in Ministry of Finance guidelines dated 12.01.2006 and the guidelines on competitive bidding issued by Ministry of Power. TPTL had indicated the original estimated completion cost of Rs.550 crore and with the changes in scope of work, the revised estimated cost has been Rs.358 crore. To issue transmission license to the TPTL for construction and maintenance of the proposed transmission system, the Commission directed that a public notice under clause (a) of sub-section (5) of Section 15 of the Act be published. The Commission decided that a final view on grant of license would be taken thereafter on consideration

of the suggestions or objections, if any, received.

### **Revision in sharing of Transmission Tariff of 35 Paise/KWh in North-Eastern Region**

The transmission charges in NER have been charged based on Uniform Common Pool Transmission Tariff (UCPTT) in terms of paise per unit, operational since 1992. The UCPTT rate of 35 paise/unit has been effective from 01.04.1998. The transmission charges collected based on UCPTT rate have been apportioned since 01.04.1998 in following manner among PGCIL and the State Utilities in NER, whose assets form part of the Common Pool of the transmission assets in the region:

<b>Constituent</b>	<b>Share (paise/unit)</b>
POWERGRID	31.61618
ASEB	1.91984
MeSEB	0.30615
Nagaland	0.23056
Tripura	0.34263
Manipur	0.58464
Total	35.00000

The Commission by its order dated 01.02.2002 in Petition No.40/2000 had decided to continue the UCPTT rate of 35 paise/unit up to 31.03.2004 as the surplus transmission capacity was not made use of by the State

Utilities because of lack of generation.

After implementation of ABT in NER from 01.11.2003, PGCIL had filed petition No.13/2004 in February, 2004. One of the issues raised in that petition was for review of sharing of UCPTT rate of 35 paise/unit from 01.02.2000. The Commission by order dated 06.09.2004 directed Member-Secretary, NEREB to expedite determination of revised UCPTT sharing formula since in the course of the proceedings the Commission was informed that reapportionment of UCPTT was under consideration of a Committee formed by NEREB.

Member-Secretary, NEREB/NERPC after interaction with the constituents of the region submitted the report. The computation was based on capital cost of transmission assets. The Commission after considering the report simplified UCPTT apportionment and ordered its implementation from February, 2000.

Constituent	4/2004- 5/2004	6/2004- 12/2004	1/2005- 7/2005
<b>PGCIL</b>	33.853696	33.690816	33.465764
ASEB	0.750010	0.891357	0.885403
Manipur	0.084885	0.084476	0.083912
MeSEB	0.113227	0.112682	0.111929
Nagaland	0.079441	0.079059	0.312328
Tripura	0.118741	0.141610	0.140664
Total	35.000000	35.000000	35.000000

ASEB and TSECL filed review petitions mainly against implementation of the revised apportionment retrospectively. Commission observed that PGCIL did not raise the issue of sharing of UCPTT rate of 35 paise/unit till it filed Petition No. 13/2004 in February, 2004, wherein it claimed the entire UCPTT charge of 35 paise/unit by giving some interpretation of the order dated 01.02.2002. Therefore, the Commission found it appropriate that the following revised sharing formula be implemented from 01.04.2004, that is, from the financial year immediately following the filing of Petition No. 13/2004 and from the beginning of the financial year of filing of Petition No. 3/2005 wherein the issue of apportionment was decided. This also takes into consideration the order dated 01.02.2002 in Petition No. 40/2000 wherein it was decided to continue the existing UCPTT rate of 35 paise/unit, up to 31.03.2004.

It was also decided that the arrears for the period from 01.04.2004 to 30.11.2006 would be paid in eight equal quarterly installments commencing on 31.03.2007 and would be liquidated by 31.12.2008. No interest shall be charged as long as payments are released as per above schedule.

## **DISCUSSION PAPER ON TRANSMISSION TARIFF**

CERC released a Discussion Paper entitled, “Proposed Approach for Sharing of Charges for and Losses in Inter-State Transmission System (ISTS)” in February 2007. This paper outlines measures for rationalization of transmission tariff and apportioning of transmission losses. The Paper proposed new methodology for sharing of charges for inter-State transmission system to be built in the future and provides a road map for gradual transition from the existing concept of pooling of regional transmission charges to a National Transmission Tariff framework, in line with the mandate of the National Electricity Policy.

It has been proposed that the charges for Associated Transmission Systems (ATS) for the new inter-State generating stations would be shared by the concerned beneficiaries taking into account the quantum of power (MW) as well as the distance involved (kilometers) for each beneficiary. The concept of sharing of transmission charges on ‘MW-kilometers’ basis rather than ‘MW’ alone would significantly help in resolving issues which have been delaying the finalization of transmission systems associated with inter-State

generating stations in the pipeline. This would be particularly helpful in finalizing transmission schemes associated with the Ultra Mega Power Projects and Hydro Power Projects located in the North-East, whose beneficiaries are located across different regions of the country at vastly different distances from the source of generation. This would also help to rationalize transmission charges for load centre generating stations.

However, the existing concept of pooling the transmission charges at the regional level and their sharing in the ratio of quantum of power (MW) allocation would not be abandoned for the existing transmission schemes built over the last 30 years. It would not be desirable to complicate the matter by introducing major changes in a system, which has been working satisfactorily for many years. However, the charges for the inter-connecting transformer (ICT) and down stream transmission systems would be segregated and taken out of the regional transmission pool. The charges for such segregated down stream assets, which are meant to feed power into the network of individual beneficiary, would be solely borne by the concerned beneficiary.

The Paper has carried out detailed analysis based on usage



pattern of the existing inter regional links and proposed significant changes and rationalization. The proposed sharing of their charges are based on the principle that the charges on inter regional link should be allocated to its actual beneficiary in the present context rather than the historical concept of apportioning them between the two adjoining regions on 50:50 basis.

In the light of experience of the past two years, the Commission proposed to simplify the procedure for availing Open Access on inter-State Transmission System in the near future. One of the proposals is not to levy any transmission charges for short term Open Access, but to apply incremental losses instead of average losses to short term transactions. The incremental losses could be double of the average losses or nil depending on the direction of flow of power for the proposed transaction.

On the issue of apportioning of transmission losses, the Paper proposed to move away from the present practice of apportioning the regional transmission losses to all beneficiaries in proportion to their scheduled drawal irrespective of their relative location and distance from the generating station. In line with tariff policy, the Paper proposes that RLDCs should gear up urgently for

implementation of transmission loss allocation in equitable manner with distance and direction sensitivity.

The Paper proposed to introduce a system of differential UI rates to take care of the impact of transmission losses on account of overdrawal and underdrawal by a beneficiary depending upon its location in the grid.

The highlights of the measures proposed in the Discussion Paper are listed below:

- To segregate step down transformers and downstream system from the regional pool and charge only the local beneficiary for the same
- To introduce the concept of 'fixed' transmission charges in North Eastern Region at par with other Regions
- To stop automatic pooling the charges of new transmission schemes in the existing regional pools with effect
- To rationalize transmission charge sharing of inter-regional links
- To introduce capacity allocation to beneficiaries for inter-regional links
- To implement distance and direction sensitive loss allocation for supplies from central generating stations

- To introduce differentials in UI rates of different regions, and for beneficiaries in each region, to compensate for transmission losses
- To simplify 'open access' procedure and apply incremental losses
- To undertake further rationalization in 2008-09 to cater to long term transmission development

The Commission invited comments from stakeholders and decision is yet to be taken.

### **Second Amendment to Open Access in inter-State Transmission Regulations, 2004**

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 inter-State transmission have facilitated and streamlined electricity trading.

The volume of traded electricity has been rising steadily. 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.

After gaining experience of one year the OA regulations were reviewed and refined in February 2005. Subsequently, it was observed that some Short Term Open Access (STOA) customers were booking the surplus transmission capacity in advance but not utilizing it and thereby affecting optimal utilization of available transmission capacity. In order to prevent blocking of transmission capacity, the Commission issued second amendment in OA inter-State transmission regulations-2004 in December 7, 2006 by making amendment in Regulation-14. As per this, available transmission capacity not scheduled by its original allottee by 3 PM of the day would be released for use for others for the next day. The amendment has helped in full utilization of available transmission

capacity to enable the deficit entities to procure additional power from all possible resources any where in the country.

### **Amendments in the Indian Electricity Grid Code (IEGC)**

The Commission had notified revised IEGC on 17.03.2006 which became effective from 01.04.2006. Prior to coming into force of the revised IEGC, the function of preparation of Regional Energy Accounting (REA) as well as UI and VAR accounting was entrusted to Regional Electricity Boards (REBs), Ministry of Power while notifying Regional Power Committees (RPCs) for five regions in May, 2005 had not mentioned Regional Energy Accounting as one of the functions of RPCs. Keeping this in view, the Commission transferred work of REA and weekly UI & VAR accounting from RPCs to RLDCs in the revised IEGC. Subsequently, MOP vide its letter dated 12.04.2006 informed the Commission that present arrangement of RLDCs being operated by CTUs was being reviewed by the Central Govt. and suggested that Secretariats of RPCs be allowed to discharge the function of REA for the time being. Representations from Central Electricity Authority, NTPC and Northern Regional Power Committee for amending the relevant provisions of IEGC were also received. When the

Commission invited comments from stakeholders, they overwhelmingly reposed faith in RPC Secretariats for discharge of REA function. The Commission decided that REA as well as UI and reactive energy accounts be issued by RPCs from 01.09.2006 and accordingly two IEGC amendments were issued.

### **Amendment of Chapter 1 of the Grid Code: Sub-clause (iii) of Clause 1.3 of Chapter 1 of the Grid Code shall be substituted as under:**

Narmada Control Authority (NCA) had approached the Commission and intimated that since responsibility of scheduling and dispatch of SSNNL power station is with them, therefore, clause 1.3 and 6.3 needs amendment to that extent only. Accordingly, the Commission issued amendment on December 11, 2006 by inserting the word 'NCA' at appropriate places in clause-1.3 and 6.3.

## **HYDRO GENERATION**

Commission regulated the tariff of following six Central sector hydro power generating companies having an aggregate installed plant capacity of 7500 MW during the year 2006-07:

- i) National Hydro Electric Power Corporation Ltd. (2953 MW)

- ii) North Eastern Electricity Power Corporation Ltd. (755 MW)
- iii) Satluj Jal Vidyut Nigam Limited (1500 MW)
- iv) Narmada Hydro Development Corporation Ltd. (1000 MW)
- v) Tehri Hydro Development Corporation (500 MW).
- vi) Damodar Valley Corporation (144 MW)



Commission dealt 28 petitions of the above hydro power generating companies during the year. These comprise of 15 petitions relating to approval of final generation tariff of the existing hydro stations, approval of additional capitalization of previous tariff period, provisional tariff of newly commissioned projects for the period 2004-09, 8 petitions pertaining to review of Commission's orders. Other petitions which have been dealt by the Commission are (i) Implementation of comprehensive scheme for dynamic inflow forecasting in respect of Chamara –I HEP by NHPC (ii) Implementation of ABT

in respect of Indira Sagar Project (iii) Claim of SJVNL in respect of Capacity Index due to red alert in 2004-05, high silt conditions & flooding of Satluj river in the year 2005-06 (iv) HPSEB petition for relaxation under Regulations 12 and 13 of CERC Tariff Regulations, 2004 in Nathpa Jhakri HE project (v) Final tariff of four out of total six units of Nathpa Jhakri HE project and four out of eight units of Indira Sagar HEP commissioned during the period 2001-04.

#### **1. Petitions for approval of generation tariff for the period 2001-04**

i) Four out of total six generating units of the Nathpa Jhakri hydro station (6x250 MW) of SJVNL were commissioned during the year 2003-04. Commission approved final tariff of four units for the period from 06.10.2003 to 31.03.2004 based on the apportioned capital expenditure incurred on these four units.

While approving final tariff of 4 generating units up to 31.03.2004, Commission has made following observations:

The generating station was originally scheduled to be commissioned in March, 1996 but has actually been commissioned in May, 2004. The dam works are still in progress and as per the submission of the petitioner, the completion of the dam up to full reservoir level of 1495.5 M to provide minimum of three hours of peaking of 1500 MW is expected by the end of March,

2007. Therefore, the total time overrun with reference to the original commissioning schedule of 1996 works out to 8 years as on the date of commercial operation of the last unit in May, 2004 and to 11 years as on the expected date of completion of dam by 31.03.2007 when full peaking benefits would be accrued. As regards the cost overrun, the original approval of April, 1989 was for Rs.167802 lakh whereas the anticipated expenditure is said to be Rs.908300 lakh. Thus, there is a massive cost overrun of Rs.740500 lakh, resulting in increase of 541% over the original cost. However, the impact of the time and cost overrun is not being considered for the purpose of fixation of tariff in the present petition and shall be taken into account while considering tariff of all the six units of the generating station taken together during the tariff period 2004-09.

ii) Commission also approved final tariff of four generating units (4x125 MW) of the Indira Sagar H E Project of NHDC, which were commissioned during the period

from 14.01.2004 to 31.03.2004.

## **2. Petition relating to approval of Additional Capital expenditure for the period 2001-04:**

Commission approved additional capital expenditure in respect of Kopili HEP (4x50 MW) of NEEPCO. The additional capitalization allowed by the Commission is mainly on account of balance payments regarding settlement of liabilities after arbitration case awarded by the court, welfare measures for the project employees located at a very remote location in Assam, safety and security related expenses, replacement of worn out equipment for improvement in efficiency and performance of the old plant, expenses on scheme of Augmentation & Modernisation approved by GOI, de-capitalization of assets etc.

Following additional capital expenditure/ de-capitalization was approved for the above project which formed base capital cost as on 01.04.2004 for determination of tariff for the period 2004-09 :

<b>Project</b>	<b>Capital Cost as on 01.04.2001</b>	<b>Add. Capitalization/ De-capitalization approved during 2001-04</b>	<b>Capital Cost as on 01.04.2004</b>
Kopili HEP	242.24	14.71	256.95
Project	Capital Cost as on 01.04.2001	Add. Capitalization/ De-capitalization approved during 2001-04	Capital Cost as on 01.04.2004
Kopili HEP	242.24	14.71	256.95

### 3. Petitions for approval of generation tariff for the period 2004-09

i) Indira Sagar hydro station (8x 125=1000MW) of NHDC was commissioned during the period 14.01.2004 to 25.08.2005. While four units were commissioned in the tariff period 2001-04, the remaining four units were commissioned during the period 01.04.2004 to 30.03.2005. The date of commercial operation of Indira Sagar hydro station for the purpose of tariff was, however, considered by the Commission w.e.f. 25.08.2005, when dam at FRL with spillway gates was complete and maximum continuous rating of 1000 MW of the station was demonstrated by the generator. Commission approved following Annual Fixed charges of the station for the tariff period 2004-09:

Year	2004-05	2005-06	2006-07	2007-08	2008-09
AFC	20507.09	38974.64	41202.30	42179.75	47784.08

With the annual design energy of 1978.69 million units, the composite rate during the year 2006-07 would be of the order of Rs. 2.10 per kWh from the station.

ii) Dauliganga HE station stage-I (4x70 MW) of NHPC was commissioned on 01.11.2005. Commission approved the provisional tariff @ Rs. 1.83 /kWh from date of commercial

operation of 1st unit upto 31.03.2007. The single part tariff was converted into two parts and Annual Fixed Charge of Rs. 180.55 crore was allowed. The approval of final tariff is under consideration of Commission pending certain additional information / clarifications on various aspects.

iii) Nathpa Jhakri HE Project (6x250 MW) of SJVNL was commissioned in May, 2004. Provisional tariff of @ Rs. 2.35/kWh was earlier approved by the Commission from 01.04.2004 to 31.03.2006. The single part tariff was converted into two part and annual Fixed Charge of Rs.1414.83 crore were allowed by the Commission for the year 2005-06. Since the dam up to Full Reservoir Level (FRL) of 1495.5 M could not be completed to provide 1500 MW of peak power in the lean season and final completion cost of Rs.8105 crore

was yet to be approved by the GOI, Commission allowed continuation of provisional tariff @ Rs. 2.35/kWh and AFC of Rs.1414.83 crore for the year 2006-07. Commission, however, directed SJVNL to complete dam up to the required FRL so as to provide peak power of 1500 MW and to file the petition for approval of final tariff latest by 31.03.2007, after seeking



approval of GOI for the completion cost of the project.

iv) Petition was filed by DVC on the direction of the Commission because in terms of Section 79 of the Electricity Act, 2003 the tariff for sale of electricity by the DVC and the inter-State transmission of electricity undertaken by it is to be regulated in accordance with the terms and conditions for determination of tariff notified by the Commission in March 2004. DVC has three hydro generating stations namely Maithon (2x40 MW), Panchet (3x20MW) and Tialiya (2x2 MW). These stations are about 50 years old (except one unit at Panchet HEP which was commissioned in the year 1991). The Annual Fixed Charges (AFC) approved by the Commission for the period 2006-09 are as below:

Project	Inst. Capacity (MW)	2006-07	2007-08	2008-09
Maithon	80	17.22	17.47	17.67
Panchet	60	10.83	11.12	11.44
Tiliaya	4	3.42	3.55	3.67

v) Dulhasti HE station (3x130 MW) of NHPC in J&K is likely to be commissioned in the year 2007-08. Two units of the station were synchronised in 2006-07. NHPC, in consultation with the Ministry of Power and subsequent discussions with the beneficiaries of the station, formulated a "Back loaded Tariff Model". In this tariff,

a composite tariff of Rs.3 per unit has been proposed during first year of the operation of the plant. Commission approved the provisional tariff @ Rs.3.00 /kW h from date of commercial operation of generating unit(s) based on the consensus between the generator NHPC and beneficiaries of the station. The single part tariff was converted into two parts and provisional Annual Fixed Charge of Rs.497.40 crore was allowed up to 31.03.2008 or till the approval of final tariff by the Commission.

vi) Tehri stage-I (4x250 MW) being executed by THDC is a storage based multi-purpose hydro electric project situated in Uttaranchal. With its Earth & rockfilled dam of 206.5 M height and live storage capacity of 2615 million cubic meters, it will provide 1000 MW peak power to the

Northern grid and other benefits of irrigation, drinking water etc.

