Central Research Institute of Electric Power Industry: Organization and Activities

Three Research Objectives

- 1. Cost reduction and ensuring reliability
- 2. Creation of integrated energy service
- 3. Harmonization of energy and environment

Organization of the Central Research Institute of Electric Power Industry



Research Projects Implemented in Fiscal 2007

Total	617 projects
* Research Subject	82 projects
(Project Research Subjects to Respond	
to the Field Requirements	43 Subjects)
(Basic Research Subjects to Back the	
Fields up	39 Subjects)
* Funded Researches by Electric Utilitie	es and
National Government and others	535 projects

Staff Strength in Fiscal 2007

Total (not including executives)	783
* Research Staff	688
* Administrative Staff	95

Fiscal 2007 Expenditures

Total Expenditure	32.71 billion yen
* Business Activity Expenditure	25.97 billion yen
(Business Expense Expenditure	23.95 billion yen)
(Management Cost Expenditure	2.02 billion yen)
* Investment Activity Expenditure	
(Research Facility Acquiring)	6.74 billion yen



On the Publication of the Annual Research Report 2008



Ryoichi Shirato, President Central Research Institute of Electric Power Industry The Toyako Summit held in July, 2008 made people more aware of global environmental problems and the reduction of GHG emissions is a truly important requirement for the electric power industry. Meanwhile, a stable supply of energy has become a crucial task in view of the hike of fuel prices. Under these circumstances, the Central Research Institute of Electric Power Industry has been conducting a wide range of research activities as a comprehensive research institute for all energy-related fields while envisaging the likely state of electricity supply in the future to achieve its dual missions of "ensuring energy security" and "approach to the global environmental problems". In FY 2007, the research activities centered on five pillars, i.e. nuclear technology, advanced maintenance technology, environmental and innovative technology, optimum energy utilization technology and social/business risk management, to respond to the actual needs in the field. Moreover, on fulfillment of our total research power we enhanced field crossing research system and addressed the research of light water reactors aging deterioration and global warming issues.

The Annual Research Report 2008 outlines the principal research results in FY 2007. We will be very pleased if this publication further enhances understanding of the CRIEPI's activities on the part of the reader and would be grateful for your valuable opinions.

Preface

In fiscal 2007, the CRIEPI conducted a total of 82 research projects, focusing on the achievement of three goals, i.e. "cost reduction and ensuring reliability", "creation of integrated energy services" and "harmonization of energy and environment". Of these 82 projects, the results of 49 projects are compiled in this Annual Report 2008. We believe that these projects particularly contribute to solving a number of technological and economic problems faced by electric utilities. They were selected according to the following criteria and are presented here as our principal research results.

- Projects with a particularly high value in terms of innovation, creativity, scientific and technical achievements, economic efficiency and practicality
- Projects which are timely in view of the current socioeconomic and energy situations
- Projects which demonstrate the CRIEPI's abilities, such as our general R & D capability and expertise in basic as well as exploratory research

We will be greatly honoured if the reader finds the research results introduced in the Report useful to facilitate the further advancement of knowledge and technology.

Shirabe Akita, Chairman

Annual Research Report 2008 Editing Committee

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I. Principal Research Results

This Annual Report introduces 49 principal results of the projects conducted in fiscal 2007 in the following fields.

General Overview



Research Fields

1	Socio-economy
2	Environment
3	Energy Services for Customer
4	Power Delivery
5	Nuclear
6	Fossil Fuel Power Generation
7	New Energy
8	Information and Communication
9	Construction and Preservation of Electric Facilities
10	Advanced Basic Technologies

Note : The positions of the researchers listed in the principal research results are as of the end of September, 2008.