UNIVERSITY OF PETROLEUM & ENERGY STUDIES, DEHRADUN

End-Sem Examination – May 2017 – MBA – 2nd Semester – MDSP 824

Subject Code	Course Title
MBA(PM), MDSP 824 - Semester 2nd	Regulatory Framework for Power Sector
May Marks – 100	Duration – 3 Hours

<u>Course Title</u> – Regulatory Framework for Power Sector

Section A – 20 Marks (Each question carry two marks)

Question A: -

- i. Evaluate needs of BEE Star-rating with examples.
- ii. Explain sustainability.
- iii. What do you mean by regulatory assets? Suggestion to tackle this problem.
- iv. Why secondary fuel charge has now become part of the energy charge? Give reasons.
- v. What do you mean by concurrent subjects? How it has complexed Indian Power? Explain.
- vi. What do you mean by energy security? Your suggestion for better energy security in India.
- vii. National Tariff Policy 2016 was notified by CERC whereas National Renewable Energy Policy 2006 was notified by MNRE. (True/False)
- viii. Overall current installed capacity of India for power generation is about ------MW whereas in 2016-17 approx. ------BU of electricity produced in India.
- ix. Write full form of POSOCO, RPO, RGO, REC and RPC.
- x. Transmission Utilities are not allowed to do power trading-Why?

Section B -Total -20 Marks (4 x 5 marks) (Attempt any four questions)

- 1. Evaluate different competitive bidding methods for power generation with respect to each other.
- 2. What are Force measures? Describe the available relief for a force measure event.
- 3. Differentiate between power theft and UUE (Unauthorized Use of Electricity)
- 4. Explain how Indian Power Sector is moving from monopoly to competition? Give at least three examples in support.
- 5. Explain Bill, Act, Policy, Rules & Regulation, SOP and Plan for Indian power sector.
- 6. What are various components of open access charges? Critically evaluate its application.
- 7. In spite of large scale integration of renewable energy coal based TPP will remain the main source of electricity till new storage techniques for renewable or Nu-Power become cost effective. Evaluate this above given statement with a futurist view.
- 8. Explain "Distribution and supply" concept in Power Sector?

Section C (40 Marks) Attempt any four question – Each question carry 10 marks

- 1. Write main features of PPA in between UJVNL and UPCL for 500 MW Hydro-plant for 25 years from new proposed Hydro PP– both Power-PSUs of Govt. of Uttarakhand.
- 2. Explain salient features of new National Tariff Policy 2016. How it is different from National Tariff Policy 2006? Critically evaluate.

- 3. Explain salient features of Energy Conservation Act 2001. Explain roles of BEE and EESL in energy efficiency and conservation? Critically evaluate it.
- 4. Explain salient features of proposed Amendments Bill 2014 in the Electricity Act 2003. How it is different from EA 2003? Critically analyzed and evaluate.
- 5. Describe electricity tariff structure for a Nu-power-plant having 1000 MWe capacity.
- 6. Explain salient features of proposed Drafted RE Bill. How it will be different from the RE policy 2006? Critically evaluate the major proposal for India in 2022, 2032 and 2047.
- 7. What is Compensatory tariff? Critically evaluate its role along with force-majeure in context of Tata & Adani Mundra Plants with your suggestions for solution.
- 8. Write salient features of the Electricity Policy 2005 –critically evaluate in current scenario with suggestions for change.

Section – D - 20 Marks - Attempt all questions (Each question carry 10 marks)

Indian Power Sector is passing through a turbulent transition phase as it is moving out from natural monopoly towards a fair competition. This transition started a decade earlier with enactment of the Electricity Act 2003 – an integrated Act to replace three previous Acts namely the Indian Electricity Act 1910, the Electricity (Supply) Act 1948 and the Electricity Regulatory Commission Act 1998. Along with all good things of these Acts the Electricity Act 2003 first time in Indian power history talked for bringing competition in the sector and this is the most distinctive feature of this Act. In spite of the major goal of the bringing completion the Electricity Act 2003 restrict us to think about any kind of the duplicity of the network-system, and its operation and control as well non-discriminatory application of these systems. This is why Transmission-system and its allied areas related business entities are not allowed to do power trading business.

Power sector business is roughly divided in to three broad areas — Generation, Transmission and Distribution GT&D). Transmission related activities are natural monopoly business whereas we can easily have a competitive approach for the generation business. The problems usually found with the Distribution sector as it have both characters i.e. the character of a natural monopoly when we are thinking about Distribution network (Transformers, Sub-stations, and Distribution-lines etc.) whereas the supply of the electricity required tough competition for getting proper quantity & quality of power at the best cost which the whole distribution-sector is combination of two unequal group of the products or services — one group of them are monopolistic in nature whereas other can be easily done much better by introducing competition.

This is why the Distribution sector in many countries (even in few developing countries in South America) divided into two parts – the Network-business (normally called as Distribution Network) and the content business (normally known as the Supplybusiness). These divisions are similar to Hardware and Software divisions in the IT-business and are also found in our cable-TV operation in our homes where local cable-operator or DTH-operators like Airtel, Tata-Sky etc. used to work as the Distribution-networking provider whereas the programs are telecast by different channels like Star, Sony, Zee, etc..

Indian power sector is suffering mainly because of huge inefficiency in the Distribution sector as we are 10-11 years after the Electricity Act 2003 have not decided what to do with Distribution-reforms. In the Transmission-sector we have decided about the basic framework of the sector as the natural monopoly and so these are by an independent regulation, whereas in the Generation-companies (Gencos) we have in theory decided to have a universal competitive bidding although in practice even today have not have everything through competition. But slowly and steadily we are moving from monopoly to the competition in the gencos at least in theory whereas transmissions remain monopoly.

Time has come that we have to take major structural decisions about the Distribution sector as whole GT&D revenues are realized by Distribution companies (Discoms) only. Indian power business is suffering due to huge losses by Discoms as they failed to realize the cost of power due to many socio-political and economic reasons. Naturally Discoms had failed to pay their dues to the Gencos, making whole power sector sick.

For any success business we required three kinds of viabilities – Technical, Economical and Regulatory viable. This is why we I have taken Structure & Functioning for broader economic viability, Technology for technical viability and Regulations for regulatory viability in this book. As per our PM we required 3S (Skill, Scale and Speed) for growth and development. Skill is more or less technical issues, scale is economic and speed is indirectly related to regulations. In last few years we have found a lot of projects delayed due to environment-regulations. The new Land Acquisition Act 2013 is also going to make things difficult.

Question-1. Critically evaluate current status Power Sector in India.

Question-2. Suggest what needed to be done for betterment of Indian Power Sector.