

***Training Programme for SERC Officials on
Regulation, Competition and Consumer Issues in the Electricity Sector in India***
Bhagsunag, Dharamshala, 18-21 May 2009

A Brief Report including Participants' Feedback

Introduction

Independent regulation is a relatively new development in developing countries like India. The basic premise of independent regulation is that specialised agencies that are independent of influence from stakeholders can make decisions for maximising social welfare. Such decisions result in competitive prices and efficient resource allocation. Aggregation of such decisions helps in maximising growth and investment and, at the same time, such aggregation should also take into account distributive justice especially in sectors such as electricity because it is a basic need of a consumer. In this process a consistent and balanced regulatory environment is created in order to facilitate healthy competition along with the enhancement of consumer welfare. In short, the basic objective of regulation is to infuse dynamic efficiency into a system.

Independent regulation essentially follows a consultative approach of decision-making. Regulatory decisions try to strike a balance among conflicting interests of various stakeholder groups. Therefore, quality of representation from stakeholder groups, their capacity, and that of regulators and their staff becomes crucial determinants of regulatory effectiveness.

In this respect, apart from building the capacity of practitioners and consumers it is also important to create a pool of resource persons on economic regulation and related subjects.

It is with the above-stated perspective a four-day Training Programme entitled “***Regulation, Competition and Consumer Issues in the Electricity Sector in India***” was organised by the CUTS Institute for Regulation & Competition with support from the Forum of Regulators, Central Electricity Regulatory Commission. It was organised at Bhagsunag, Dharamshala in Himachal Pradesh from 18th to 21st May 2009. It was attended by 25 officers representing fifteen SERCs (state electricity regulatory commissions) from across 16 states¹ (Annexure - I). 17 of them are middle level officers and the rest are senior level.

The background study material, provided to all participants and resource persons, included 19 papers covering various aspects of competition and regulatory reforms in the Indian electricity sector (Annexure - II).

There were 13 technical sessions (including the Opening Session where the Vision of the Electricity Act 2003 and related policies were presented) led by 12 resource persons representing their respective professional areas (Annexure - III).

Objectives

The objectives were to:

- impart knowledge to SERC officials on theories of economic regulation and its application in the electricity sector; and
- build better understanding and appreciation of SERC officials on issues relating to regulation, competition and consumer protection in the Indian electricity sector.

Proceedings

Inaugurating the Programme, S. Jayaraman, Member, CERC, covered the broad theme of electricity reforms in India. He specifically addressed how Electricity Act 2003 is an important tool in this process. He highlighted some specific aspects relating to promotion of competition in various sub-sectors such as generation, transmission and distribution. He also underlined the role of the Electricity Act 2003 in leveraging consumer welfare. V. K. Khanna, Adviser, Forum of Regulators, welcomed the participants and presented his views on the purpose of the Programme. Navneet Sharma, Fellow, CIRC, provided an overview of the topics which were to be presented.

¹ There is a joint state electricity regulatory commission covering two states: Manipur and Mizoram.

In Session 1 (**Regulation versus Competition – Theory & Practice**) Raghav Narsalay, India Lead, Accenture Institute for High Performance Business, presented the concept of regulation along with various regulatory initiatives that are taken up to promote competition in the Indian electricity sector. He dealt with basic approaches to competition and regulation. He also highlighted, through a case study of the telecom and the electricity sector in the European Union, the right balance and level of cooperation which exists between competition and regulatory authorities.

In Session 2 (**Competition in the Infrastructure Sector**) Navneet Sharma, Fellow, CIRC, talked about the evolution of the competition law in India from the time when the first Indian law to curb monopolies and restrictive trade practices was enacted in 1969. He acquainted the participants about various facets of the Indian Competition Act 2002 (as amended in 2007) and also highlighted various sectoral and cross-sectoral issues which exist in the infrastructure sector which includes energy, communications, transport.

In Session 3 (**Competition in Electricity Generation**) P. S. Shah, Secretary, Gujarat Electricity Regulatory Commission, familiarised the participants about the competitive bidding process in power procurement in the state of Gujarat. He gave a detailed overview of the entire bidding process, types of bids, selection of bids, etc with various examples.

In Sessions 4 and 5 (**Issues on Open Access and Other Competition Issues in Electricity Distribution**) S. C. Mahalik, Former Chairman, Orissa Electricity Regulatory Commission, highlighted various aspects of ‘open access’ in electricity distribution and how it acts as a key to generate more competition. He also enlightened various road blocks which exist in the promotion of open access in India and steps that could be taken to remove those blocks.