THDC is a joint venture company of the Govt. of India and Govt. of Uttar Pradesh. GOI holds 75% of the equity shares and the balance 25 % equity is held by Govt. of Uttar Pradesh. As Gol is the majority share



holder, therefore, generation tariff shall be regulated by CERC in terms of Section 79 (1) (a) of the Electricity Act, 2003.

Three out of total four generating units of Tehri Stage-I were commissioned on 22.09.2006, 09.11.2006 and 30.03.2006.

The petition was heard by the Commission on 26.10.2006. During the hearing the representative of the THDC informed that one unit of 250 MW was put under commercial operation on 22.09.2006 and that the remaining three units would be commissioned by end February 2007. It was also stated that the power generated was being billed provisionally at the rate of Rs.3.50/kWh as per the decision reached at the meetings of TCC & NRPC held on 02.06.2006 and 03.06.2006 respectively, till the provisional tariff is approved by the Commission. The representative of the petitioner further submitted that it was difficult for them to supply energy at the rate of Rs. 3.50/kWh and that the rate of supply of energy would be of the

order of Rs.6/kWh, if the actual expenditure incurred till commissioning of the generating unit was taken into account.

On the contrary, the representatives of the respondents submitted that though the petitioner claimed 22.09.2006 as the date of commercial operation of IVth unit, it has not been able to achieve the Maximum Continuous Rating of 250 MW. According to NRLDC, the maximum output actually achieved was only 205 MW. It was, therefore, pleaded that the date of commercial operation declared by the petitioner should not be accepted and the energy supplied should be billed only at infirm power rate of 81.40 paise/unit.

At the subsequent hearing held, the staff proposal was deliberated and accepted by THDC and most of the beneficiary States. Commission vide order dated 23.03.2007 in Petition No.63/2006 approved following two-part tariff provisionally:

Period	Tariff Rate
22.09.2006 to 31.12.2006	Rs. 3.50/kwh on single part basis
01.01.2007 to 31.03.2007	i) Energy charge @ Rs. 2.50/kwh on the scheduled energy ii) Capacity charge: Rs. 18000/day

#### 4 Review of Commission's orders -

Commission disposed off eight review petitions in respect of NHPC and NEEPCO stations:

i) The Commission approved generation tariff of Bairasiul, Chamera stage -I, Chamera stage-II, Salal, Uri, Tanakpur, Rangit and Loktak hydro power stations of NHPC for the period 2004-09. Subsequently, NHPC filed review of Commission's orders in respect of Bairasiul, Chamera stage -I, Salal, Uri, Tanakpur and Rangit hydro power stations.

The main issues on which review of Commission's orders were sought are:

- a) Review of O&M expenses – consumption of stores & spares, certain administrative expenses, ex-gratia and VRS to employees, corporate expenses, and productivity linked incentive etc.
- b) Allocation towards debt and equity in respect of additional capitalization for the years 2001-04
- c) Computation of balance useful life of assets for the purpose of determination of depreciation

d) Treatment of depreciation when it exceeds the repayment of loan.

Commission on review of its orders allowed revision of O&M expenses in respect of consumption of stores & spares, interest on settlement of old contracts, payment of compensation of land awarded by District Judge. However, no review was allowed on ex-gratia and VRS to employees, corporate expenses, and productivity linked incentive. As regards expenditure on VRS, Commission has not considered expenses on VRS incurred during 1998-99 to 2002-03 for normalization of such expenses for the tariff period 2004-09, because these expenses are not of regular nature and vary from year to year. However, Commission has given liberty to the petitioner to approach the Commission post facto with complete details of expenditure and savings on account of VRS for the period 2004-09.

Commission ruled out review of its orders on account of other issues.

A picture of Annual fixed charges approved for the period 2004-09, after review of Commission's orders, and composite tariff of these hydro stations based on Commission's approval is summarized in the following below:

Station	Annual Fixed charges (Rs. Crore)					Composite Rate (Paise/ kWh)				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Baira Siul	54.74	48.60	49.92	51.29	52.71	80.39	71.37	73.31	75.32	77.41
Salal	185.74	170.59	169.98	173.30	176.74	69.18	63.53	63.31	64.54	65.82
Tanak Pur	47.14	47.42	47.49	45.56	46.59	119.66	119.85	120.55	115.65	118.28
Chamera-I	196.01	184.90	187.42	190.03	192.76	135.44	127.76	129.50	131.31	133.20
Uri	446.90	393.32	469.32	309.15	274.17	198.66	174.84	208.63	137.43	121.87
Loktak	47.24	48.22	49.59	49.62	49.64	120.67	123.17	126.67	126.75	126.80
Rangit	73.13	49.96	52.60	45.82	46.25	247.89	169.37	178.30	155.32	156.78
Chamera-II	285.00	286.34	333.55	338.46	327.37	218.55	219.58	255.78	259.54	251.04
Indira sagar	205.07	389.75	412.02	421.80	477.84	151.11	258.79	210.33	215.32	243.93
Maithon	-	-	17.22	17.47	17.67	-	-	126.96	128.81	130.28
Panchet	-	-	10.83	11.12	11.44	-	-	46.16	47.39	48.76
Tilaiya	-	-	3.42	3.55	3.67	-	-	246.75	256.13	264.79

ii) NEEPCO filed review of Commission's order dated 16.08.2005 in respect of final tariff for the period 2001-04 of Kopili HEP (4x50 MW) & Khandong HEP (2x25 MW). Commission considered review of Kopili HEP (4x50 MW) on account of cost considered for tariff purpose, error in escalation factor considered for calculation of O&M expenses and financial charges etc.

## 5. Availability Based Tariff for Indira Sagar hydro electric project

Commission in its Order dated 04.07.2005 had decided to implement Availability Based Tariff (ABT) on single beneficiary generating stations with effect from 01.12.2005, which included Indira Sagar hydro electric project (8x125 MW) in Madhya Pradesh. Commission appointed one Member Bench to consider the difficulties on implementation of ABT expressed by the various stakeholders and make appropriate recommendations to

the Commission. The Bench heard the parties and made its recommendations vide Order dated 03.07.2006. The Bench keeping in view of the overall progress of procurement of SEMs and their installation, customization of billing software, the mock billing of ABT energy accounting, UI billing etc., recommended to introduce ABT for Indira Sagar HE Project with effect from 01.01.2007.

Commission, subsequently vide order dated 30.11.2006 accepted the recommendations of one-Member Bench and directed that ABT shall be implemented at the generating station w.e.f. 01.01.2007 and in case any of the parties encounters difficulties in smooth operation of ABT during first six months, it is at liberty to approach the Commission for appropriate remedy.

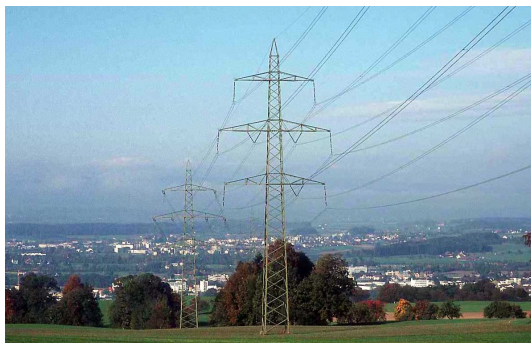
However, Madhya Pradesh Power Transmission Company Ltd. (MPPTCL) subsequently requested

the Commission for deferment of implementation of ABT from 01.01.2007 to 01.04.2007, as they envisaged certain problems. NHDC conveyed its no objection to defer the date of implementation of ABT from 01.01.2007 to 01.04.2007.

The Commission, in view of request made by the MPPTCL, directed that ABT shall be implemented at Indira Sagar HEP w.e.f. 01.04.2007 and also made it clear that no further deferment on any ground shall be allowed.

## INTER-STATE TRADING IN ELECTRICITY

The Commission had notified the Central Electricity Regulatory Commission (Procedure, Terms & Conditions for grant of Trading Licence and



other related matters) Regulations, 2004, dated 30.01.2004 followed by an Amendment dated 03.04.2006. As on 31st March 2007, the Commission has awarded trading licences to 21 companies for inter-State trading in electricity. Of the total, 13 trading licences were awarded during the year 2004-05, of which, one license has been cancelled on 26.10.2006 (GMR Energy Ltd) , 6 licences were awarded during 2005-06 and 3 licences were awarded during 2006-07.

### VOLUME OF ELECTRICITY TRADED BY THE TRADING LICENSEES

Details on volume of electricity traded by the licensees are provided below.

Sale Price (Rs)	Volume Traded During 2004-05		Volume Traded During 2005-06		Volume Traded During 2006-07	
	Volume (Million Kwhs)	% to Total Volume	Volume (Million Kwhs)	% to Total Volume	Volume (Million Kwhs)	% to Total Volume
0.00 - 1.00					252.20	1.68
1.00 - 2.00	1209.95	10.21				
2.00 - 3.00	10378.32	87.61	5103.33	35.97	1387.73	9.24
3.00 - 4.00	258.27	2.18	8437.07	59.46	1781.01	11.86
4.00 - 5.00			647.92	4.57	7203.30	47.95
5.00 - 6.00					3936.84	26.21
6.00 - 7.00					461.67	3.07
	<b>11846.53</b>	<b>100.00</b>	<b>14188.31</b>	<b>100.00</b>	<b>15022.74</b>	<b>100.00</b>

Nine licensees, which are undertaking trading have traded the total volume of electricity of 15022.74 MUs during the year 2006-07. Of the total volume, 43.77% traded by PTC India Ltd followed by NTPC Vidyut Vyapar Nigam Ltd (17.73%), Adani Exports Ltd (12.28%), Tata Power Trading Company (8.03%), JSW Power Trading Company Ltd (6.44%), Reliance Energy Trading Ltd (5.85%), Lanco Electric Utility Ltd (4.95%), Karam Chand Thapar & Bros (CS) Ltd (0.71%) and Subash Kabini Power Corporation Ltd (0.24%).

The volume of electricity traded by the licensees has increased from 14188.31 MUs in 2005-06 to 15022.74 MUs in 2006-07 registering the growth of 6%

during the current year. The growth in the volume of electricity traded was 7% in 2004-05 and 20% in 2005-06. However, the volume of electricity traded as percentage to the total electricity generation was between 2 to 3 percent during the last 3 years.

### **Selling and Buying Entities**

The trading licensees have purchased 60.93% of the total volume of electricity traded from only five selling entities (Govt. of HP, WBSEB, GRIDCO, JSWEL and KSEB) and sold 59.28% of the total volume of electricity traded to five buying entities (PSEB, MSEDCL, DTL, HVPNL and MSEB) during 2006-07. Full details are given below:

### SELLING ENTITIES\* DURING 2006-07

Sr.No	Name of the selling entity	Volume of electricity sold to Traders (MUs)	% of the Volume (MUs)
1	GOVT OF HP	2570.51	17.11
2	WBSEB	1864.96	12.41
3	GRIDCO	1819.01	12.11
4	JSWEL	1520.14	10.12
5	KSEB	1378.07	9.17
6	DVC	702.17	4.67
7	TNEB	524.10	3.49
8	CESC	439.74	2.93
9	DTL	362.49	2.41
10	KPCL	326.54	2.17
11	SIKKIM	310.26	2.07
12	HPGCL	287.62	1.91
13	NBFAL/NBVL	286.87	1.91
14	HPSEB	270.00	1.80
15	MPCL	265.33	1.77
16	GUVNL	234.34	1.56
17	NTPC-URS	224.56	1.49
18	BPSL	218.30	1.45
19	APPCC	204.26	1.36
20	TSECL	176.81	1.18
21	TRIPURA	169.42	1.13
22	TISCO	168.95	1.12
23	PSEB	133.87	0.89
24	TATA STEEL	106.65	0.71
25	MPPTC	72.85	0.48
26	ASEB	65.15	0.43
27	MPSEB	53.53	0.36
28	USWL	47.67	0.32
29	J&K	42.92	0.29
30	GSML	40.03	0.27
31	MeSEB	38.55	0.26



32	OHPC	33.81	0.23
33	KPTCL	21.74	0.14
34	VSL	19.96	0.13
35	NAGALAND	14.14	0.09
36	APTRANSCO	7.40	0.05
37	MIZORAM	0.04	0.00
	<b>Total</b>	<b>15022.74</b>	<b>100.00</b>
	<b>Top 5 selling entities</b>		<b>60.93</b>

\* The Entities those have sold their surplus power through trading licensees

#### BUYING ENTITIES\* DURING 2006-07

Sr.No	Name of the buying entity	Volume of electricity bought from Traders (MUs)	% of the Volume (MUs)
1	PSEB	3399.24	22.63
2	MSEDCL	2123.60	14.14
3	DTL	1415.71	9.42
4	HVPNL	1021.43	6.80
5	MSEB	945.14	6.29
6	HPSEB	712.05	4.74
7	CSEB	698.22	4.65
8	GUVNL	698.02	4.65
9	MPSEB	665.92	4.43
10	MPPTCL	659.60	4.39
11	TNEB	516.81	3.44
12	UPPCL	375.91	2.50
13	HPGCL	299.12	1.99
14	APTRANSCO	234.18	1.56
15	TPCL	216.48	1.44
16	APPCC	174.07	1.16
17	MeSEB	165.52	1.10
18	RPPC	151.72	1.01
19	CESC	90.79	0.60
20	ASEB	83.66	0.56
21	J&K	79.75	0.53

22	UTC	72.90	0.49
23	JDVVNL/JVVNL	61.89	0.41
24	WBSEB	57.48	0.38
25	KPTCL/KTAKA	35.26	0.23
26	UPCL	32.73	0.22
27	AVVNL	26.15	0.17
28	GOA	4.57	0.03
29	NOIDA POWER COMPANY LTD	2.62	0.02
30	CHANDIGARH	1.32	0.01
31	TSECL	0.72	0.00
32	BESCOM	0.20	0.00
	<b>Total</b>	<b>15022.74</b>	<b>100.00</b>
	<b>Top 5 buying entities</b>		<b>59.28</b>

\* The Entities those have purchased power through trading licensees

### Price of Electricity Traded

At the price range of Rs. 2.00 – Rs.3.00, about 88% of the volume of electricity has been traded during the year 2004-05 whereas at the same price range 35.97% and 9.24% has been traded during the following two years. The highest volume of electricity has been traded at the price range of Rs.3.00-Rs.4.00 and Rs.4.00-Rs.5.00 in the following two

years 2005-06 and 2006-07 respectively.

The sale price witnessed an upward trend during the year 2006-07 when compared with the sale price in the previous year. Maximum sale price was Rs.3.30 during 2004-05, where as it was Rs.4.75 during 2005-06 and Rs.6.88 during 2006-07. The weighted average sale price increased from Rs.3.23/kWh in 2005-06 to Rs.4.51/kWh in 2006-07.

