

Indian Electricity Sector

Capacity Addition scenario 11th Plan

Country is facing power shortage in terms of energy and peak demand, the energy shortage being 8% while peaking capacity shortage is about 12%. Government of India has plan to wipe out the shortage by the end of 2011-12 i.e. by the end of 11th Plan and also to provide 5% spinning reserve and ensure uninterrupted quality power at affordable cost. The National Electricity policy has targeted for providing power to all by 2011-12. Accordingly, 68500 MW need-based capacity addition plan has been worked out to be accomplished by March, 2012.

Thermal generation constitutes more than 80% of total energy generation. The coal based power plant is the backbone of the Indian Power Sector and will continue to be a major source of electricity generation in the country. During the 11th Plan, capacity addition of about 40200 MW coal based plant is planned. To improve the thermal efficiency of coal based plants, super critical technology has been introduced and 6 numbers of 660 MW units are under advance stage of construction. In addition 36 numbers of 800 MW super critical units have been planned to be commissioned during 11th & 12th Five Year Plans of which 8 numbers of 800 MW units are planned to be commissioned during 11th Plan. The introduction of super critical technology in thermal power station would address the problem of environmental degradation and green house gases. In addition the efficient technology would help in conserving limited fossil fuel resources apart from providing reliability in power supply.

Presently power sector is dominated by public sector having about 89% share in the total installed capacity. Government of India through various measures encourages private sector participation and has accordingly planned to develop five ultra mega power projects of 4000 MW capacity each and offer these for construction in private sector. More than 20% share from private enterprises is expected to be constructed during 11th Plan.

The salient features of the 11th Plan are given below:

Sector wise / Prime mover wise plan of capacity addition

	Hydro	Thermal	Nuclear	Total
State Sector	3957	15538		19495
Central Sector	11080	19880	3160	34120
Private Sector	3744	11145		14889
Total	18781	46563	3160	68504

Price Rs. 700.00



अखिल भारतीय विद्युत सांख्यिकी All India Electricity Statistics

सामान्य पुनर्विलोकन 2006
(2004-05 के आंकड़े समाविष्ट)
General Review 2006
(Contain data for the year 2004-05)



भारत
INDIA

भारत सरकार
विद्युत मंत्रालय
केन्द्रीय विद्युत प्राधिकरण
नई दिल्ली
मार्च 2006

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MINISTRY OF POWER
CENTRAL ELECTRICITY AUTHORITY
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All India Electricity Statistics 2006

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सत्यमेव जयते

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अध्यक्ष, केन्द्रीय विद्युत प्राधिकरण
तथा पदेन सचिव, भारत सरकार



सत्यमेव जयते

प्राक्कथन

केन्द्रीय विद्युत प्राधिकरण विद्युत अधिनियम, 2003 के प्रावधानों के अनुरूप विद्युत के उत्पादन, संचारण, विपणन, वितरण तथा समुपयोजन से संबंधित सांख्यिकी को समय-समय पर सर्वविदित करता है। हसामान्य पुनर्विलोकनह प्रकाशन में देश में विभिन्न क्षेत्रों द्वारा विद्युत का उत्पादन तथा उपभोग से संबंधित अखिल भारत सांख्यिकी निहित हैं। वर्तमान प्रकाशन में विद्युत विपणन के आंकड़े दर्शाते हुए विद्युत विपणन पर एक नया अध्याय जोड़ा गया है।

हसामान्य पुनर्विलोकनह के लिए आंकड़े भारतीय विद्युत क्षेत्र की उपयोगी तथा गैर-उपयोगी संस्थाओं से और विद्युत उपभोक्ताओं की विशिष्ट श्रेणियों से एकत्रित किया गया है। अपेक्षित सूचना समय पर प्रस्तुत करने के लिए जिन प्रतिष्ठानों/संगठनों ने सहयोग दिया है, उनके हम आभारी हैं। समय पर प्रस्तुत न कर सकने वाली कुछ यूटिलिटियों के डाटा को इस पुस्तक में सम्मिलित नहीं किया जा सका है। विद्युत क्षेत्र में सभी संगठन जिन्होंने सूचना प्रस्तुत की है तथा विशेष रूप से वे संगठन जो समय पर सूचना प्रस्तुत नहीं कर सके हैं, से अनुरोध है कि विनिर्धारित अवधि के भीतर पूर्ण सूचना उपलब्ध करवाकर इस प्रकाशन के अगले अंक को समय पर प्रकाशित करने के हमारे प्रयास को सबल बनाएं।

मुझे उम्मीद है कि 'सामान्य पुनर्विलोकन 2004-05' भारत में विद्युत क्षेत्र के विकास में जुटे सभी जनों की प्रत्याशा को पूर्ण करेगा।

दिनांक 08 मार्च, 2006

(राकेश नाथ)



सत्यमेव जयते

RAKESH NATH
Chairperson, CEA

FOREWORD

Central Electricity Authority makes public from time to time, the Statistics concerning the generation, transmission, trading, distribution & utilization of electricity as per the provisions of the Electricity Act, 2003. The publication "General Review" contains All India Statistics pertaining to generation and consumption of electricity by different sectors in the country. A new chapter on Power Trading has been added in the present publication showing data on energy trading.