In Session 6 (**Competition in Electricity Transmission**) Ajay Talegaonkar, Deputy Director, Distribution Planning & Development Division, Central Electricity Authority, spoke about the scope for integrating transmission networks in a competitive electricity markets in India and certain specific issues such as network pricing, risk management, need for independent system operators that need to be addressed. He shared some success stories on intra-state and inter-state open access in electricity transmission and its impact.

In Session 7 (**Tariff Regulation in the Electricity Sector in India**) K. Biswal, Chief, Finance Division, CERC and Pankaj Prakash, Secretary, Uttarakhand Electricity Regulatory Commission, introduced the process of tariff determination in India. They gave a genesis of tariff setting and how tariffs are determined and regulated. They provided a detailed analysis of various technical and commercial aspects and provisions of the 2009-2014 regulations. Some case studies on tariff determination and their distribution across sectors/groups were discussed.

In Sessions 8 and 9 (**Issues Concerning Availability Based Tariff and Multi-Year Tariff**) K. Venugopal, Member, Delhi Electricity Regulatory Commission, introduced the concept of ABT and how it benefits the system: generators, distribution licensees and end users. He provided justification for MYT and highlighted some key requirements, process and control mechanism in determining MYT.

In Session 10 (**Developing Standards for Better Quality Service**) Ashish Agarwal, Senior Consultant, PricewaterhouseCoopers, highlighted the current status of Standards of Performance regulation in India. He emphasised on issues of complaint handling and resolution mechanism, compensation and incentive mechanism, monitoring, etc.

In Session 11 (**Role of Consumers in Regulatory Decision-Making Process in the Electricity Sector**) S. K. Sharma, Assistant Secretary, Delhi Electricity Regulatory Commission, gave an overview of consumer participation and means of communication in regulatory decision making process, with evidence from different Indian states. He laid down various measures which could be taken up to improve public participation in regulatory decision making process in India.

In Session 12 (**Consumer Impact Analysis in the Electricity Sector**) Navneet Sharma, Fellow, CIRC, highlighted the need for CIA in India. He presented an overview of the methodology and tools for CIA with an emphasis on effective and appropriate consumer involvement to improve the quality of regulatory decision making in India. With examples he discussed the use of CIA for addressing specific regulatory questions.

Participants' Feedback

Participants were requested to assess and share their feedback through a structured questionnaire. The questionnaire consists of qualitative questions and also some questions to quantify different facets of the structure of the Programme as well as that for different sessions with respect to their effectiveness in addressing issues. 23 out of 25 participants filled up the Feedback Form.

On 'primary objectives' for attending, the following were highlighted:

- To interact with other SERC representatives for gaining insight of their practices, aspiration and ground realities;
- To share information and thoughts and come out with solutions to some complex issues;
- To know the regulators' present performance status in the electricity sector across the country;
- To get educated regarding recent trends and developments in regulatory laws, open access, etc as commonly practiced/introduced across the country;
- To know more about competition and consumer protection issues in electricity distribution; and
- To have knowledge regarding good practices across the country.

Regarding how far their 'expectations' have been met, most of the participants replied that their expectations had been met to great extent and such programmes ought to be arranged with regular intervals. Following are some of the suggestions given for future programmes:

- Staffing pattern in SERCs should be discussed to help building them up as institute of experts.
- There should be some technical sessions on better management (including demand side management) of power utilities and related sectors/sub-sectors.
- Constraints in implementation of some regulations and laws in real life situation should be presented.
- Experience sharing in the form of group discussions should be stressed upon.
- Future programmes should address issues from the angle of "what is now" and "what it ought to be" instead of mostly sticking to the former.

As far as the 'most valuable' session for them from the point of view of 'relevance' to their work, most of the participants recognised more than one. A summary of their responses is as follows:

- Session 9 (Issues on Multi Year Tariff) has been identified by 11 out of 23 participants.
- Session 7 (Tariff Regulation in the Electricity Sector in India) and Session 8 (Issues Concerning Availability Based Tariff) have been identified as educative, informative and thought provoking by 10 and 9 participants respectively.
- Session 10 (Developing Standards for Better Quality Service) has been selected by 7 participants.
- Session 3 (Competition in Electricity Generation) and Session 5 (Issues on Open Access in Electricity Distribution) have been recognised by five of them.
- Seven participants have identified all the sessions as equally relevant and valuable.