**WEIGHTED AVERAGE PRICE AND TRADING MARGIN**

Sr. No	Name of the Trading Licensee	2005-06			2006-07		
		Weight Average Purchase Price (Rs)	Weighted Average Sale Price (Rs)	Trading Margin (Rs)	Weight Average Purchase Price (Rs)	Weighted Average Sale Price (Rs)	Trading Margin (Rs)
1	PTC India Ltd	3.13	3.19	0.06	4.41	4.45	0.04
2	NTPC Vidyut Vyapar Nigam Ltd	3.05	3.10	0.05	4.09	4.13	0.04
3	Adani Exports Ltd	3.20	3.40	0.20	5.01	5.05	0.05
4	Tata Power Trading Company	3.05	3.15	0.10	5.04	5.08	0.04
5	Reliance Energy Trading Ltd	3.20	3.26	0.06	3.94	3.99	0.05
6	Subash Kabini Power Corporation Ltd	3.17	3.33	0.16	3.72	3.70	-0.02
7	Lanco Electric Utility Ltd	4.48	4.52	0.04	4.45	4.49	0.04
8	JSW Power Trading Company Ltd				4.64	4.68	0.04
9	Karam Chand Thapar & Bros (CS) Ltd.				4.91	4.95	0.04
	<b>Total</b>	<b>3.14</b>	<b>3.23</b>	<b>0.09</b>	<b>4.47</b>	<b>4.51</b>	<b>0.04</b>

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

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 Commission has been proactive in implementing the intent of the Act on both above-mentioned fronts.

### (A) Benefits to Consumers

Reduction in bulk electricity process of central generating station under the new Terms & Conditions for the period 2004-09 on account of the following:

#### (i) Reduction in Return on Equity (ROE)

Reduction in ROE from 16% to 14% for the tariff period 2004-09 shall directly reduce the cost of bulk power.

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

The capital investment of the existing projects of the central generating companies were being serviced on debt equity ratio of 50:50. The new Terms & Conditions provide that for new investment on or after 01.04.2004

shall be serviced in the ratio of 70:30 and in case the equity deployed is less than 30% then 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) Rationalisation of Depreciation

Central Commission has rationalised recovery of depreciation in tariff by linking it to useful life of the assets in its tariff notification for 2001-04 and 2004-09. The accelerated rate of depreciation of 7.5% allowed to thermal generating station has been dispensed with. This was with a view to reduce front loading of tariff and reduce price of electricity to the SEBs/DISCOMs.

#### (iv) Higher Benchmarks of Performance

The norms of stations 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 of performance. The revision in these operational norms is as follows:

<b>Gross Station Heat Rate</b>		
	For period 2001-04	For period 2004-09
Coal based TPS 500 MW sets	2500 Kcal/KWh	2450 Kcal/KWH
TPS-II based stations	2956 Kcal/KWh	2850 Kcal/KWh
Combined cycle stations	2000 Kcal/KWh and separate norms for small gas turbines less than 50 MW	1850/1950 Kcal/KWh depending upon class of the gas turbine.
<b>Secondary Fuel Oil Consumption</b>		
Coal/Lignite based stations	3.5 ml/kWh	2.0 ml/KWh for coal and 3.0 ml/KWh for lignite based stations.
<b>Auxiliary Energy Consumption</b>		
Coal	As per GOI notification dt.30.3.1992.	Reduced by 0.5% point for coal based stations.

The relaxed operation norms for existing stations of NTPC namely Kahalgaon STPS and gas based

station namely Kawas, Gandhar, Dadri, Anta and Auriya have also been reduced and are as follows:

<b>Name of Generating Station</b>	<b>For the period 2001-04</b>	<b>For the period 2004-09</b>
Kahalgaon STPS	2550	2500
Kawas GPS	2125	2075
Gandhar GPS	2100	2000
Anta GPS	2125	2075
Auraiya GPS	2125	2100
Dadri GPS	2125	2075

The variable charges are reduced corresponding to the revision in operating norms. In case of existing stations of NTPC, the net reduction in the variable charges for the NTPC stations based on prices of coal gas and

secondary fuel oil as in March 2004 is expected to be around Rs.372.00 crore out of this Rs.233 crore is on account of reduction in specific fuel oil consumption norms alone. However, upward revision in fuel price can offset the

reduction achieved through tightening of operating norms.

Consequent to renovation and modernization of Tanda TPS

(4 x 110 MW), after its acquisition by NTPC, the Commission has tightened its norms of performance and operation w.e.f. 01.04.2007 as follows :

#### Tanda TPS

Operational Parameters	Old Norm	New Norm
Target Availability (%)	60	80
Target PLF (%)	60	80
Station Heat Rate (kcal/kWh)	3000	2850
Auxiliary Energy Consumption Norm (%)	11	12
Specific Fuel Oil Consumption (ml/kWh)	3.5	2.0

(v) Norms for loss of coal in transit

In the tariff regulations for the period 2004-09, the following normative transit and handling losses as percentage of the quantity of coal dispatched by the coal supply company during the month have been specified:

Pithead generating stations: 0.3%

Non-Pit head generating stations: 0.8%

The above norms would have significant impact in curbing loss/ pilferage of coal in transit.

(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 will encourage the generating companies to economize their O&M expenses and keep the cost of generation under control. The O&M norms for coal based stations are as follows:

### Coal based stations (Rs. in lakh/MW)

Year	200/210/250 Mw sets	500 MW and above sets
2004-05	10.40	9.36
2005-06	10.82	9.73
2006-07	11.25	10.12
2007-08	11.70	10.52
2008-09	12.17	10.95

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

#### (vii) Target Availability

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. 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.

### **(B) 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:

#### (i) Rationalisation of Advance Against Depreciation (AAD)

There was provision of Advance Against Depreciation to facilitate repayment of loan in terms & conditions of tariff for the period 2001-04. The new Terms & Conditions of tariff for the period 2004-09 provide for advance against depreciation linked to loan tenure of 10 years instead of 12 years earlier. This will ensure easy repayment option for the generators and comfort in arranging finance for the new projects.

(ii) Doing away with concept of actual or lower whichever is lower.

#### (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 have been removed and interest on working capital has to be computed on the normative fuel stock and fuel consumption etc.

This would incentivise generators to optimise their resources and bring in more efficiency in operation so that savings, if any, could be retained by them.

(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 in advance and incentivise them to optimise their resources. Savings, if any, can be retained by the generators.

(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. The normative operational parameters now incentivise generators to operate its plant efficiently and in optimum manner. Savings, if any, can be retained by the generator.

(iii) All India Norm 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 to be applied for working out regional O&M charges for the inter-State transmission system.

2. 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 inter-State transmission have facilitated and streamlined electricity trading. The volume of traded electricity has been rising steadily. 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.

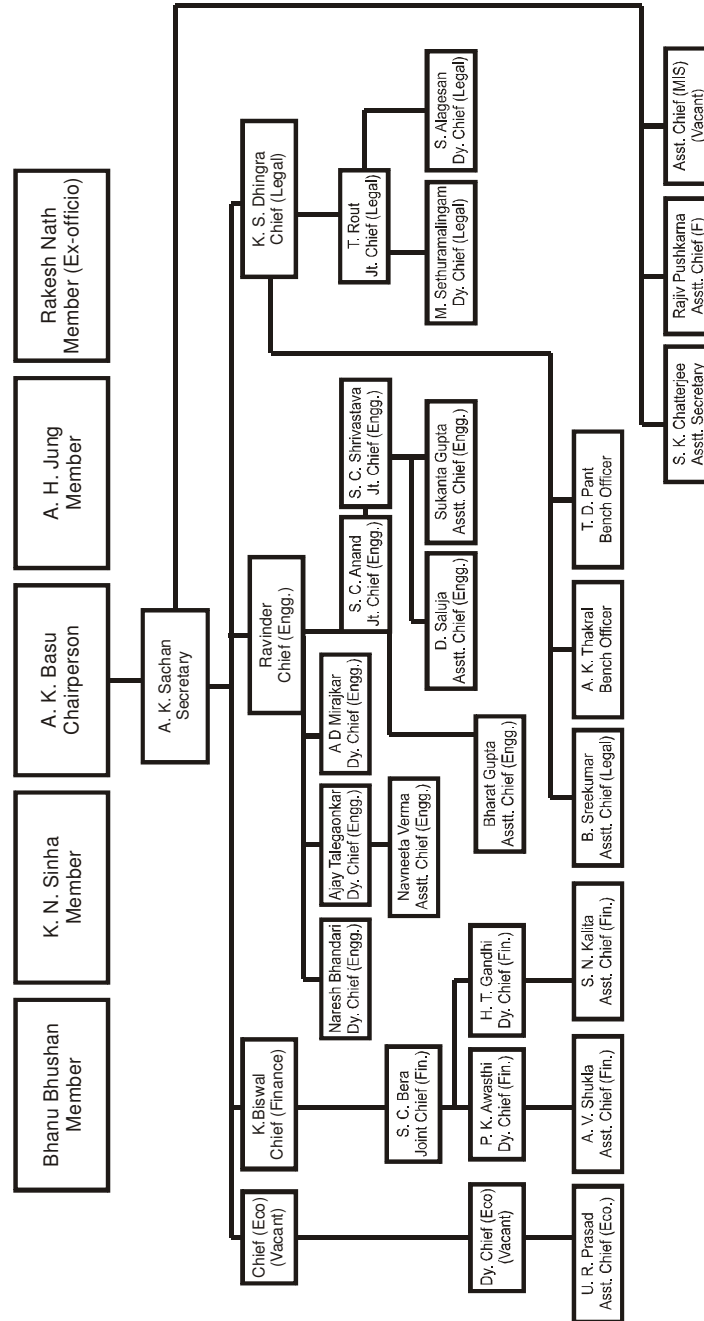
The Commission has issued the guidelines for setting up of the Power Exchange. It is hoped that the setting up of Power Exchange would bring about equity and transparency and efficiency in electricity trading resulting in better resource optimization and providing stronger signal for investment.

## AGENDA FOR 2007-08

- Preparation for framing of Tariff Regulation for the next Tariff Period, i.e. 2009 – 14 including
  - Devising a framework in which tariff can be determined upfront.
  - Obtaining performance and operational data from the utilities.
  - Simplification of tariff calculation methodology.
  - Issue of discussion paper for a focused debate on new terms and conditions of tariffs.
- Preparation for implementation of National Transmission Tariff framework.
- Preparation of Regulatory framework for servicing of investment on renovation and modernization of plants/units, which have served their useful life.
- Review of Open Access Regulations in order to accommodate Power Exchange transactions.
- Conceiving Regulatory Mechanism to ensure payment security for payment to UI Pool account.

# ANNEXURES

## Central Electricity Regulatory Commission Organisation Chart



**Annexure - II**

**E-MAIL ID AND PHONE NUMBERS OF THE CHAIRPERSON,  
MEMBERS AND STAFF OF THE COMMISSION  
(As on 31.03.2007)**

	Name	Designation	Phone No.	E-mail
	A. K. Basu	Chairperson	24360004	chairman@cercind.org
	Bhanu Bhushan	Member	24361259	bhanubhu@del3.vsnl.net.in
	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	Deputy Chief (Engg.)	24364826	ajay_tal@hotmail.com

	A. D. Mirajkar	Deputy Chief (Engg.)	24364826	avinashdmirajkar@rediffmail.com
	M. Sethuramalingam	Deputy Chief (Legal)	24364826	msr_sethu@yahoo.com
	S. Alagesan	Deputy Chief (Legal)	24364826	alagesan_js@yahoo.com
	S. K. Chatterjee	Assistant Secretary	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 (Fin.)	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
	A. K. Thakral	Bench Officer	24361145	
	T. D. Pant	Bench Officer	24361145	tdpant_law@yahoo.com



## ANNEXURE – III

### 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 Ravinder, Chief (Engg.)	Peer Exchange Programme of USAID (from 26 <sup>th</sup> to 30 <sup>th</sup> June, 2006).	Johannesburg (South Africa)
02.	Smt. Navneeta Verma, Asst. Chief (Engg.)	- DO -	- DO -
03.	Shri A.K. Basu Chairperson	13 <sup>th</sup> Steering Committee Meeting of South Asia Forum of Infrastructure Regulation (SAFIR) (from 01 <sup>st</sup> to 02 <sup>nd</sup> September, 2006).	Bhutan
04.	Shri A.K. Basu Chairperson	Bilateral Discussion with Michigan Public Service Commission and to attend a meeting of World Forum on Energy Regulation-III (from 05 <sup>th</sup> to 10 <sup>th</sup> October, 2006).	U.S.A.
05.	Shri Ajay Talegaonkar Dy. Chief (Engg.)	- DO -	- DO -
06.	Shri Devendra Saluja, Asst. Chief (Engg.)	Technical visit to Coal-based Power Plants in USA as per the Work Plan of the Task Force (on Power Generation & Transmission) of Asia Pacific Partnership on Clean Development and Climate (from 30 <sup>th</sup> October, 2007 to 04 <sup>th</sup> November, 2006).	U.S.A.
07.	Shri K.S. Dhingra, Chief (Legal)	South Asia Regional Initiative / Energy Executive Peer Exchange (from 06 <sup>th</sup> to 10 <sup>th</sup> November, 2006).	Canada
08.	Shri P.K. Awasthi, Dy. Chief (Fin.)	- DO -	- DO -
09.	Shri Naresh Bhandari, Dy. Chief (Engg.)	Foreign Training on "Technology Improvement Programme in Grid Operation" (from 17 <sup>th</sup> March, 2007 to 22 <sup>nd</sup> April, 2007)	Canada, USA, Norway, UK, Belgium and France.

### 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.	Intensive Programme on "Financing, Pricing and Accounting System" for the Power Sector (from 28 <sup>th</sup> – 30 <sup>th</sup> August, 2006) at New Delhi.	(1) Shri S.C. Bera, Joint Chief (Fin.) (2) Shri Rajeev Pushkarna, Asst. Chief (Fin.)
02.	Engineering Staff College of India (ESCI), Hyderabad.	DRUM Training Programme on "Regulation of Distribution Business" (from 06 <sup>th</sup> – 10 <sup>th</sup> November, 2006) at Hyderabad.	(1) Shri Sreekumar, Asst. Chief (Legal)
03.	The Energy & Resources Institute (TERI), New Delhi.	National Conference on "Regulatory Performance in India : Achievements, Constraints, and Future Action" (from 09 <sup>th</sup> - 10 <sup>th</sup> November, 2006) at New Delhi.	(1) Shri K. Biswal, Chief (Fin.)
04.	The Energy & Resources Institute (TERI), New Delhi in association with New Energy & Industrial Technology Development Organization (NEDO)	"India-Japan Energy Forum – Promoting Cooperation in Energy Sector" (from 06 <sup>th</sup> – 07 <sup>th</sup> December, 2006) at New Delhi.	(1) Shri M. Sethuramalingam, Dy. Chief (Legal) (2) Shri Rajeev Pushkarna, Asst. Chief (Fin.)
05.	The Energy & Resources Institute (TERI), New Delhi in association with Forum of Regulators (FOR)	"Implementation of the Electricity Act & Electricity Policies " (from 26 <sup>th</sup> February – 03 <sup>rd</sup> March, 2007) at Gurgaon.	(1) Shri S.N. Kalitha, Asst. Chief (Fin.) (2) Shri Rajeev Pushkarna, Asst. Chief (Fin.)

