



Conference on

# ENERGY NEEDS FOR THE TELECOM SECTOR

Trends and Outlook, Strategies and Solutions

September 20-21, 2010, Hyatt Regency, New Delhi

Organisers:



Lead sponsor:



Co-sponsors:



# ENERGY NEEDS FOR THE TELECOM SECTOR

## Mission

- The Indian telecom sector is amongst the largest consumers of energy in the country. In fact, power and fuel costs account for over 50 per cent of the operating expenditure for telecom operators, which may even be as high as 80 per cent in rural areas.
- The high energy costs may be attributed to the rising use of diesel generators (DG) for primary as well as back-up power as grid supply is either not available or is limited/ deteriorating, given the grim power situation (an annual peak deficit of 11-12 per cent).
- In rural regions particularly, with a large proportion of the sites being located in grid-deficit areas, telecom infrastructure is heavily dependent on DG sets, sometimes for up to 20 hours a day. In urban areas as well, frequent power cuts necessitate daily diesel consumption at tower sites. According to industry estimates, over 2 billion litres of diesel are being consumed annually at a cost of over Rs 65 billion.
- Energy consumption requirements and costs for telecom operators are only likely to increase with an estimated 200,000 towers to be installed in the country by 2012 to support new technologies (3G and Wi-Max) and future mobile subscriber growth (which will be heavily dependant on off-grid populations).
- The extensive tower rollout will result in a rising demand for diesel (with a majority of the new sites being set up in rural areas), which will only add to an operator's opex as diesel power costs Rs 20 to Rs 25 per unit vis-à-vis grid power, which costs anywhere between Rs 5-Rs 7 per unit depending upon the state.
- In addition, while so far, the diesel prices in India have been below cost (regulated by the government), the recent price hike and its impending deregulation, along with the likelihood of these prices being pegged to international market prices, will further increase the operators' opex.
- Given the huge cost implications, energy management, considered an afterthought till as recently as two years ago, has now come to the fore-front and is a key focus area for the entire telecom ecosystem.
- Technology vendors, operators, tower companies and power solution providers have now started deploying energy-efficiency solutions, albeit on a small scale, to reduce DG consumption at cell sites.
- A gradual move towards using renewable sources of energy has also started taking place. The business case for renewable sources, characterised by high capital expenditure and low operating expenditure, is highly compelling given that operational expense, play a key role in determining the profitability of a telecom site.
- The government is also promoting solar and other alternative energy sources along with technological innovations. For instance, given the huge capex requirements for renewable sources, the Universal Service Obligation Fund has widened its scope and is subsidising pilots that are using alternative energy.
- **The mission of this conference is to examine the energy needs and requirements of the Indian telecom sector and provide a platform for discussing solutions and strategies that will reduce energy consumption and costs.**

## Target Audience

- The conference is targeted at:
  - Telecom operators
  - Fuel suppliers
  - Energy/Power solution providers
  - Infrastructure equipment manufacturers
  - Infrastructure service providers
  - Energy services companies
  - Telecom equipment manufacturers
  - Civil contractors
  - Renewable energy solutions providers (solar, wind, etc.)
  - Legal and management consultants
  - Diesel genset manufacturers
  - Industry analysts
  - Policy-makers and regulators
  - Financial institutions
  - Energy management consultants
  - Supporting infrastructure companies
  - Energy-efficient technology providers
  - Etc.

## AGENDA/STRUCTURE

### ENERGY CONSUMPTION IN TELECOM: TRENDS AND OUTLOOK

- ❖ What are the key energy consumption trends?
- ❖ What is the future outlook (and projections)?
- ❖ What is the impact of energy costs on operator profitability?
- ❖ What are the key challenges? How are these being addressed?

### Grid Power Availability and Tariff Trends

- ❖ What is the current status of grid power availability?
- ❖ What have been the trends in power tariffs across states?
- ❖ What can be expected in future?

### OPERATOR AND INFRASTRUCTURE-PROVIDER PERSPECTIVE

- ❖ What are the key energy-related bottlenecks?
- ❖ What is the impact of energy costs on operator capex and opex?
- ❖ What energy-related strategies are operators considering (renewable, fixed-cost model, etc.)?

### CURRENT DG ECONOMICS: CAPEX/OPEX

- ❖ What is the current DG economics (opex and capex)?
- ❖ What are the different configuration, packaging and technology options?

### RENEWABLE ENERGY OPTIONS

- ❖ What are the renewable energy options available?
- ❖ What is the current and future economics (capex and opex)?

### REDUCING COST OF ENERGY: STRATEGIES/SOLUTIONS

- ❖ What strategies can operators adopt to reduce energy costs?
- ❖ What are the most relevant and promising solutions in this regard?

### Energy Efficient Technology and Equipment

- ❖ How can telecom equipment be more energy efficient?
- ❖ What are the most promising developments/technologies towards this end?

### FUEL PRICE OUTLOOK

- ❖ What is the market outlook (demand/supply) for key fuels (diesel, etc.)?
- ❖ How are the fuel prices expected to move in the short and medium term?

*Each session will be split into two parts. The first part will feature the viewpoints of all stakeholders. The second part will be devoted to Q&A and floor discussions. Several sessions will also be interactive. The conference will feature, as appropriate, presentations by all the major stake holders.*

### Delegate Fee

- The delegate fee is Rs 20,000 for one, Rs 35,000 for two, Rs 50,000 for three and Rs 65,000 for four.

### Distinguishing Features

- Our conferences and workshops are known for their focus on dissemination of information, sharing of expertise and exchange of views. Schedules are adhered to and there is adequate time for discussion and networking. There are no long lamp-lighting ceremonies.

### Organisers

*The conference is being organised by India Infrastructure Publishing, a company dedicated to providing information on the infrastructure sectors through magazines, newsletters, reports and conferences. The company publishes Power Line (India's premier power sector magazine), tele.net (a magazine for service providers and large enterprise customers), Power News and Telecom News (weekly newsletters), and a series of reports on the energy and telecom sector including Power in India, Renewable Energy in India, Solar Power in India, Wind Power in India and Telecom Infrastructure in India.*

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## Registration Form

I would like to register for the conference. I am enclosing Rs \_\_\_\_\_ vide cheque/demand draft no. \_\_\_\_\_ drawn on \_\_\_\_\_ dated \_\_\_\_\_ in favour of India Infrastructure Publishing Pvt. Ltd payable at New Delhi.

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## Registration Fee

Delegates	One	Two	Three	Four
INR	20,000	35,000	50,000	65,000
USD	475	835	1,195	1,555

- Registration will be confirmed on receipt of the payment.

## Contact

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