The data for "General Review" are collected from Utilities & Non-utilities of the Indian Electricity Sector and specific categories of electricity consumers. The cooperation of all utilities/organizations who have timely furnished the requisite information is gratefully acknowledged. All the organizations in the power sector who furnished the information and specially those who could not furnish the information on time are requested to strengthen our endeavour in bringing out next issue of this publication in time by providing complete information within the stipulated period.

I hope that General Review 2004-05 will fulfill the expectations of all stakeholders who are involved in the development of electricity sector in India.

Dated the 8th March, 2006

(RAKESH NATH)
Chairperson
Central Electricity Authority &
Ex-Officio Secretary To Govt. of India



वी.एस.वर्मा,
सदस्य (योजना)
केन्द्रीय विद्युत प्राधिकरण एवं
पदेन अपर सचिव, भारत सरकार



सत्यमेव जयते

भूमिका

भारतीय विद्युत क्षेत्र ने गत पाँच दशकों में विद्युत के उत्पादन, संचारण, वितरण तथा समुपयोजन के क्षेत्र में असाधारण प्रगति की है। हालांकि, विद्युत की माँग आपूर्ति से अधिक ही रही है। इस प्रकाशन के वर्तमान संस्करण में 'विद्युत विपणन' पर एक नया अध्याय शामिल किया गया है जो विद्युत विपणन कंपनियों के माध्यम से विद्युत की खरीद पर घाटे वाले राज्यों की आवश्यकता को पूरा करने के लिए उपयोगी होगा।

विद्युत अधिनियम, 2003 के अधीन अपने उत्तरदायित्व को पूरा करने के लिए के.वि.प्रा. द्वारा किया जा रहा वार्षिक सांख्यिकी का एकत्रण, जाँच, समेकन, तथा प्रकाशन एक महत्वपूर्ण कार्य है। इस रिपोर्ट में 165 उपयोगी स्रोतों तथा एक में.वा. तथा अधिक की माँग वाले 4500 एच.टी. उद्योगों से संबंधित आंकड़े शामिल हैं।

आवश्यक सूचना को प्रस्तुत करने के लिए गैर-उपयोगी की प्रतिक्रियाओं को बढ़ावा देने की आवश्यकता है। जहाँ वर्ष 2004-05 के लिए आंकड़े प्राप्त नहीं हुए हैं उनका अनुमान लगाया गया है।

वर्ष 2004-05 का समान्य पुनर्विलोकन 30 नवम्बर, 2005 तक प्राप्त आंकड़ों/सूचनाओं के आधार पर समेकित किया गया है। मुझे विश्वास है कि इस प्रकाशन में निहित सूचना भारत के विद्युत क्षेत्र में संलग्न सभी के लिए उनके क्रियाकलापों की भावी योजनाओं के निर्माण में अत्यंत महत्वपूर्ण सिद्ध होगी। कृपया इस प्रकाशन में प्रस्तुत सूचना में सुधार के लिए टिप्पणियाँ/प्रेक्षण/सुझाव सचिव, केन्द्रीय विद्युत प्राधिकरण को प्रेषित किए जाएँ ताकि वर्ष 2005-06 के आगामी संस्करण में इन्हें शामिल किया जा सके।

(वी. एस. वर्मा)

दिनांक 08 मार्च, 2006



सत्यमेव जयते

V.S. VERMA
Member Planning, CEA

PREFACE

The Indian Electricity Sector has made remarkable progress during the last five decades in the field of generation, transmission, distribution & utilization of electricity. However, the demand of electricity has always been overstepping the supply. The present issue of this publication has incorporated a new Chapter on Power Trading which will be useful for meeting the requirement of deficit States on competitive purchase of power through Power Trading Companies.

Collection, scrutiny, compilation and publication of annual electricity statistics has been an important task being accomplished by CEA in fulfillment of its obligation under the Electricity Act, 2003. Data pertaining to 165 utility sources and 4500 HT Industries having demand of 1 MW & above have been included.

The response from the Non-utilities in furnishing of the requisite information rather needs boosting up. Where ever the data for 2004-05 has not been received, the same was estimated.

The General Review for 2004-05 has been compiled based on the data/information received till 30th November, 2005. I am sure that the information contained in the publication shall be of immense importance to all those who are involved in Power Sector of India for future planning of their activities. The comments/observations/suggestions for improvement of the information presented may kindly be forwarded to the Secretary, Central Electricity Authority, so that these could be taken care of in our next issue of 2005-06.

(V.S. VERMA)
Member Planning
Central Electricity Authority & Ex-officio
Additional Secretary
To Govt of India

Dated the 8th March, 2006