## ANNEXURE – V

### (A) STATUS OF PETITIONS FILED BEFORE THE COMMISSION DURING THE YEAR 2006-07

Carried forward from last year (2005-2006)	No. of Petitions received during 2006-2007	Total	Disposed of	Pending as on 31.03.2007
157	178	335	231	104

### Details of Petitions disposed of during 2006-2007

Sl. No.	Petition No.	Date of Filing	Filed by	Subject	Date of Disposal
01.	<b>38/2001</b>	<b>06.06.2001</b>	<b>NTPC</b>	Tariff for Rihand STPS - 01.04.2001 to 31.03.2004.	02-Jun-06
02.	<b>87/2002</b>	<b>26.06.2002</b>	<b>PGCIL</b>	Incentive of transmission system of Southern Region for the year 2001-2002.	09-Jun-06
03.	<b>89/2002</b>	<b>28.06.2002</b>	<b>PGCIL</b>	Incentive of transmission system of Eastern Region for the year 2001-2002.	26-Oct-06
04.	<b>90/2002</b>	<b>03.07.2002</b>	<b>PGCIL</b>	Incentive of transmission system of Northern Region for the year 2001-2002.	02-Jun-06
05.	<b>131/2002</b>	<b>09.12.2002</b>	<b>PGCIL</b>	Transmission Tariff for 400 kV D/C Talchar-Meramundali Line in Eastern Region for the period from 01.12.2003 to 31.03.2003.	09-May-06
06.	<b>10/2003</b>	<b>07.03.2003</b>	<b>GRIDCO</b>	Direction to APTRANSCO for payment of arrears/outstanding dues.	26-Oct-06
07.	<b>44/2003</b>	<b>14.08.2003</b>	<b>PGCIL</b>	Approval of incentive on availability of transmission system in Southern Region for period from 2002 - 2003.	09-Jun-06
08.	<b>45/2003</b>	<b>14.08.2003</b>	<b>PGCIL</b>	Approval of incentive based on availability of transmission system in Eastern Region for the year 2002-2003.	26-Oct-06

09.	<b>46/2003</b>	<b>14.08.2003</b>	<b>PGCIL</b>	Approval of incentive based on availability of transmission system in Northern Region for the year 2002-2003.	02-Jun-06
10.	<b>96/2003</b>	<b>15.12.2003</b>	<b>PGCIL</b>	Approval for transmission tariff for 400 KV S/C Meramundali-Jeypore Transmission Line along with extension of Meramundali and Jeypore Sub-station in Eastern Region for the period from 01.01.2004 to 31.03.2004.	19-Jul-06
11.	<b>6/2004</b>	<b>16.01.2004</b>	<b>MPSEB</b>	Fixation of wheeling charges in respect of transmission system of GRIDCO for wheeling of power from NTPC's power stations in Eastern Region through their system to the MPSEB w.e.f 01.04.2001.	23-Mar-07
12.	<b>31/2004</b>	<b>23.03.2004</b>	<b>GEL</b>	Grant of inter-state trading licence	28-Aug-06
13.	<b>35/2004</b>	<b>05.04.2004</b>	<b>NTPC</b>	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).	25 Sep-06
14.	<b>48/2004</b>	<b>03.06.2004</b>	<b>PGCIL</b>	Approval of incentive under Regulation-86 based on availability of transmission system of Western Region for the year 2003/2004.	14-Sep-06
15.	<b>56/2004</b>	<b>15.06.2004</b>	<b>PGCIL</b>	Incentive based on availability of transmission system in Eastern Region for year 2003-2004.	14-Sep-06
16.	<b>57/2004</b>	<b>15.06.2004</b>	<b>PGCIL</b>	Incentive based on availability of transmission system in Northern Region for year 2003-2004.	15-Jan-07
17.	<b>60/2004</b>	<b>17.06.2004</b>	<b>PGCIL</b>	Incentive based on availability of transmission system in Southern Region for year 2003-2004.	02-Feb-07
18.	<b>72/2004</b>	<b>22.07.2004</b>	<b>PGCIL</b>	Tariff of Vindhyachal Stage-I Additional transmission system in Western Region for the period from 01.04.2004 to 31.03.2009.	02-May-06
19.	<b>74/2004</b>	<b>23.07.2004</b>	<b>PGCIL</b>	Tariff of Kayamkulam transmission system in Southern Region for the period from 01.04.2004 to 31.03.2009.	09-May-06
20.	<b>91/2004</b>	<b>13.09.2004</b>	<b>NTPC</b>	Approval of tariff of Talcher Thermal Power Station (460 MW) for the period from 01.04.2004 to 31.03.2009.	23-Mar-07
21.	<b>96/2004</b>	<b>28.09.2004</b>	<b>PGCIL</b>	Tariff for Rihand Transmission System in Northern Region for the period	09-May-06

				from 01.04.2004 to 31.03.2009.	
22.	<b>116/2004</b>	<b>30.09.2004</b>	<b>PGCIL</b>	Tariff for 50 MVAR Reactor alongwith the associated equipment at Chandrapur sub-station in Western Region for the period from 01.04.2004 to 31.03.2009.	25-Apr-06
23.	<b>128/2004</b>	<b>28.09.2004</b>	<b>NTPC</b>	Tariff for Vindhychal Super Thermal power station Stage-I for the period from 01.04.2004 to 31.03.2009	29-Jun-06
24.	<b>129/2004</b>	<b>28.09.2004</b>	<b>PGCIL</b>	Tariff for 315 MVA 400/230 KV Auto Transformer at Hyderabad and one 50 MVAR Reactor at Cuddapah under Central Transmission Project Augmentation in Southern Region for the period from 01.04.2004 to 31.03.2009.	03-May-06
25.	<b>130/2004</b>	<b>28.09.2004</b>	<b>PGCIL</b>	Tariff for 400 kV Ramagundam Transmission System including ICT Khammam & Reactor at Gazuwaka under CTP Augmentation in Southern Region for the period from 01.04.2004 to 31.03.2009.	02-May-06
26.	<b>137/2004</b>	<b>30.09.2004</b>	<b>PGCIL</b>	Tariff for Ramagundam -Hyderabad transmission line in Southern Region and Chandrapur HVDC back to back station (2x500MW) in Western Region and Southern Region for the period from 01.04.2004 to 31.03.2009.	02-May-06
27.	<b>142/2004</b>	<b>20.10.2004</b>	<b>NTPC</b>	Approval of tariff of Feroze Gandhi Unchachar Thermal Power Station Stage-I (420MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
28.	<b>144/2004</b>	<b>21.10.2004</b>	<b>NTPC</b>	Approval of tariff of Talcher Super Thermal Power Station Stage-I (1000MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
29.	<b>146/2004</b>	<b>25.10.2004</b>	<b>NTPC</b>	Approval of tariff of Vindhyachal Super Thermal Power Station-Stage-II for the period from 01.04.2004 to 31.03.2009.	21-Aug-06
30.	<b>147/2004</b>	<b>26.10.2004</b>	<b>NTPC</b>	Approval of tariff of Kayamkulam Combined Cycle Power Project (359.58 MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06

31.	<b>148/2004</b>	<b>26.10.2004</b>	<b>NTPC</b>	Approval of tariff of Ramagundam Super Thermal Power Station (2100MW), Stage I & II for the period from 01.04.2004 to 31.03.2009.	30-Jun-06
32.	<b>149/2004</b>	<b>26.10.2004</b>	<b>NTPC</b>	Approval of tariff of Simhadri Thermal Power Station (1000MW) for the period from 01.04.2004 to 31.03.2009.	22-Sep-06
33.	<b>150/2004</b>	<b>27.10.2004</b>	<b>NTPC</b>	Approval of tariff of Feroze Gandhi Unchachar Thermal Power Station Stage-II (420MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
34.	<b>151/2004</b>	<b>27.10.2004</b>	<b>NTPC</b>	Approval of tariff of Rihand Super Thermal Power Station (1000MW) for the period from 01.04.2004 to 31.03.2009.	19-Jun-06
35.	<b>153/2004</b>	<b>28.10.2004</b>	<b>NTPC</b>	Approval of tariff of Farakka Super Thermal Power Station (1600 MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
36.	<b>155/2004</b>	<b>28.10.2004</b>	<b>NTPC</b>	Approval of tariff of Dadri Gas Power Station (829.78 MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
37.	<b>156/2004</b>	<b>28.10.2004</b>	<b>NTPC</b>	Approval of tariff of Faridabad Gas Power Station (431.586 MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
38.	<b>157/2004</b>	<b>29.10.2004</b>	<b>NTPC</b>	Approval of tariff of Singrauli Super Thermal Power Station (2000 MW) for the period from 01.04.2004 to 31.03.2009.	09-May-06
39.	<b>158/2004</b>	<b>28.10.2004</b>	<b>NHPC</b>	Approval of tariff of Bairasiul HE Project for the period from 01.04.2004 to 31.03.2009.	09-May-06
40.	<b>159/2004</b>	<b>29.10.2004</b>	<b>NTPC</b>	Approval of tariff of Korba Super Thermal Power Station (2100 MW) for the period from 01.04.2004 to 31.03.2009.	19-Jul-06
41.	<b>160/2004</b>	<b>29.10.2004</b>	<b>NTPC</b>	Approval of tariff of Anta Gas Power Station for the period from 01.04.2004 to 31.03.2009.	09-May-06
42.	<b>162/2004</b>	<b>29.10.2004</b>	<b>NTPC</b>	Approval of tariff of National Capital Thermal Power Station, Dadri for the period from 01.04.2004 to 31.03.2009.	05-May-06
43.	<b>163/2004</b>	<b>01.11.2004</b>	<b>NTPC</b>	Approval of tariff of Tanda Thermal Power Station (440 MW) for the period from 01.04.2004 to 31.03.2009.	30-Nov-06
44.	<b>164/2004</b>	<b>29.10.2004</b>	<b>NTPC</b>	Approval of tariff of Auraiya Gas Power Station (663.36 MW) for the	09-May-06

				period from 01.04.2004 to 31.03.2009.	
45.	<b>171/2004</b>	<b>05.11.2004</b>	<b>NHPC</b>	Tariff of Loktak HE Project of NHPC for the period from 01.04.2004 to 31.03.2009.	04-Oct-06
46.	<b>175/2004</b>	<b>16.11.2004</b>	<b>NHPC</b>	Approval of generation tariff of Rangit HE Project for the period from 01.04.2004 to 31.03.2009.	09-May-06
47.	<b>183/2004</b>	<b>06.12.2004</b>	<b>Induj Energetech Ltd.</b>	Application for grant of inter-state trading licence.	18-Jul-06
48.	<b>186/2004</b>	<b>06.12.2004</b>	<b>NLC</b>	Approval of fixation of tariff of NLC TPS-I (600MW) for the period from 01.04.2004 to 31.03.2009.	26-Sep-06
49.	<b>187/2004</b>	<b>01.12.2004</b>	<b>NHPC</b>	Approval of tariff in respect of Chamera HE Project Stage -II for the period from 01.04.2004 to 31.03.2009.	09-May-06
50.	<b>189/2004</b>	<b>14.12.2004</b>	<b>ASEB</b>	Review of order dated 6.9.2004 in petition No.13/2004-implementation of the order dated 01.01.2002 in petition No. 40/2000 and Review Petition No. 110/2000 for approval of transmission tariff of assets in North Eastern Region covered in Petition No. 40/2000 for the period from 01.02.2000 to 31.03.2004 for the pre-ABT Period.	07-Apr-06
51.	<b>197/2004</b>	<b>24.12.2004</b>	<b>NHPC</b>	Approval of tariff in respect of Salal HE Project for the period from 01.04.2004 to 31.03.2009.	09-May-06
52.	<b>2/2005</b>	<b>07.01.2005</b>	<b>NEEPCO</b>	Review of Commissions Order dated 06.09.2004 in Petition No. 13/2004-implementation of the order dated 01.01.2002 in petition No. 40/2000 and Review Petition No. 110/2000 for approval of transmission tariff of assets in North Eastern Region covered in Petition No. 40/2000 for the period from 01.02.2000 to 31.03.2004 for the pre-ABT Period.	07-Apr-06
53.	<b>3/2005</b>	<b>07.01.2005</b>	<b>PGCIL</b>	Review of Commissions Order dated 06.09.2004 in Petition No. 13/2004-implementation of the order dated 01.01.2002 in petition No. 40/2000 and Review Petition No. 110/2000 for approval of transmission tariff of assets in North Eastern Region covered in Petition No. 40/2000 for the period from	09-May-06



				01.02.2000 to 31.03.2004 for the pre-ABT Period.	
54.	<b>11/2005</b>	<b>08.02.2005</b>	<b>PGCIL</b>	Determination of transmission tariff for Fixed and Thyristor controlled Series Compensation for 400 kV D/C Raipur-Rorkela Transmission Line at Raipur in Western Region for the period from 01.11.2004 to 31.03.2009.	27-Oct-06
55.	<b>24/2005</b>	<b>10.03.05</b>	<b>ERLDC</b>	Non-payment of UI charges by BSEB.	07-Jun-06
56.	<b>25/2005</b>	<b>11.03.2005</b>	<b>PGCIL</b>	Reimbursement of the cost of hedging as pass through on account of currency and/or interest rate swap in the changed scenario of accountal of FERV on the foreign loans as per revised AS-II	09-May-06
57.	<b>30/2005</b>	<b>31.03.2005</b>	<b>NHPC</b>	Tariff for Tanakpur HE project for the period 01.04.2004 to 31.03.2009.	09-May-06
58.	<b>39/2005</b>	<b>26.04.2005</b>	<b>NHPC</b>	Approval of tariff of CHAMERA HE Project Stage -I for the period 01.04.2004 to 31.03.2009.	09-May-06
59.	<b>49/2005</b>	<b>12.05.2005</b>	<b>PGCIL</b>	Tariff for 400/220 kV Bhiwadi s/s along with LLO of Ballabgarh-Jaipur 400 kV S/C line and ICT-I & ICT-II at Bhiwadi in Northern Region for the period from 01.04.2004 to 31.03.2009 and for 2001-04 for the additional capitalization during 2001-2004.	26-Apr-06
60.	<b>59/2005</b>	<b>25.05.2005</b>	<b>BSEB</b>	Sharing of the transmission charges of the 220 kV D/C Birpara/Salakati transmission line and associated sub-station at Bipara (ER) and Salakati (NER)an inter regional assets between ER & NER and part of the Chukka transmission system.	20-Jun-06
61.	<b>60/2005</b>	<b>27.05.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for stage-I of 400 kV Thyristor controlled series compensation project (FACTS Device) on Kanpur-Ballabgarh 400 kV S/C line at Ballabgarh in Northern Region for the period from 01.04.2004 to 31.03.2009 and for the additional capitalization during 2001-2004.	09-May-06

62.	<b>61/2005</b>	<b>26.05.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for 400 kV D/C Kolhapur-Mapusa Transmission line (ckt -I and (ckt II) and associated bays in Western Region for the period from 01.04.2004 to 31.03.2009.	09-May-06
63.	<b>63/2005</b>	<b>06.06.2005</b>	<b>PGCIL</b>	Transmission tariff for 400 kV D/C Raipur- Rourkele line along with Raipur & Rourkele Extension under Eastern-Western inter-regional link in Western Region for the period from 01.04.2004 to 31.03.2009 and for additional capitalization for the period 2001-2004. Ramagundum-Chandarpur Transmission System in Southern and Western Region for the period from 01.04.2001 to 31.03.2004.	09-May-06
64.	<b>64/2005</b>	<b>06.06.2005</b>	<b>PGCIL</b>	Transmission tariff for 1x500 MW HVDC back to back station at Sasaram with associated AC Switchyard at Sasaram and Allahabad & Auxiliary system including 400 kV Sarnath-Allahabad Line Associated bays etc. under Eastern-Northern inter-regional HVDC Transmission System from 01.04.2004 to 31.03.2009 and for 2001-04 for the additional capitalization for the period 2001-2004,	09-May-06
65.	<b>65/2005</b>	<b>08.06.2006</b>	<b>Suo-motu</b>	Compliance of Central Electricity Regulatory Commission (Procedure, Terms & Conditions for grant of Trading Licence and other related matters) Regulations, 2004	
66.	<b>66/2005</b>	<b>10.06.2005</b>	<b>DVC</b>	Tariff for sale of electricity by Damodar Valley Corporation and the inter-state transmission of electricity.	03-Oct-06
67.	<b>67/2005</b>	<b>07.06.2005</b>	<b>PGCIL</b>	Transmission tariff of 400 kV Jamshedpur-Rourkela Single circuit Transmission line in Eastern Region for the period from 01.04.2004 to 31.03.2009 and additional capitalization for the period 2001-2004.	04-May-06
68.	<b>68/2005</b>	<b>13.06.2005</b>	<b>NLC</b>	Approval of tariff for NLC TPS-I Expansion (2x210MW) for the period	23-Mar.07

				from 01.04.2004 to 31.03.2009	
69.	<b>70/2005</b>	<b>14.06.2005</b>	<b>PGCIL</b>	Transmission tariff for 315 MVA, 400/220 kV ICT-IV Ballabgarh in Northern Region for the period from 01.04.2004 to 31.03.2009 and for the additional capitalization during 2001-2004	28-Apr-06
70.	<b>72/2005</b>	<b>17.06.2005</b>	<b>PGCIL</b>	Transmission tariff for LLO of S/C Singrauli-Kanpur Line-I, 400 kV Sub-station at Allahabad and LLO of Singrauli-Kanpur Line-II, including ICT I&II at Allahabad with associated bays in Northern Region for the period from 01.04.2004 to 31.03.2009 and additional capitalization for the period 2001-04.	09-May-06
71.	<b>73/2005</b>	<b>16.06.2005</b>	<b>PGCIL</b>	Transmission tariff for Bihar Grid Strengthening Scheme in Eastern Region for the period from 2004 to 2009.	09-May-06
72.	<b>79/2005</b>	<b>06.07.2005</b>	<b>NTPC</b>	Approval of tariff of Kawas Gas Power Station (656.20 MW) for the period from 01.04.2004 to 31.03.2009.	16-Nov-06
73.	<b>80/2005</b>	<b>06.07.2005</b>	<b>NTPC</b>	Approval of tariff of Jhanor Gandhar Gas Power Station (657.39MW) for the period from 01.04.2004 to 31.03.2009.	15-Dec-06
74.	<b>84/2005</b>	<b>11.07.2005</b>	<b>PGCIL</b>	Transmission tariff for Talcher Kolar HVDC line----- in Southern Region for the period from 01.04.2004 to 31.03.2009 and additional capitalization during 2001-2004.	09-May-06
75.	<b>86/2005</b>	<b>15.07.2005</b>	<b>NHPC</b>	Determination of impact of additional capital expenditure incurred during 2001-02, 2002-03 and 2003-04 for Chamara HE Project Stage-I	27-Apr-06
76.	<b>87/2005</b>	<b>18.07.2005</b>	<b>SJVNL</b>	Approval of final generation tariff of Nathpa Jhakri HE Project for the period 06.10.2003 to 31.03.2004.	21-Mar-07
77.	<b>90/2005</b>	<b>27.07.2005</b>	<b>TNEB</b>	Miscellaneous application for gaming by the generators by generating more than the 1% of the declared capacity on a regular basis from 01.04.2004.	09-May-06