Answering to the question of identifying the 'least valuable' session, 16 out of 23 participants have responded that they have found no such session. Following is a summary of comments and suggestions:

- Two of them felt that Session 2 (Competition in the Infrastructure Sector) and Session 4 (Competition in Electricity Transmission) were least valuable. One of them suggested that these two sessions could have been merged.
- One of them felt that Session 11 (Role of Consumers in Regulatory Decision-Making Process in the Electricity Sector) and Session 12 (Consumer Impact Analysis in the Electricity Sector) were similar and that they could have been merged.
- Session 3 to 6 (Competition in Electricity Generation, Competition in Electricity Transmission, Issues on Open Access in Electricity Distribution and Other Competition Issues in Electricity Distribution, respectively) have been identified as least valuable by one of the participants as he found that only some general issues were discussed.
- Session 10 (Developing Standards for Better Quality Service) has been selected by one of the participants as least valuable as he found that practical aspects and ground realities were not properly covered in this presentation.

More than one ‘reason’ had attracted most of the participants to this Programme. A synopsis of their responses is as follows:

- 19 out of 23 were attracted by the agenda including resource material.
- 13 of them found resource persons and networking opportunity as the main reasons behind attending.
- Four of them found opportunity to discuss ground realities as an attraction.
- Two of them were attracted by the venue of the Programme.

Responding to whether the ‘profile’ of the participants and resource persons represented well as far as the relevance of the Programme, the following were mentioned:

- 11 participants had given straight assertive answer while one of them felt otherwise.
- 10 of them avoided any reply and one felt that the question was ambiguous.
- Five of them (two from Delhi, two from Madhya Pradesh and one from Rajasthan) have recommended this event for all the officers of their respective state commissions.

Regarding ‘strengths’ and ‘limitations’ the following points are to be noted:

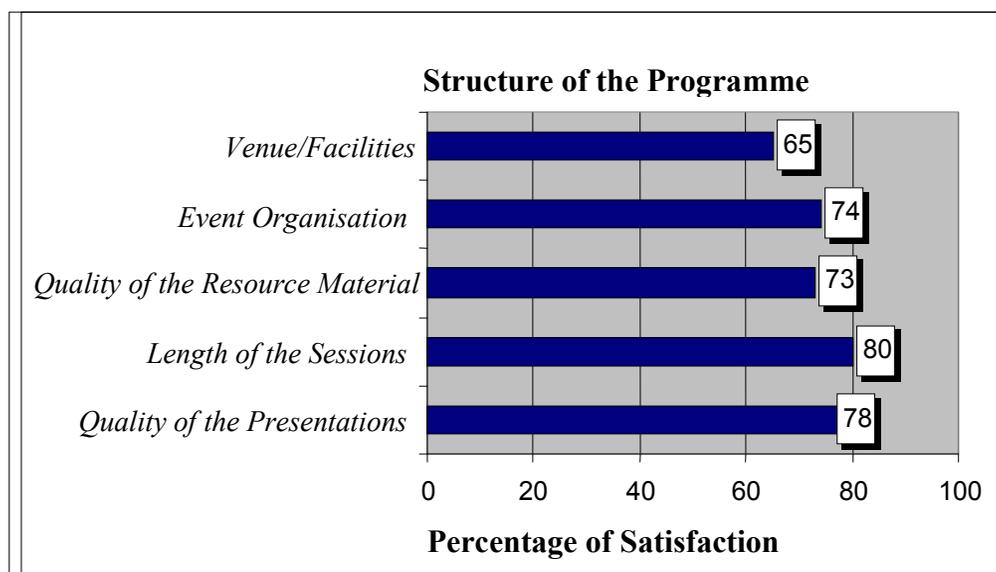
- Resource material, resource persons from diverse background, selection of topics, size of the audience, interactive mode of the Programme are identified as strengths.
- Among the limitations, couple of participants pointed out non-inclusion of interactive case work and absence of case studies from other countries. They suggested including good regulatory practices from other countries and how can they be replicated in India.
- Couple of participants suggested that such programmes should be held on regional basis so that there is better participation from geographically contiguous states.
- One of them suggested that in future programmes more stress should be given to the Competition Act of India and its relevance in infusing more competition in the Indian electricity sector, and resource persons from the Competition Commission of India should be invited.