78.	<b>99/2005</b>	<b>08.08.05</b>	<b>NRLDC</b>	Maintaining of regional Grid frequency above 49.0 Hz by curbing overdrawal in line with Section 6.2 (1) and 7.4.4 respectively of the Indian Electricity Grid code (IEGC).	20-Jun-06
79.	<b>102/2005</b>	<b>31.08.05</b>	<b>PGCIL</b>	Approval of Panki-Naubasts transmission line in Northern Region for the period from 01.04.2004 to 31.03.2009.	28-Apr-06
80.	<b>104/2005</b>	<b>31.08.2005</b>	<b>PGCIL</b>	Approval of LILO of 400 kV D/C Bongaigaon-Malda at Purnea & sub-station at Purnea (New) in Eastern Region for the period from 01.11.2003 to 31.03.2004.	09-May-06
81.	<b>105/2005</b>	<b>08.09.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Hiriur Sub-station, (including 315 MVA Auto Transformer), LILO of Davangere Hoody 400 kV D/C line at Hiriur and additional bays at Kolar and Hosur sub-station for second circuit of Kolar-Hosur 400 kV D/C line under system strengthening Scheme -II in Southern Region for the period 01.04.2004 to 31.03.2009.	05-May-06
82.	<b>109/2005</b>	<b>19.09.2005</b>	<b>NTPC</b>	Determination of impact of additional capital expenditure incurred during 2001-2002, 2002-2003 and 2003-04 in respect of Jhanor Gandhar Gas Power Station (657.39 MW).	09-May-06
83.	<b>110/2005</b>	<b>19.09.2005</b>	<b>NTPC</b>	Determination of impact of additional capital expenditure incurred during 2001-2002, 2002-2003 and 2003-04 in respect of Kawas Gas Power Station (656.20 MW).	09-May-06
84.	<b>111/2005</b>	<b>20.09.2005</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV Tarapur-Padge Ckt-I including bay extension at Padge S/S associated with Tarapur Atomic Power Station State 3 & 4 in Western Region for the period from 01.03.2005 to 31.03.2009.	25-Apr-06
85.	<b>112/2005</b>	<b>20.09.2005</b>	<b>PGCIL</b>	Approval of tariff of LILO of 400 kV D/C Bongaigaon-Malda at Siliguri & Sub-station at Dsiliguri (New) IN Eastern Region for the period from 01.04.2004 to 31.03.2009.	04-May-06

86.	<b>113/2005</b>	<b>21.09.2005</b>	<b>NEEPCO</b>	Review of the order dated 16.8.2005 in petition No. 36/2003- Approve of generation tariff of Kopili Hydro Electric Project ( 250 MW) for the period from 01.04.2001 to 31.03.2004.	02-Jun-06
87.	<b>114/2005</b>	<b>21.09.2005</b>	<b>NTPC</b>	Revision of O & M Expenses in respect of Jhanor Gandhar Gas Power Station (657.39 MW) for the period from 01.04.2001 to 31.03.2004.	05-Feb-07
88.	<b>115/2005</b>	<b>23.09.2005</b>	<b>NEEPCO</b>	Review of the order dated 22.08.2005 in petition No. 33/2003- Approval of tariff of Assam Gas Based Power Station for the period from 01.04.2001 to 31.03.2004.	02-Aug-06
89.	<b>117/2005</b>	<b>29.09.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Agra (Power grid)-Agra (UPPCL) 400KV D/C interconnection in Northern Region for the period from 01.04.2004 to 31.03.2009.	07-Jul-06
90.	<b>118/2005</b>	<b>29.09.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Series compensation on Panki-Mu+E816radnagar 400 KV S/C line of UPPCL in Northern Region from 01.04.2004 to 31.03.2009.	19-Jun-06
91.	<b>119/2005</b>	<b>27.09.2005</b>	<b>NHDC</b>	Approval of generation tariff of Indira Sagar Project for the period 14.01.2004 to 31.03.2009.	06-Feb-07
92.	<b>120/2005</b>	<b>05.10.2005</b>	<b>NTPC</b>	Approval of tariff of Kahalgaon Super Thermal Power Station (840 MW) for the period from 01.04.2004 to 31.03.2009.	20-Nov-06
93.	<b>121/2005</b>	<b>07.10.2005</b>	<b>NHPC</b>	Determination of impact of additional capital expenditure incurred during the years 2001-02, 2002-03 and 2003-04 in respect of Ranjit HE Project	09-May-06
94.	<b>123/2005</b>	<b>13.10.2005</b>	<b>NTPC</b>	Review of the Commission's order dated 13.06.2005 in petition No. 1/2003-approval of tariff of the Units I&II of Talcher STPS Stage-II for the period from 01.08.2003 to 31.03.2004	09-May-06
95.	<b>125/2005</b>	<b>17.10.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Mau-Balia 132 KV S/C line in the state of Uttar Pradesh in NR for the period 2001-2004.	25-Apr-06
96.	<b>126/2005</b>	<b>20.10.2005</b>	<b>EDCL</b>	Application for inter-state Trading license	29-Aug-06

97.	<b>127/2005</b>	<b>25.10.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for (a) HVDC terminal station at Talcher and Kolar related with Pole-II, 400 kV D/C Kolar-Hossur Transmission line along with bays at Kolar and House and 400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet etc under transmission system associated with Talcher STPS Stage-II in SR for the period from 01.04.2004 to 31.03.2009 and for 2001-04 for additional capitalization during 2001-04.	09-May-06
98.	<b>128/2005</b>	<b>24.10.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Khammam-Nagarjunsagar 400 kV S/C line along with extension of Khammam and Nagarjunsagar 400/220 kV S/S under scheme for strengthening of grid system and evacuation of power from Ramagundum Stage III in Southern Region for the period from 01.04.2004 to 31.03.2009.	05-May-06
99.	<b>130/2005</b>	<b>31.10.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Allahabad-Phulpur S/C transmission line under system improvement scheme in Uttar Pradesh of Northern Region for the period from 01.06.2004 to 31.03.2009.	26-Oct-06
100.	<b>131/2005</b>	<b>02.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for 400 kV Nathpa-Jhakri Transmission system in Northern Region for the period 01.04.2004 to 31.03.2009 and additional capitalization for the period 01.04.2001 to 31.03.2004.	22-Sep-06
101.	<b>132/2005</b>	<b>10.10.2005</b>	<b>NEEPCO</b>	Review of the Commission's order dated 09.09.2005 in petition No. 32/2003- Approval of tariff in respect of Agartala Gas Turbine Power Project for the period from 01.04.2001 to 31.03.2004.	06-Jun-06
102.	<b>133/2005</b>	<b>09.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for Strengthening of 220 kV transmission systems under system improvement scheme in U.P. in Northern Region for the period from 01.04.2004 to 31.03.2009.	09-May-06

103.	<b>138/2005</b>	<b>14.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for 500 MW HVDC back to back station at Gajuwaka (inter regional asset of Eastern Region & Southern Region) and 400 Kv D/C Vijyawada-Gajuwaka line along with bay extension and equipments at Vijyawada & Gajuwaka (Southern Region) under Augmentation of capacity of Gajuwaka HVDC back to back project (550 MW) from 10.03.2005 to 31.03.2009.	23-Oct-06
104.	<b>139/2005</b>	<b>14.11.2005</b>	<b>PGCIL</b>	Approval of tariff for Unified Load Despatch & Communication (ULDC) Scheme in Northern Region for the period from 1.4.2004 to 31.07.2017 and additional capitalization after date of commercial operation during 2001 to 2004.	09-May-06
105.	<b>141/2005</b>	<b>16.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for 400 kV Meerut-Mandola Circuit I&II and ICT II & III at Meerut Sub-station with associated bays in Northern Region for the period for the period 01.04.2004 to 31.03.2009.	23-Jul-06
106.	<b>142/2005</b>	<b>16.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for 400 kV D/C Rihand-Allahabad, Allahabad-Manipur and Manipur-Ballabgarh transmission line with associated bays under Rihand Stage-II Transmission system in Northern Region for the period from 01.06.2005 to 31.03.2009.	25-Apr-06
107.	<b>144/2005</b>	<b>17.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff of LILO of Purnia-Dalkola 132 kV S/C line and extension at Purnia sub-station in Eastern Region for the period from 01.04.2004 to 31.03.2009.	29-Jun-06
108.	<b>146/2005</b>	<b>23.11.2005</b>	<b>NTPC</b>	Determination of impact of additional capital expenditure incurred during 2001-2002, 2002-2003 and 2003-04 in respect of Kahalgaon Super Thermal Power Station, Stage-I (840 MW).	09-May-06



109.	<b>148/2005</b>	<b>29.11.2005</b>	<b>PSEB</b>	Direction to National Thermal Power Corporation Ltd. to tie up and procure adequate quantum of Gas/RLNG for Anta, Auraiya, Dadri CCGT stations and for settlement of issues relating to scheduling, metering and U.I. accounting of gas and liquid generation separately, levy of capacity charges proportional to gas fired generation, charging of variable charges as per actual and supply of information.	6th-Feb-07
110.	<b>149/2005</b>	<b>29.11.2005</b>	<b>PGCIL</b>	Approval of transmission tariff for 400/220 kV Khandwa Sub-station and LLO of 400 kV D/C Itarsi-Dhule transmission line at Khandwa in Western Region for the period from 01.02.2005 to 31.03.2009.	26-Oct-06
111.	<b>154/2005</b>	<b>15.12.2005</b>	<b>Torrent</b>	In principle acceptance of project Capital cost and financing plan of 1100 MW SUGEN CCPP of Torrent Power Generation Ltd.	22-Aug-06
112.	<b>157/2005</b>	<b>19.12.2005</b>	<b>PGCIL</b>	Approval of incentive based on availability of transmission system of Southern Region for the year 2004-05.	06-Feb-07
113.	<b>158/2005</b>	<b>23.12.2005</b>	<b>Essar</b>	In principle acceptance of project Capital cost and financing plan of 1500 MW Hazira Combined Cycle Power Plant.	02-Aug-06
114.	<b>160/2005</b>	<b>23.12.2005</b>	<b>PGCIL</b>	Determination of provisional transmission tariff 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 01.08.2005 to 31.03.2009.	07-Apr-06
115.	<b>161/2005</b>	<b>26.12.2005</b>	<b>JSW</b>	Grant of Inter-state trading in Electricity.	25-Apr-06
116.	<b>163/2005</b>	<b>28.12.2005</b>	<b>NEEPCO</b>	Review of the order dated 30.09.2005 in petition No. 5/2005-Relief from excessive per unit charge from the Hydro Electric Project under NEEPCO mainly Ranganadi & Doyang in post- ABT Period, regulation over transmission constraints/contingency/ natural calamities causing adverse	09-May-06

117.	<b>02/2006</b>	<b>06.01.2006</b>	<b>PGCIL</b>	effect on drawal/trading of power and Surrounding of share of Doyang HEP. Approval of transmission tariff for Special Energy Meters in Northern Region for the period from 01.04.2004 to 31.03.2009.	09-May-06
118.	<b>03/2006</b>	<b>01.06.2006</b>	<b>NTPC</b>	Approval of recovering the fixed charges on account of capital expenditure at the various offices of NTPC.	26-Apr-06
119.	<b>04/2006</b>	<b>13.06.2006</b>	<b>NRLDC</b>	Review of the frequency-linked Unscheduled Interchange (UI) price vector and implementation of a payment security mechanism for Unscheduled Interchange charges.	27-Apr-06
120.	<b>05/2006</b>	<b>16.01.2006</b>	<b>NTPC</b>	Approval of provisional tariff of Unit-I & II (2x500 MW)(Combined) of Rihand STPS, Stage-II for the period from 01.03.2006 to 31.03.2009.	06-Jun-06
121.	<b>06/2006</b>	<b>18.06.2006</b>	<b>NTPC</b>	Recovery of water charges for Vindhyachal Super Thermal Power Station Stage-I (1260 MW)	25-Apr-06
122.	<b>07/2006</b>	<b>24.01.2006</b>	<b>GUVNL</b>	Petition for directing NTPC Ltd. to refund the amount recovered on account of impact on Foreign Exchange Rate variation for the period 2001-04 in case of Kawas Gas Based power station and other owner stations.	18-Aug-06
123.	<b>08/2006</b>	<b>23.01.2006</b>	<b>NLC</b>	Seeking increase in capital cost on account of FERV.	26-Apr-06
124.	<b>09/2006</b>	<b>30.01.2006</b>	<b>PGCIL</b>	Approval of transmission tariff for LILO of 400 132 kV S/C Chamera I-Kishenpur transmission line at Chamera II under system associated with Chamera HEP STG-II in Northern Region for the period from 01.04.2004 to 31.03.2009.	24-Oct-06
125.	<b>10/2006</b>	<b>15.02.2006</b>	<b>NTPC</b>	Removal of difficulties and for relaxation of norms regarding Additional Capitalization for Ramagundam STPS Stage-III.	06-Feb-07
126.	<b>11/2006</b>	<b>07.02.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Balance system of Tarapur Transmission System (Commissioned w.e.f. 01.08.2005 & 01.09.2005) associated with Tarapur	26-Apr-06

				Atomic power Station stage 3 & 4 in Western Region for the period from 01.08.2005 to 31.03.2009 and 01.09.2005 to 31.03.2009 respectively.	
127.	<b>12/2006</b>	<b>07.02.2006</b>	<b>NHPC</b>	Review of the Commission Order dated 15.09.2005 in petition No. 185/2004-Approval of generation tariff of Chemera HE Project stage-II for the period from 02.11.2003 to 31.03.2004.	09-May-06
128.	<b>13/2006</b>	<b>03.03.2006</b>	<b>UPPCL</b>	Application for formula/methodology dated 11.05.2004 evolved by Ministry of Power, Govt. of India to adjust U.I. charges payable by Madhya Pradesh viz-a-viz UI gain of Chhattisgarh.	09-May-06
129.	<b>14/2006</b>	<b>13.03.2006</b>	<b>WRDLC</b>	Non-payment of UI charges by MPSEB.	08-Jun-06
130.	<b>15/2006</b>	<b>28.02.2006</b>	<b>Gajendra</b>	Seeking direction to Grid Corporation of Orissa Ltd. not to charge trading margin exceeding 4 paisa/kWh, notified by the Commission.	01-May-06
131.	<b>17/2006</b>	<b>21.03.2006</b>	<b>NLC</b>	Payment of the power bills of NLC power stations and refund of excess rebate by TNEB in line with order dated 19.10.2005	14-Sep-06
132.	<b>18/2006</b>	<b>21.03.2006</b>	<b>NRPTCPL</b>	Application for grant of licence for inter-state transmission of electricity.	11-Sep-06
133.	<b>19/2006</b>	<b>24.03.2006</b>	<b>NLC</b>	Linking incentive payment to Availability instead of Scheduled Plant load factor.	26-Sep-06
134.	<b>20/2006</b>	<b>28.03.2006</b>	<b>PGCIL</b>	40% Fixed Series Compensation on existing Gooty-Neelmangala 400 kV S/C line and both circuits of Nagarjunasagar-Cuddapah 400 kV S/C lines under FSC Project in Southern Region for the period from 01.11.2004 to 31.03.2009.	16-Nov-06
135.	<b>21/2006</b>	<b>29.03.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff for 400 kV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004) and 400 kV S/C Hyderabad-Kurnool-Gooty (DOCO 01.03.2005) transmission line along	22-Nov-06

				with associated bays and equipment in Southern Region for the period from DOCO to 31.03.2009.	
136.	<b>23/2006</b>	<b>17.04.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 400 kV D/C Kaiga-Narendra transmission line and 400/220 kV sub-station at Narendra associated with Kaiga-Narendra transmission system in Southern Region from 01.11.2005 to 31.03.2009.	04-Jul-06
137.	<b>24/2006</b>	<b>25.04.2006</b>	<b>NTPC</b>	Review of the order dated 27.02.2006 in petition No. 108/2005-Revision of O & M expenses for the period 1.4.2001 to 31.03.2004 in respect of Talcher Thermal Power Station (460 MW).	22-Jun-06
138.	<b>25/2006</b>	<b>01.05.2006</b>	<b>NRLDC</b>	Endangering grid security by undisciplined over drawal from the grid.	09-May-06
139.	<b>27/2006</b>	<b>09.05.2006</b>	<b>Gajendra</b>	Petition for restrain PTC from carrying on purchase of electricity from another electricity trader, including GRIDCO	07-Aug-06
140.	<b>28/2006</b>	<b>10.05.2006</b>	<b>GRIDCO</b>	Non-payment of dues of GRIDCO by BSEB and JSEB towards drawl of GRIDCO power from ER Regional pool during oct.99, Nov, 99, Aug, 01 and Sept., 2001.	23-Aug-06
141.	<b>29/2006</b>	<b>17.05.2006</b>	<b>NTPC</b>	Tariff for infirm power supply to the Respondents prior to its date of commercial operation from Unit-I (500MW) of Vindhyachal Super Thermal Power Station, Stage-III.	20-Jul-06
142.	<b>30/2006</b>	<b>15.05.2006</b>	<b>PGCIL</b>	Approval of 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..	24-Aug-06
143.	<b>33/2006</b>	<b>19.05.2006</b>	<b>PTL</b>	Approval of provisional transmission tariff for 400 kV D/C Bareilly Mandola line with twin conductor associated with THEP, East-North Interconnector and NR-Transmission System.	18-Aug-06
144.	<b>34/2006</b>	<b>29.05.2006</b>	<b>PGCIL</b>	Determination of provisional	18-Aug-06

				transmission tariff for 400 kV sub-station (UPPCL) (extension) and 400 kV Mandola sub-station (extension) under transmission system associated with Tala HEP, East-North Inter-connector and Northern Regional transmission system for the period from 01.05.2006 to 31.03.2009.	
145.	<b>36/2006</b>	<b>01.06.2006</b>	<b>NHPC</b>	Approval for the expenditure to be incurred to implement the comprehensive scheme for dynamic inflow forecasting the hydro scheduling in respect of the Chamara-I H. E. Project in compliance to the direction of Commission in order dated 08.12.2000 in Review petition No. 17/2000	29-Aug, 06
146.	<b>37/2006</b>	<b>06.06.2006</b>	<b>PGCIL</b>	Approval under Regulations 12 of the CERC (Terms and Conditions of Tariff) Regulations, 2004 "Power to Remove difficulties" for reimbursement of additional expenditure towards deployment of special security forces (CISF) at Wagoors sub-station for the year 2004-05.	04-Aug-06
147.	<b>38/2006</b>	<b>06.06.2006</b>	<b>PGCIL</b>	Determination for tariff for ICT-I & II at Patiala sub-station, ICT- I & II at Kaithal sub-station, LILO of one circuit of Nallagarh-Hissar transmission line at Kaithal, LILO of one circuit of Lalagarh-Hissar line at Patiala, 400 kV S/C Patiala-Malerkotla transmissin line, ICT-III at Abdullapur sub-station and ICT I & II (along with four no 220 kV line bays) at Mainpuri sub-station with associated bays under Rihand Stage-II transmission system in Northern Region for the period from 2004-09.	21-Sep-06
148.	<b>39/2006</b>	<b>12.06.2006</b>	<b>NTPC</b>	Approval of tariff for infirm power from Feroze Gandhi Unchahar Thermal Power Station Stage-III for infirm power supply to the respondents.	02-Aug-06
149.	<b>40/2006</b>	<b>13.06.2006</b>	<b>SKPCL</b>	Dispute on the payment of the amounts payable to trading of	27-Oct-06

				power.	
150.	<b>41/2006</b>	<b>15.06.2006</b>	<b>NTPC</b>	Determination of impact of additional capital expenditure incurred from 01.08.2003 to 31.03.2004 for Talcher STPS, Sage-II (2X500 MW)	24-Jan-07
151.	<b>42/2006</b>	<b>16.06.2006</b>	<b>PGCIL</b>	Approval of transmission tariff of integration of Sikkim transmission system with Eastern Region by LILO of Siliguri-Gangtok section of 132 kV Rangit-Siliguri line at Melli in Eastern Region for the period 01.10.2005 to 31.03.2009.	21-Sep-06
152.	<b>43/2006</b>	<b>15.06.2006</b>	<b>PGCIL</b>	Revision of O&M expenses for the period 2001-02 to 2003-04	28-Aug-06
153.	<b>44/2006</b>	<b>30.06.2006</b>	<b>NEEPCO</b>	Petition for declaring the 132 kV single circuit Balipara-Khupi (Tenga)-Kimi transmission line and associated 220/132 kV and 132/33 kV substation of Kameng Hydro Electric Project, 600 MW of NEEPCO as dedicated transmission line.	19-Sep-06
154.	<b>45/2006</b>	<b>27.06.2006</b>	<b>PGCIL</b>	Approval of transmission tariff for 132 kV S/C Mau-Balia transmission line in Northern Region for the period from 01.04.2004 to 31.03.2009.	09-Jan-07
155.	<b>46/2006</b>	<b>06.07.2006</b>	<b>NHPC</b>	Review of the order dated 09.05.2006 in petition No. 197/2004-Approval of generation tariff of Salal HE Project for the period 01.04.2004 to 31.03.2009.	05-Feb-07
156.	<b>47/2006</b>	<b>06.07.2006</b>	<b>NHPC</b>	Review of the order dated 09.05.2006 in petition No. 47/2005-Approval of generation tariff of Uri HE Project for the period 01.04.2004 to 31.03.2009.	04-Feb-07
157.	<b>48/2006</b>	<b>07.07.2006</b>	<b>PGCIL</b>	Approval of transmission tariff for 400 kV S/C Meramundali-Jeypore transmission line along with extension of Meramundali and Jeypore sub-station in Eastern Region for the period 01.06.2004 to 31.03.2009.	06-Feb-07
158.	<b>49/2006</b>	<b>13.07.2006</b>	<b>NHPC</b>	Review of the order dated 09.05.2006 in petition No. 175/2004-Approval of generation tariff of Rangit HE Project for the period	05-Feb-07

				01.04.2004 to 31.03.2009.	
159.	<b>50/2006</b>	<b>17.07.2006</b>	<b>PGCIL</b>	Approval of transmission tariff for LILO of one circuit of 132 kV D/C Siliguri-Rangit line at Gangtok in Eastern Region for the period from 01.10.2005 to 31.03.2009.	21-Nov-06
160.	<b>51/2006</b>	<b>17.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 156/2004 - determination of tariff for Faridabad GPS for the period 01.04.2004 to 31.03.2009.	04-Oct-06
161.	<b>52/2006</b>	<b>17.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 155/2004 - determination of tariff for Dadri Gas Power Station for the period 01.04.2004 to 31.03.2009.	04-Oct-06
162.	<b>53/2006</b>	<b>17.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 142/2004 - determination of tariff for Feroze Gandhi Unchahar Thermal Power Station Stage-I for the period 01.04.2004 to 31.03.2009.	26-Oct-06
163.	<b>54/2006</b>	<b>18.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 160/2004 - determination of tariff for Anta Gas Power Station for the period 01.04.2004 to 31.03.2009.	26-Oct-06
164.	<b>55/2006</b>	<b>18.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 150/2004 - determination of tariff for Feroze Gandhi Unchahar Thermal Power Station Stage-II for the period 01.04.2004 to 31.03.2009.	04-Oct-06
165.	<b>56/2006</b>	<b>19.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 147/2004 - determination of tariff for Kayamkulam station (359.58 MW) for the period 01.04.2004 to 31.03.2009.	27-Oct-06
166.	<b>57/2006</b>	<b>19.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 162/2004 - determination of tariff for NCTPS, Dadri for the period 01.04.2004 to 31.03.2009.	21-Dec-06



167.	<b>58/2006</b>	<b>19.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 157/2004 - determination of tariff for Singrauli Super Thermal Power Station for the period 01.04.2004 to 31.03.2009.	26-Oct-06
168.	<b>59/2006</b>	<b>19.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 153/2004 - determination of tariff for Farakka Super Thermal Power Station for the period 01.04.2004 to 31.03.2009.	27-Oct-06
169.	<b>60/2006</b>	<b>19.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 164/2004 - determination of tariff for Auraiya Gas Power Station for the period 01.04.2004 to 31.03.2009.	26-Oct-06
170.	<b>61/2006</b>	<b>18.07.2006</b>	<b>NHPC</b>	Review of the order dated 09.05.2006 in petition No. 158/2004- Approval of generation tariff of Bairasiul HE Project for the period 01.04.2004 to 31.03.2009.	05-Feb-07
171.	<b>62/2006</b>	<b>21.07.2006</b>	<b>TSECL</b>	Review of the order dated 09.05.2006 in petition No. 3/2005.	27-Dec-06
172.	<b>64/2006</b>	<b>20.07.2006</b>	<b>NHPC</b>	Review of the order dated 09.05.2006 in petition No. 39/2005 - Approval of generation tariff of chamera-I HE Project for the period 01.04.2004 to 31.03.2009.	05-Feb-07
173.	<b>65/2006</b>	<b>24.07.2006</b>	<b>NEEPCO</b>	Approval of revised fixed charges due to additional capitalization for the year 2003-04 for Assam Gas based Power Project.	29-Jan-07
174.	<b>66/2006</b>	<b>20.07.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 144/2004 with I.A..No. 54/2005 -determination of tariff for Talcher Super Thermal Power Station, Stage-I (1000 MW) for the period 01.04.2004 to 31.03.2009.	26-Oct-06
175.	<b>67/2006</b>	<b>24.07.2006</b>	<b>RGPPL</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
176.	<b>68/2006</b>	<b>26.07.2006</b>	<b>NHPC</b>	Review of the order dated 09.05.2006 in petition No. 30/2005 - Approval of generation tariff of Tanakpur HE Project for the period	05-Feb-07

				01.04.2004 to 31.03.2009.	
177.	<b>69/2006</b>	<b>28.07.2006</b>	<b>NTPC</b>	Tariff for infirm power of (2x500 MW) Unit I and II of Khalgaon Super Thermal Power Station, Stage-II, phase-I for infirm power supply to respondents.	22-Nov-06
178.	<b>71/2006</b>	<b>26.07.2006</b>	<b>NEEPCO</b>	Approval of additional capital expenditure for the period 01.04.2003 to 31.03.2004 in respect of Agartala Gas Turbine Project.	09-Jan-07
179.	<b>72/2006</b>	<b>26.07.2006</b>	<b>ASEB</b>	Review of the order dated 09.05.2006 in petition No. 3/2005.	27-Dec-06
180.	<b>73/2006</b>	<b>08.08.2006</b>	<b>MPTCL</b>	Review /reconsideration of provision in clause 7.5 (10) of Indian Electricity Grid Code of December (effective from 01.04.2006) for enhancement in limit of schedule import of power on ER-WR link from 1000 MW to 1500 MW.	19-Sep-06
181.	<b>76/2006</b>	<b>10.08.2006</b>	<b>METPL</b>	Application for grant of inter-state trading licence to Malaxmi Energy Trading Private Limited.	12-Dec-06
182.	<b>77/2006</b>	<b>18.08.2006</b>	<b>PGCIL</b>	Determination of transmission tariff for Tala-Siliguri transmission system in Eastern Region commission on 01.10.2005 (for the period 01.10.2005 to 31.03.2009) and remaining transmission system commissioned on 01.05.2006 (for the period 01.05.2006 to 31.03.2009.)	06-Feb-07
183.	<b>79/2006</b>	<b>18.08.2006</b>	<b>PGCIL</b>	Determination of transmission tariff for 40% Fixed Series Compensation on existing 400 kV S/C Rengali-Indravati transmission line associated with augmentation of capacity of Gazuwaka HVDC back to back project in Eastern Region for the period from 01.10.2005 to 31.03.2009.	15-Dec-06
184.	<b>80/2006</b>	<b>17.08.2006</b>	<b>NTPC</b>	Review of the order dated 20.06.2006 in petition No. 128/2004-tariff for Vindhyachal Stage-I station for the period from 01.04.2004 to 31.03.2009.	27-Sep-06

185.	<b>81/2006</b>	<b>25.08.2006</b>	<b>PGCIL</b>	Approval under regulations 12 of the CERC (Terms and Conditions of Tariff) Regulations, 2004 "Power to Remove difficulties" for reimbursement of additional expenditure towards deployment of special security forces (CISF) for Salakati and Bongaigaon sub-station for the year 2004-05 in Eastern Region.	27-Oct-06
186.	<b>92/2006</b>	<b>04.08.2006</b>	<b>NEEPCO</b>	Approval of additional capital expenditure for the period 01.04.2003 to 31.03.2004 in respect of Kopli Hydro Electric Project.	06-Feb-07
187.	<b>93/2006</b>	<b>24.08.2006</b>	<b>NTPC</b>	Revision of O & M expenses for the period 01.04.2001 to 31.03.2004 in respect of Talcher Thermal Power Station (460 MW)	23-Mar-07
188.	<b>94/2006</b>	<b>05.09.2006</b>	<b>GUVNL</b>	Petition for deciding the (i) Appropriate Commission having jurisdiction to determine the transmission charges of the Gujarat Transmission system being used incidental to transmission system of CTU for transmission of Central Sector and Bilateral power to the Union Territories of Daman & Diu and Dadra Nagar Haveli and/or (ii) determination of transmission charges for using GETCO system.	04-Oct-06
189.	<b>95/2006</b>	<b>04.09.2006</b>	<b>NTPC</b>	Infirm power supply to the respondents prior to its date of commercial operation from ( 2x 500 MW) Units of Sipat Super Thermal Power Station Stage-II.	22-Nov-06
190.	<b>98/2006</b>	<b>04.09.2006</b>	<b>GEA</b>	Application for grant of inter-state trading licence in electricity to GEA Energy System (India) Ltd.	07-Dec-06
191.	<b>99/2006</b>	<b>14.09.2006</b>	<b>UPPCL</b>	Review of the order dated 24.10.2005 in Petition No.8/2005 Approval of revised fixed charges on account of additional capital expenditure incurred during 14.01.2000 to 31.03.2004 in respect of Tanda Thermal Power Station (440 MW).	26-Oct-06

192.	<b>100/2006</b>	<b>11.09.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Neelamangala-Mysore 400 kV D/C Transmission line along with 2 x 315 MVA, 400/220 kV, Mysore sub station and bay extension at Neelamangala (KPTCL) 400/220 Kv sub station from 01.05.2006 to 31.03.2009 in Southern Region.	21-Dec.-06
193.	<b>101/2006</b>	<b>14.09.2006</b>	<b>TNEB</b>	Review of the order dated 02.05.2006 in Petition No. 137/2004 - Approval of transmission tariff for 400 kV Ramagundum-Hyderabad transmission line in SR and HVDC back to back station (2x 500 MW) at Chandrapur confecting Western Region and SR for the period 01.04.2001 to 31.03.2009.	12-Mar-07
194.	<b>102/2006</b>	<b>12.09.2006</b>	<b>PGCIL</b>	Approval of transmission tariff of 400 kV D/C Talcher-Meramundali transmission line in Eastern Region for the period from 01.04.2004 to 31.03.2009.	10-Jan-07
195.	<b>104/2006</b>	<b>20.09.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for Bhadrawati - Chandrapur 400 kV D/C Transmission line including bays at Bhadrawati (power grid) switching station (extension) and Chandrapur (MSEB) switchyard (extension) in Western Region (01.05.2006 to 31.03.2009).	21-Dec-06
196.	<b>105/2006</b>	<b>19.09.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for LILO of Nagarjunasagar- Raichur 400 kV D/C line at Mehoobnagar (01.01.2006 to 31.03.2009) and LILO of both the Circuits of Nellor-Sriperumbudur 400 kV D/C line at Almathi (01.06.2006 to 31.03.2009) along with associated bays at Mehoobnagar and Almathi under system strengthening -IV of Southern Region Grid in Southern Region.	21-Dec.-06