Replying to a question on whether they found ‘interaction’ among the participants and resource persons satisfactory and beneficial, about 85 percent were highly satisfied. One of them suggested that though the discussion with the resource persons were excellent there should have been more discussion among the participants.

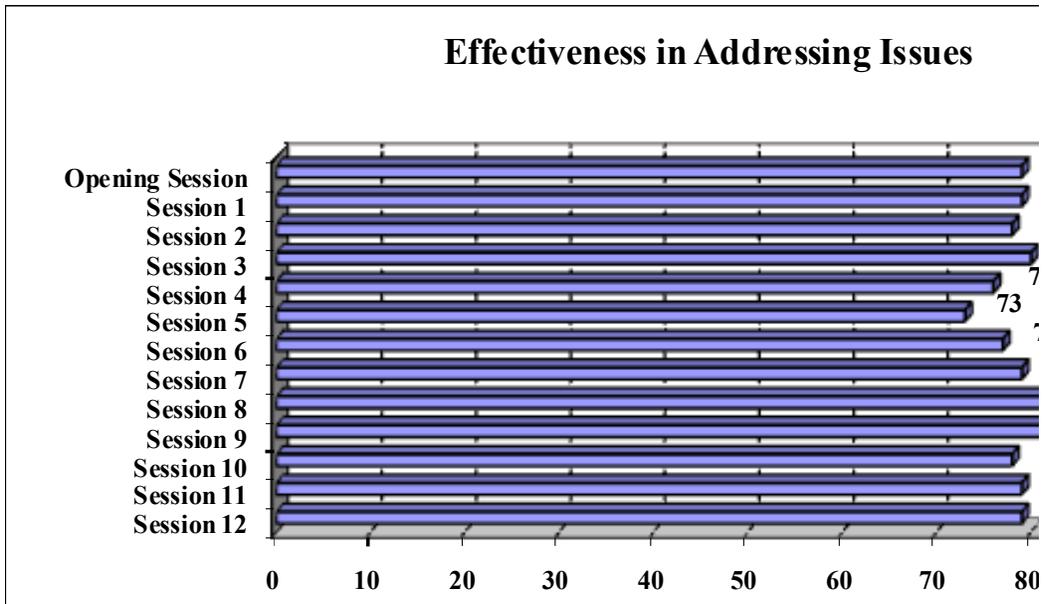
On ‘logistical issues’ the following feedback were received:

- About 20 percent said that future programmes should be organized in more accessible location so that there is less travel time.
- About 10 percent argued for early completion of each day’s programme so as facilitate sight-seeing.
- Three had some complain regarding food and venue facilities.

The participants were requested to ‘rate’ different facets of the structure of the Programme. The following chart shows the ‘percentage of satisfaction’. Overall rate of satisfaction is 74 out of 100.



The participants were requested to 'rate' different sessions (in terms of their 'effectiveness' in addressing issues) in a scale of 0 to 10 (10 being 'excellent'). The following chart shows session-wise ratings. Overall rate of satisfaction is 79 out of 100.



List of the Participants

| S. No. | State | Name & Designation |
|---------------|-------------------|--|
| 1 | Andhra Pradesh | K. Hari Prasad, Deputy Director (Tariff/Finance) |
| 2 | Bihar | M. S. Haque, Secretary |
| 3 | | R. N. Sharma, Deputy Director (Tariff) |
| 4 | | Ajit Kumar Sinha, Financial Analyst |
| 5 | Delhi | K. K. Verma, Joint Director (Engineering) |
| 6 | | M. S. Gupta, Deputy Director (Law) |
| 7 | Haryana | Suraj Prakash Gupta, Electricity Ombudsman |
| 8 | | Suresh Kumar Goyal, Deputy Director (Distribution) |
| 9 | Himachal Pradesh | J. P. Kalta, Executive Director |
| 10 | | Rajiv Sindhu, Deputy Director |
| 11 | Karnataka | Saifulla Khan, Director (Tariff) |
| 12 | | K. S. Satishchandra, Consultant (Technical) |
| 13 | Maharashtra | Rajendra Ambekar, Director (Tariff) |
| 14 | Madhya Pradesh | Ashok Kumar Gupta, Joint Director |
| 15 | | Ashok Upadhyay, Deputy Director |
| 16 | Manipur & Mizoram | P. Lalhminghlua, Assistant Chief (Engineering) |
| 17 | Orissa | A. K. Panda, Joint Director (Tariff-Engineering) |
| 18 | Punjab | Narinder Mehta, Deputy Director |
| 19 | Rajasthan | G. S. Verma, Assistant Secretary (Technical) |
| 20 | | Tarun Mathur, Secretary (Technical) |
| 21 | Tamil Nadu | K. Shanmugam, Deputy Director (Engineering) |
| 22 | Uttarakhand | Rajnish Mathur, Joint Director (Technical) |
| 23 | | S. P. Arya, Deputy Director (Tariff/Finance) |
| 24 | Uttar Pradesh | Shailender Gaur, Joint Director (TM&OA) |
| 25 | | Atul Chaturvedi, Deputy Director (Administration) |