197.	<b>111/2006</b>	<b>29.09.2006</b>	<b>PTL</b>	Approval of provisional transmission tariff for 400 kV Double Circuit Gorakhpur-Lucknow transmission line associated with Tala Hydro Electric Project, East-North Interconnector and Northern Region Transmission System for the period 01.08.2006 to 31.03.2009.	21-Dec-06
198.	<b>112/2006</b>	<b>29.09.2006</b>	<b>MPL</b>	Request for certain clarification on the Tariff Policy issued by the GOI vide notification published in the gazette of India dated 06.01.2006 (Tariff Policy).	17-Jan-07
199.	<b>113/2006</b>	<b>30.09.2006</b>	<b>ISNI</b>	Filing of final PPA dated 28.09.2006 signed between ISN International Company Ltd and Ajmer Vidyut Vitran Ltd. Jaipur VVNL and Jodhpur VVNL and final purchase agreement dated 14.09.2006 signed between ISN International Company Ltd and M. P. Power Trading Company Limited.	23-Mar-07
200.	<b>115/2006</b>	<b>03.10.2006</b>	<b>NTPC</b>	Approval of tariff of Unit-I (500MW) of Vindhyachal Super Thermal Power Station-Stage-III from the date of commercial operation.	29-Dec-06
201.	<b>116/2006</b>	<b>06.10.2006</b>	<b>PGCIL</b>	Approval of transmission tariff of LILO of 400 kV D/C Bongaigaon-Malda at Purnea % sub-station at Purnea (New) in Eastern Region for the period from 01.04.2004 to 31.03.2009.	13-Feb-07
202.	<b>120/2006</b>	<b>13.10.2006</b>	<b>NTPC</b>	Review of the order dated 09.05.2006 in petition No. 153/2004 -determination of tariff for Farakka Super Thermal Power Station for the period 01.04.2004 to 31.03.2009.	01-Dec-06
203.	<b>121/2006</b>	<b>17.10.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for LILO of 400 kV S/C Korba (STPS) Raipur (MPEB) at Sipat in Western Region for the period from 01.05.2006 to 31.3.2009.	16-Jan-07
204.	<b>122/2006</b>	<b>23.10.2006</b>	<b>NTPC</b>	Approval of provisional tariff of Feroze Gandhi Unchahar Thermal Power Station Stage-III from the date of commercial operation.	23-Jan-07
205.	<b>123/2006</b>	<b>19.10.2006</b>	<b>NRLDC</b>	Miscellaneous application in regard to Notification No. L/68/(84)/2006-	06-Dec-06

				CERC, dated 22.08.2006.	
206.	<b>124/2006</b>	<b>20.10.2006</b>	<b>WRLDC</b>	Miscellaneous application in regard to Notification No. L/68/(84)/2006-CERC, dated 22.08.2006	06-Dec-06
207.	<b>125/2006</b>	<b>20.10.2006</b>	<b>ERLDC</b>	Miscellaneous application in regard to Notification No. L/68/(84)/2006-CERC, dated 22.08.2006	06-Dec-06
208.	<b>126/2006</b>	<b>20.10.2006</b>	<b>NERLDC</b>	Miscellaneous application in regard to Notification No. L/68/(84)/2006-CERC, dated 22.08.2006	06-Dec-06
209.	<b>127/2006</b>	<b>17.10.2006</b>	<b>SRLDC</b>	Miscellaneous application in regard to Notification No. L/68/(84)/2006-CERC, dated 22.08.2006	06-Dec-06
210.	<b>128/2006</b>	<b>30.10.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff for 400 kV sub-station at Narendra including additional capitalization from date of commercial operation (01.11.2005) to 31.03.2006 in Southern Region for the period from 01.11.2005 to 31.03.2009.	15-Mar-07
211.	<b>129/2006</b>	<b>27.10.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff for (1) for 40% Fixed Series Compensation on 400 kV Gooty-Neelmangala Circuit-II Gooty under FSC project in Southern Region for the period from 01.05.2005 to 31.03.2009 including additional capitalization from DOCO to 31.03.2006 and (2) additional capitalization from date of commercial operation to 31.03.2006 for the asset covered in Petition No. 20/2006.	23-Mar-07
212.	<b>130/2006</b>	<b>30.10.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff for 400 kV S/C Gooty-Neelmangala line along with bay extension and equipments at Gooty and Neelmangala associated with Ramagundam-III transmission system in Southern Region from DOCO to 31.03.2009.	15 –Mar-07

213.	<b>131/2006</b>	<b>27.10.2006</b>	<b>PTL</b>	Approval of provisional transmission tariff for 400 kV D/C Muzaffarpur-Gorakhpur transmission line in Eastern-Northern inter-connector associated with Tala Hydro Electric Project, East-North inter-connector and Northern Region transmission system for the period from 01.09.2006 to 31.03.2009.	16-Jan-07
214.	<b>132/2006</b>	<b>30.10.2006</b>	<b>PTL</b>	Approval of provisional transmission tariff for 400 D/C Siliguri-Purnea transmission line, 400 kV D/C Purnea-Muzaffarpur transmission line and 220 kV D/C Muzaffarpur (PGCIL)-Muzaffarpur (BSEB) transmission line in Eastern Region associated with Tala Hydro Electric Project, East-North inter-connector and Northern Region transmission system from the period from 2005-09	16-Jan-07
215.	<b>134/2006</b>	<b>31.10.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff for Raipur-Chandrapur (Bhadrawati) 400 kV D/C transmission line including bay extension at Raipur and Bhadrawati sub-station in Western Region for the period from 01.06.2005 to 31.03.2009.	06-Feb-07
216.	<b>135/2006</b>	<b>31.10.2006</b>	<b>PGCIL</b>	Determination of transmission tariff for Tarapur Transmission System commissioned w.e.f. 01.03.2005, 01.08.2005 and 01.09.2005 associated with Tarapur Atomic Power station stage 3 & 4 in Western Region for the periods from 01.03.2005, 01.08.2005 & 01.09.2005 to 31.03.2009 respectively.	06-Feb-07
217.	<b>136/2006</b>	<b>31.10.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff along with additional capitalization from DOCO (1.8.2005) to 31.03.2006 for 400 kV D/C Mandurai Thiruvananthapuram Transmission system in Southern Region for the period from 01.08.2005 to 31.03.2009.	06-Feb-07
218.	<b>137/2006</b>	<b>31.10.2006</b>	<b>PGCIL</b>	Approval for final transmission tariff of 2nd 400 kV D/C Kahalgaoon-Biharshariff transmission line in Eastern	06-Feb-07

				Region for the period 2004-09.	
219.	<b>138/2006</b>	<b>31.10.2006</b>	<b>PGCIL</b>	Determination of final transmission tariff up to DOCO and additional capitalization from DOCO 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 from 01.08.2005 to 31.03.2009.	21-Mar-07
220.	<b>139/2006</b>	<b>01.11.2006</b>	<b>Gupta PTC</b>	Application for grant of inter-state trading licence in electricity.	22-Feb-07
221.	<b>140/2006</b>	<b>08.11.2006</b>	<b>NTPC</b>	Review of the Commission order dated in Petition No. 148/2004-approval of tariff for Ramagundam STPS, Stage I & II (2100MW) for the period from 01.04.2004 to 31.03.2009.	01-Dec-06
222.	<b>141/2006</b>	<b>08.11.2006</b>	<b>NHPC</b>	Approval of provisional generation tariff of Dulhasti HE Project for the period from date of commercial operation till final tariff determination.	20-Mar-07
223.	<b>148/2006</b>	<b>07.12.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) 400 kV Siliguri sub-station (extension) (Relevant portion), 400 kV Purnea sub-station (extension) (relevant portion) (excluding 400/220 kV, 315 MVA, ICT at Purnea sub-station)... associated with Tala HEP, East-North Inter-connector and Northern Region transmission system from date of commercial operation to 31.03.2009.	29-Jan-07
224.	<b>149/2006</b>	<b>07.12.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for 2nd 315 MVA auto transmission tariff for 2nd 315 MVA auto transformers at Narendra sub-station associated with Kaiga-Narendra transmission system in Southern Region 01.09.2006 to 31.03.2009.	29-Jan-07



225.	<b>150/2006</b>	<b>07.12.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for ICT-I at Meerut sub-station, 800 kV Tehri-Meerut CKT-I, 800 kV Tehri-Meerut CKT-II, 400 kV S/C Meerut-Muzaffarnagar transmission line with associated bays and ICT at Muzaffarnagar under Tehri transmission system in Northern Region for tariff block 2004-09 period.	15-Feb-07
226.	<b>154/2006</b>	<b>22.12.2006</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for (i) TSC and 2 nos of 400 kV bays at Gorakhpur 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-Gorakhpur line of Powerlinks under transmission system associated with Tala HEP, East-North Inter-connector in Northern Region transmission system an inter-regional asset between Northern Region and Eastern Region from 01.09.2006 to 31.03.2009.	16-Jan-07
227.	<b>155/2006</b>	<b>28.12.2006</b>	<b>Suo Motu</b>	Guidelines for grant of permission for setting up and operation of Power Exchange.	06-Feb-07
228.	<b>05/2007</b>	<b>08.01.2007</b>	<b>NTPC</b>	Review of the order dated 23.11.2006 in petition No. 120/2005-Determination of the tariff for Khangaon STPS (840 MW) for the period 01.04.2004 to 31.03.2009.	23-Feb-07
229.	<b>16/2007</b>	<b>08.02.2007</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 01.04.2004 to 31.03.2009.	27-Feb-07
230.	<b>20/2007</b>	<b>28.02.2007</b>	<b>PGCIL</b>	Determination of provisional transmission tariff for system strengthening Scheme in Northern Region (formerly part of tala supplementary Scheme) for period 2004-09	15-Mar-07

231.	<b>24/2007</b>	<b>01.03.2007</b>	<b>NBVL</b>	Refusal No.131 of 25.01.2007 by the Western Regional Load Despatch Centre of the open Access application filed by Tata Power Trading Company Limited for transmission of 27 MW power through Eastern Regional Load Despatch Centre and Orissa State Load Despatch Centre from Nava Bharat Ventures Ltd on the ground of "No consent from OPTCL".	07-Mar-07
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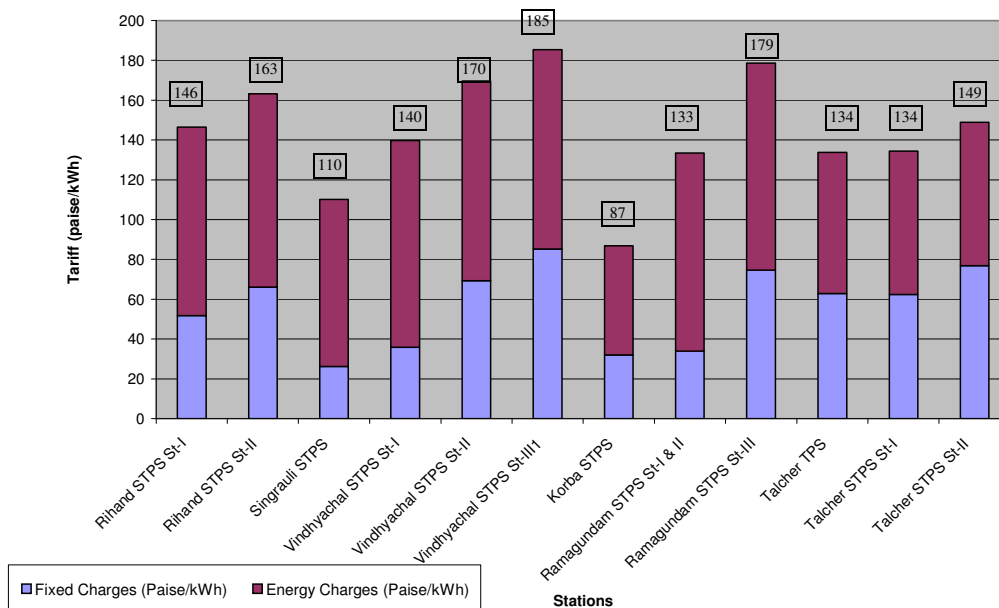
**(B) INTERLOCUTORY APPLICATION BEFORE CERC**

<b>No. of IA carried forward from last year (2005-2006)</b>	<b>No. of IA received during the period 2006-2007</b>	<b>Total</b>	<b>Disposed of</b>	<b>No. of IA pending on 31.03.2007</b>
<b>05</b>	<b>76</b>	<b>81</b>	<b>75</b>	<b>06</b>

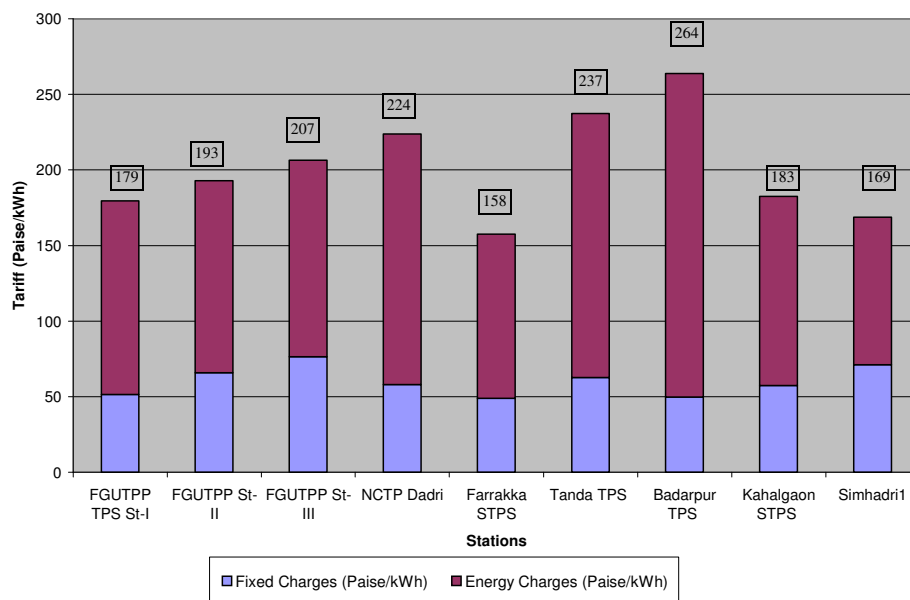
**Cost of Generation for 2006-07**  
**Cost of Generation (Tariff) of Generating Stations of NTPC, NLC & NEEPCO**  
**existing as on 31.3.2007 in Paise/kWh Ex-Bus ( New Terms & Conditions of**  
**Tariff with improved norms) at 80% PLF**

S. No.	Name of the Generating Station	Installed Capacity as on 31.3.2006	Fixed charges	Energy Charges as in March 2006	TOTAL	Weighted Average Cost of Generation	Installed Capacity as on 31.3.2007	Fixed charges	Energy Charges as in March 2007	TOTAL	Weighted Average Cost of Generation
	Years			2005-06					2006-07		
	Units	MW	paise/kWh	paise/kWh	paise/kWh	paise/kWh	MW	paise/kWh	paise/kWh	paise/kWh	paise/kWh
<b>Coal Based thermal generating Stations of NTPC</b>											
<b>A. Pit head Generating Stations</b>											
1	Rihand STPS St-I	1000.00	51	90	141	123.00	1000.00	52	95.00	147	135
2	Rihand STPS St-II						1000.00	66	97.00	163	
3	Singrauli STPS	2000.00	29	83	112		2000.00	26	84.00	110	
4	Vindhyachal STPS St-I	1260.00	35	89	124		1260.00	36	104.00	140	
5	Vindhyachal STPS St-II	1000.00	69	86	155		1000.00	69	100	169	
6	Vindhyachal STPS St-III						500.00	85	100	185	
7	Korba STPS	2100.00	32	53	85		2100.00	32	55.00	87	
8	Ramgundam STPS St-I & II	2100.00	33	77	110		2100.00	34	98	133	
9	Ramgundam STPS St-III						500.00	75	104.00	179	
10	Talcher TPS	460.00	56	71	127		460.00	63	71	134	
11	Talcher STPS St-I	1000.00	63	68	131		1000.00	62	72	134	
12	Talcher STPS St-II	1000.00	78	68	146		2000.00	77	72	149	
	Sub-Total	11920.00					14920.00				
<b>B. Non-Pit head Generating Stations</b>											
13	FGUTPP TPS St-I	420.00	51	122	173	194	420.00	51	128.00	179	193
14	FGUTPP St-II	420.00	66	121	187		420.00	66	127.00	193	
15	FGUTPP St-III						210.00	77	130.00	207	
16	NCTP Dadr-I	840.00	58	164	222		840.00	58	166.00	224	
17	Farrakka STPS	1600.00	48	121	169		1600.00	49	109	158	
18	Tanda TPS	440.00	55	185	240		440.00	63	175.00	238	
19	Badarpur TPS	705.00	50	192	242		705.00	50	214	264	
20	Kahalgan on STPS	840.00	69	138	204		840.00	57	125.00	183	
21	Simhadri	1000.00	69	93	162		1000.00	71	98	169	
	Sub-Total	6265.00					6475.00				
	Total Coal	18185.00					21395.00				153
<b>Lignite Based thermal generating Stations of NLC</b>											
1	TPS-I	600.00	49	133	182	171	600.00	49	133	182	174
2	TPS-II Stage-I	630.00	48	74	122		630.00	29	133	162	
3	TPS-II Stage-II	840.00	75	101	176		840.00	33	123	157	
4	TPS-I (Expansion)	420.00	86	134	220		420.00	98	114	212	
	Total Lignite	2490.00					2490.00				
<b>Gas/Liquid Fuel Based Stations of NTPC</b>											
<b>A. Using Natural Gas/LNG as Fuel</b>											
1	Dadri CCGT	829.78	34	108	142	164	829.78	34	129.00	163	246
2	Faridabad	431.00	64	100	164		431.00	63	122.00	185	
3	Anta CCGT	419.33	26	104	130		419.33	27	135.00	162	
4	Auraya GPS	663.36	25	111	136		663.36	25	161.00	186	
5	Candhar GPS	657.39	107	132	239		657.39	54	223.00	277	
6	Kawas GPS	656.20	57	109	166		656.20	85	387.00	472	
		3657.06					3657.06				
<b>C. Using Liquid Fuel (Naptha/HSD) as Fuel</b>											
1	Dadri CCGT	829.78	34	671	705	700	829.78	34	687.00	721	716
1	Faridabad	431.00	64	629	693		431.00	63	710.00	773	
3	Anta CCGT	419.33	26	664	690		419.33	27	668.00	695	
2	Auraya GPS	663.36	25	631	656		663.36	25	633.00	658	
3	Kayamkulam CCGT	359.58	85	663	748		359.58	84	636.00	720	
4	Kawas GPS	656.20	57	663	720		656.20	85	658.00	743	
		3359.25					3359.25				
<b>Gas/Liquid Fuel Based Stations of NEEPCO</b>											
1	Agartala GPS	84.00	118	84	202	198	84.00	103	84	187	189
2	Assam GPS	291.00	146	51	197		291.00	150	41	190	
<b>Note:</b>											
Capacity and Energy charges for 2006-07 are based on Provisional tariff.											
Energy charges as in March 2006 & 2007 respectively...											
Based on Provisional Annual Capacity charge.											