List of Background Study Material Distributed to the Participants and Resource Persons

| S. No. | Title | Author |
|---------------|---|--|
| 1 | Competition in Infrastructure | <i>S. L. Rao</i> |
| 2 | Competition in India's Energy Sector | <i>The Energy and Resources Institute</i> |
| 3 | Regulation of the Power Sector in India: Issues and Challenges | <i>Competition and Regulation in India 2009: Chapter 4 Edited by Pradeep S Mehta</i> |
| 4 | Electricity Reforms and Power Exchange Harbinger of Power Sector Boom | <i>Rajesh K Mediratta, VP, IEX and S. A. Khaparde, IIT, Bombay</i> |
| 5 | Weekender December 24 th 2007 | <i>KRC Research Kisan Ratilal Choksey Shares and Securities Pvt. Ltd.</i> |
| 6 | Transmission Sector in India grappling with private investment | <i>B A Chaudhari, COO, Powerlinks Transmission Limited</i> |
| 7 | Open Access in Electricity Distribution Assessing the Financial Impact on Utilities | <i>Daljit Singh Economic and Political Weekly September 10, 2005</i> |
| 8 | Introducing Competition in the Power Sector Open Access and Cross Subsidies | <i>Sidharth Sinha Economic and Political Weekly February 12, 2005</i> |
| 9 | Policy Brief No. 3 | <i>Competition and Development Research Forum 2007, CUTS International</i> |
| 10 | Setting Risk-Based Returns in Power Sector: An Alternative Approach | <i>Dhiraj Mathur and Ramanjit Kaur Johal Economic and Political Weekly March 27, 2004</i> |
| 11 | Incentive Regulation and Its Application to Electricity Networks | <i>Paul L. Joskow and Alfred P. Sloan Foundation and Department of Economics, MIT Review of Network Economics Vol.7, Issue 4, December 2008</i> |
| 12 | Guidelines for Encouraging Competition in Development of Transmission Projects and Competitive-Bidding for Transmission Service | <i>Ministry of Power Government of India</i> |
| 13 | ABC of ABT A Primer on Availability Based Tariff | <i>Bhanu Bhushan</i> |
| 14 | Availability Based Tariff An Economic Instrument for Grid Discipline | <i>Ashok Banerjee and Sayantan Banerjee Economic and Political Weekly August 28, 2004</i> |
| 15 | Analysis and compilation of tariff orders Prepared for Ministry of Power, Government of India | <i>The Energy and Resources Institute</i> |
| 16 | Role of IT in Power Sector: A Innovative Tool to Empower Consumers | <i>Rajesh Kumar, Assistant Policy Analyst, CUTS International India Power Journal Vol. 17, No 1, March 2009</i> |
| 17 | Consumer Participation in Electricity Regulation: Rajasthan Experience | <i>Rajesh Kumar, Assistant Policy Analyst, CUTS International Briefing Paper No. 2/2009, CUTS Centre for Competition, Investment & Economic Regulation</i> |
| 18 | Consumer Participation in Infrastructure Regulation: Evidence from East Asia and Pacific Region | <i>Elisa Muzzini World Bank Working Paper No. 66</i> |
| 19 | Assessing Impacts of Government Policies on Consumers | <i>Vijay Vir Singh, Fellow, CUTS C-CIER Briefing Papers No. 1/2009, CUTS Centre for Competition, Investment & Economic Regulation</i> |