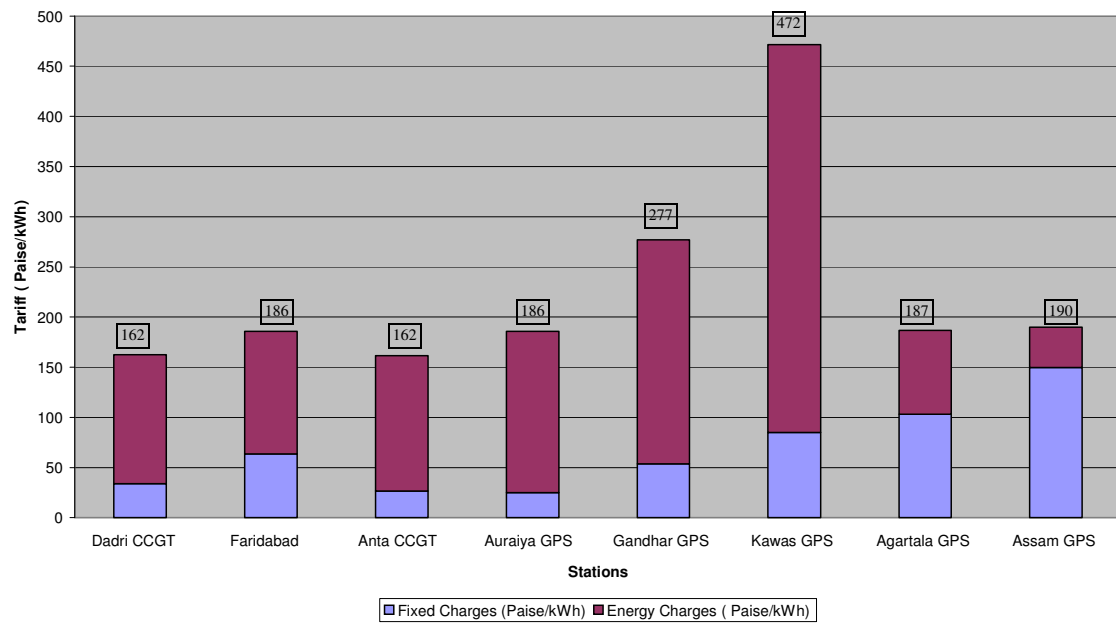
Cost of Generation of Coal Based Pit head generating Stations of NTPC in March 2007



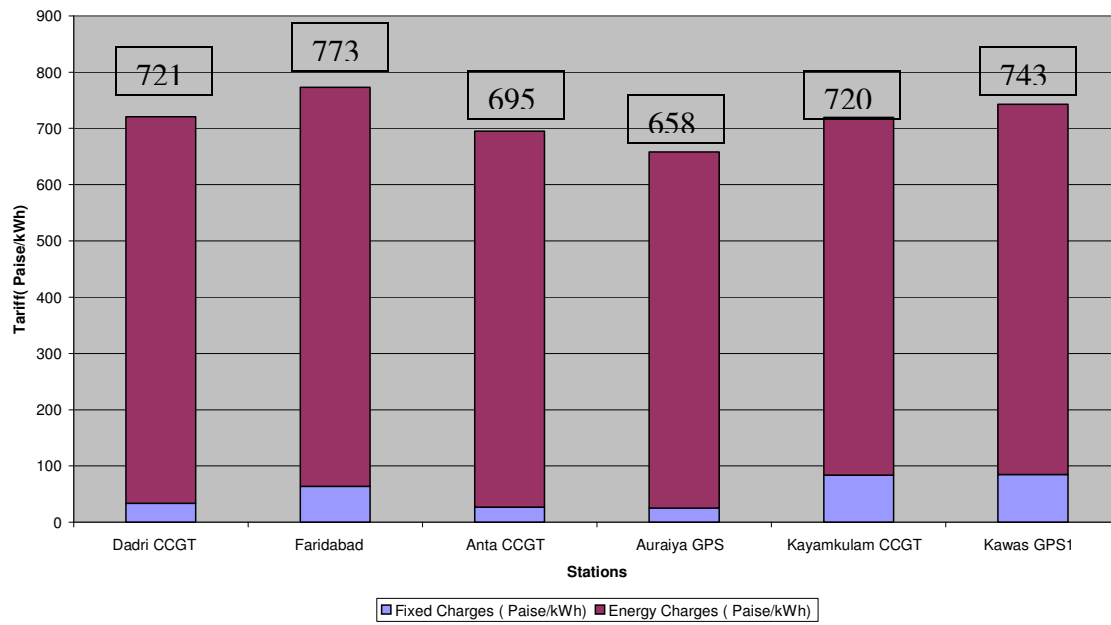
Cost of Generation for Non-Pithead stations of NTPC in March 2007



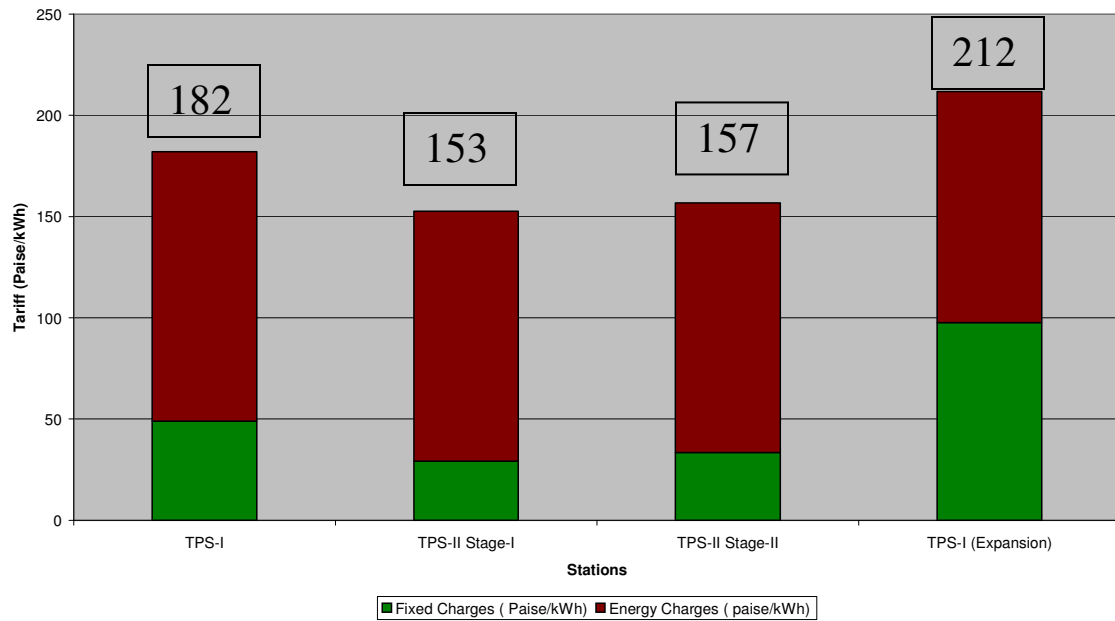
Cost of Generation ( Tariff) on Gas/RLNG fuel of NTPC and NEEPCO Gas Based stations in March, 2007



Cost of Generation on Liquid Fuel of NTPC Combined Cycle Stations in March, 2007

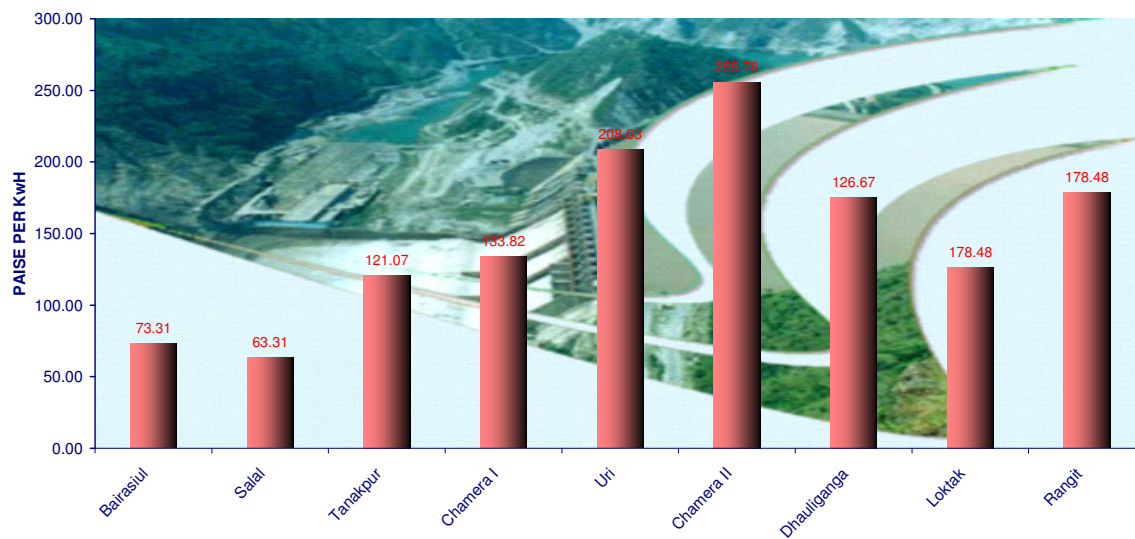


Cost of Generation on Lignite Based Stations of NLC in March, 2007





**COMPOSITE RATE (P/KWH) OF NHPC PROJECTS DURING FINANCIAL YEAR 2006-07**  
 (based on tariff orders of CERC for the period 2004-09)



## Tariff of Thermal Generating Stations of NTPC for the Tariff period 2004-09 awarded by CERC

Sl. No.	Name of the Generating Station	Installed Capacity	CERC approved Annual Fixed Charges for 2004-09							Base Energy Charges Ex-bus as on 1.4.2004 <sup>■</sup>
	Years		Pet. No.	Date of Order	2004-05	2005-06	2006-07	2007-08	2008-09	Base Energy Charges Ex-bus as on 1.4.2004 <sup>■</sup>
	Units	MW			Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Paise/kWh
Coal Based thermal generating Stations of NTPC										
1	FGUTPP TPS St-I	420.00	142/2004	9.5.2006	15780.00	13629.00	13825.00	14033.00	14246.00	106.69
2	FGUTPP St-II	420.00	150/2004	9.5.2006	17747.00	17720.00	17724.00	17725.00	17787.00	106.96
3	FGUTPP St-III <sup>■</sup>	210.00	122/2006	23.01.2007			10252.00	12214.00	11940.00	128.76
4	Rihand STPS	1000.00	151/2004	21.07.2006	32433.00	32835.00	33259.00	33698.00	34162.00	73.02
5	Rihand St-II	1000.00	106/2006	6.06.2006		42836.00	42836.00	42836.00	42836.00	85.76
6	Singrauli STPS	2000.00	157/2004	9.5.2006	36664.00	37090.00	33946.00	34135.00	35068.00	73.99
7	NCTP Dadri	840.00	162/2004	5.5.2006	31412.00	31248.00	31146.00	28169.00	28584.00	145.27
8	Tanda TPS	440.00	163/2004	30.11.2006	17580.00	17374.00	17181.00	17004.00	16836.00	142.24
9	Vindhyachal STPS St-I	1260.00	128/2004	29.6.2006	31396.00	28265.00	28839.00	29446.00	30070.00	75.78
10	Vindhyachal STPS St-II	1000.00	146/2004	21.8.2006	44799.00	44702.00	44740.00	44908.00	40040.00	73.11
11	Vindhyachal STPS St-III <sup>■</sup>	500.00	115/2006	29.12.2006	27610.00	27610.00	27610.00	27610.00	27610.00	73.11
12	Korba STPS	2100.00	159/2004	19.7.2006	42702.00	42968.00	43374.00	40221.00	41186.00	47.31
13	Ramagundam STPS St-I & II	2100.00	148/2004	30.6.2006	44363.00	45188.00	46076.00	47003.00	47971.00	82.84
14	Ramagundam STPS St-II <sup>■</sup>	500.00	140/2006	10.5.2005	24171.00	23514.00	23514.00	23514.00	23514.00	109.92
15	Simhadri TPS	1000.00	149/2004	22.09.2006	45729.00	45760.00	45810.00	45872.00	45954.00	77.12
16	Talcher TPS	460.00	91/2004	23.03.2007	17717.00	17866.00	18028.00	18205.00	18392.00	50.82
17	Talcher STPS St-I	1000.00	144/2004	9.5.2006	41254.00	40808.00	40393.00	39990.00	39730.00	41.10
18	Talcher STPS St-II <sup>■</sup>	2000.00	179/2004	29.08.2005	99072.00	99072.00	99072.00	99072.00	99072.00	50.82
19	Farrakka STPS	1600.00	153/2004	9.5.2006	53071.00	49886.00	50579.00	51305.00	52058.00	98.57
20	Kahajrapur STPS St-I	840.00	120/2005	23.11.2006	33638.00	33473.00	30766.00	31179.00	31600.00	108.50
21	Badampur TPS	705.00	40/2004	9.05.2006	22255.00	22091.00	21903.00	21694.00	21469.00	165.28
Sub-Total (Coal)		21395.00								
Gas/Liquid Fuel Based Stations of NTPC										
1	Dadri CCGT	829.78	155/2004	9.5.2006	19453.00	19238.00	19026.00	18839.00	15951.00	93.34 on NG & 481.45 on LF
2	Faridabad	431.00	156/2004	9.5.2006	18928.00	18760.00	18598.00	18436.00	18225.00	87.96 on NG & 353.83 on LF
3	Anta CCGT	419.33	160/2004	9.5.2006	7427.00	7506.00	7601.00	7707.00	7808.00	92.54 on NG & 373.65 on LF
4	Auraiya GPS	663.36	164/2004	9.5.2006	14009.00	11139.00	11289.00	11459.00	11618.00	94.39 on NG & 372.66 on LF
5	Kawas CCGT	666.20	79/2005	16.11.2006	23725.00	23880.00	24037.00	24219.00	24380.00	102.84 on NG & 380.44 on LF
6	Gandhar CCGT	657.39	80/2005	15.12.2006	39687.00	38791.00	37909.00	37033.00	36700.00	102.84 on NG & 380.44 on LF
7	Kayamkulam CCGT	359.58	147/2004	9.5.2006	20760.00	20702.00	20492.00	20291.00	17584.00	104.67 on NG & 307.72 on LF
(Sub-Total (Gas/Liquid Fuel))		4016.64								
Total		25411.64								
Note:										
1. Provisional tariff subject to adjustment after determination of final tariff.										
2. Base energy charge is subject to Fuel price variation on month to month basis.										