Agenda*Day 1: Monday, 18th May*

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| 0900-0930 | Registration |
| 0930-1100 | Welcome and Opening <ul style="list-style-type: none"> • Vision of the Electricity Act 2003 and related policies Navneet Sharma, Fellow, CUTS Institute for Regulation & Competition V. K. Khanna, Adviser, Forum of Regulators, Central Electricity Regulatory Commission S. Jayaraman, Member, Central Electricity Regulatory Commission |
| 1100-1130 | Break |
| 1130-1300 | Session 1: Regulation versus Competition – Theory & Practice <ul style="list-style-type: none"> • Concepts – key areas • Approaches to regulation • Market based regime and competition. Raghav Narsalay, India Lead, Accenture Institute for High Performance Business |
| 1300-1400 | Lunch |
| 1400-1530 | Session 2: Competition in the Infrastructure Sector <ul style="list-style-type: none"> • Competition – Why and How • Competition Policy and law in India • Competition law and infrastructure • Competition Act, 2002 Navneet Sharma, Fellow, CUTS Institute for Regulation & Competition |

Day 2: Tuesday, 19th May

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| 0930-1100 | Session 3: Competition in Electricity Generation <ul style="list-style-type: none"> • Competitive bidding; procedures, experiences, etc • Return on Investment (ROI) and tariff determination • Ownership and unbundling P. S. Shah, Secretary, Gujarat Electricity Regulatory Commission |
| 1100-1130 | Break |
| 1130-1300 | Session 4: Competition in Electricity Transmission <ul style="list-style-type: none"> • Scope for integrating transmission networks with competitive electricity markets in India • Issues that need to be addressed: regulatory issues, network pricing, risk management, need of the independent system operators (ISOs), etc • National Grid and its role in competition in electricity transmission Ajay Talegaonkar, Deputy Director, Distribution Planning & Development Division, Central Electricity Authority |
| 1300-1400 | Lunch |
| 1400-1530 | Session 5: Issues on “Open Access” in Electricity Distribution <ul style="list-style-type: none"> • Role of the electricity regulator • Progress made so far in India • Wheeling charges and cross subsidy S. C. Mahalik, Former Chairman, Orissa Electricity Regulatory Commission |
| 1530-1600 | Break |
| 1600-1730 | Session 6: Other Competition Issues in Electricity Distribution <ul style="list-style-type: none"> • Scope for competition in distribution models in India • Franchisee model S. C. Mahalik, Former Chairman, Orissa Electricity Regulatory Commission |

Day 3: Wednesday, 20th May

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| 0900-1100 | Session 7: Tariff Regulation in the Electricity Sector in India <ul style="list-style-type: none"> • Basic issues on tariff structure and how it is regulated K. Biswal , Chief (Finance Division), Central Electricity Regulatory Commission & Pankaj Prakash, Secretary, Uttarakhand Electricity Regulatory Commission |
| 1100-1130 | Break |
| 1130-1300 | Session 8: Issues Concerning Availability Based Tariff <ul style="list-style-type: none"> • Concept • Compliance • Roles and Responsibilities of Utilities K. Venugopal, Member, Delhi Electricity Regulatory Commission |
| 1300-1400 | Lunch |
| 1400-1530 | Session 9: Issues on Multi Year Tariff (MYT) <ul style="list-style-type: none"> • Justification of MYT • Key requirements in determining MYT • Process and control mechanism. K. Venugopal, Member, Delhi Electricity Regulatory Commission |
| 1530-1600 | Break |
| 1600-1730 | Session 10: Developing Standards for Better Quality Service <ul style="list-style-type: none"> • Standard of Performance (SOP) Regulations • Monitoring of various parameters of performance • Incentive and dis-incentive for better compliance • Role of regulators in ensuring better quality service Ashish Agarwal, Senior Consultant, PricewaterhouseCoopers |

Day 4: Thursday, 21st May

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| 0900-1030 | Session 11: Role of Consumers in Regulatory Decision-Making Process in the Electricity Sector <ul style="list-style-type: none"> • Consumer participation in regulatory decision-making process- rational, philosophy and challenges • Effective participation in the regulatory process, evidence from India, etc • Role of regulators and status of consumer participation in select states of India S. K. Sharma, Assistant Secretary, Delhi Electricity Regulatory Commission |
| 1030-1100 | Break |
| 1100-1230 | Session 12: Consumer Impact Analysis in the Electricity Sector <ul style="list-style-type: none"> • Basic concepts of CIA • CIA and its benefits to the electricity regulator • Challenges in implementing CIA Navneet Sharma, Fellow, CUTS Institute for Regulation & Competition |
| 1230-1330 | Participants' Feedback |
| 1330-1430 | Lunch & Departure |