

Name:	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
Enrolment No:	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, May 2020**

**Course: Energy Transaction and Litigation**  
**Program: LLM (Energy Law)**  
**Course Code: CLEL 7012**

**Semester: II**  
**Time: 03 hrs.**  
**Max. Marks: 100**

**Instructions:**

**Section A**

*\*Word limit of the answer shall range between 30-50 words.*

S. No.	Question	Marks	CO
Q 1	The Government of India set up Bureau of Energy Efficiency (BEE) under the Energy conservation Act, 2001. Write a brief note on its role and functions?	5	CO3
Q 2	Write a brief note on the National Action Plan for Climate Change (NAPCC).	5	CO3
Q 3	Write a brief note about an international treaty obligating its signatories to reduce green house gas emission.	5	CO1
Q 4	Write a short note on the adjudicatory procedure of Electricity Regulatory Commission and the appeals arising out of its orders.	5	CO2
Q 5	Name the Indian power market and power markets around the world.	5	CO4
Q 6	Write a short note on World Energy Council.	5	CO3

**SECTION B**

*\*Word limit of the answer shall range between 100-150 words.*

Q 1	What is India's vision of 2030 regarding energy independence ?	10	CO4
Q 2	Discuss in detail of security threat in Indian energy market scenario.	10	CO4
Q 3	Explain the role of Renewable Energy in Indian economy.	10	CO2
Q 4	What does wholesale power auction mean? Explain.	10	CO2
Q 5	Under the prevailing scheme of law, what is the scope of energy litigation in India.	10	CO1

**SECTION-C**

*\*Word limit of the answer shall range between 150-250 words.*

**Case Study: Power Sector Reform in Orissa**

The Belfast Agreement of April 1998 provided that a wide-ranging review of the criminal justice system in Northern Ireland would be carried out by the British Government. The Agreement also set out what the participants in the negotiations believed the aims of the system to be. These included the delivery of a fair and impartial system of justice, which is responsive to the community's concerns, encourages community involvement where

appropriate, and has the confidence of all parts of the community. Research subsequently carried out as part of the review showed that 61% of Catholics were confident in the fairness of the criminal justice system overall, compared with 77% of Protestants.

As per our Constitution, power industry is the combined responsibility of the Central Government and the State Governments. The ESA (Electricity Supply Act) envisaged three kinds of entities in the power-sector: State Electricity Boards (SEBs), generating companies, and licensees. SEBs is allowed to generate, transmit, and distribute electricity within a state; they enjoy all the powers of a licensee. They account for 65 per cent of the power generated in the country.

Generating companies are responsible for supplying power to the grid without the specific responsibility of retail distribution. Independent Power Producers (IPPs) now fall under this category. Existing licensees are private-sector utilities licensed by a State Government for power generation, distribution, or both within a specified area. The interdependence among these players in the electricity sector can be gauged from the fact that their performances are closely linked. (PGCIL is the Power Grid Corporation of India Limited)

Some instances of such interdependence are easy to find. High generation tariffs affects the performance of SEBs and transmission companies, just as MSEB (Maharashtra State Electricity Board) got badly affected by the high tariff imposed by Dabhol Power Company. In Orissa, Grid Corporation of Orissa (Gridco) files its tariff proposal with Orissa Electricity Regulatory Commission (OERC), assuming that it would buy power from OHPC, OPGC (Orissa Power Generation Corporation), and ERES (the Eastern Grid) in a particular proportion.

If, however, OHPC, the lowest-cost supplier, fails to supply power at the assumed level, Gridco is forced to buy from the other two sources, increasing its cost and pulling down its bottom-line. This interdependence also brings in problems specific to the power sector. Since IPPs and generating companies sell power to SEBs, they face accumulating burden of accounts-receivables.

While several SEBs are incurring losses, their financiers like PFC (Power Finance Corporation) and REC (Rural Electrification Corporation) are earning profits. But, liquidity problem of the SEBs has aggravated the accounts receivables problem of these financiers too. Even a single problematic player in the value-chain can kick off a chain reaction affecting virtually all the parties. Since SEBs is the most important players in the value-chain, it is imperative to understand their strengths and weaknesses. That may give us an important insight into the necessity for reforms in the power sector.

**Performance of SEBs**

SEBs has done a reasonably good job in creating the generating capacity. The installed generating capacity was less than 10,000 MW (megawatt) in 1951, but had breached the

	<p>75,000 MW mark by 1995. The average annual growth rate, however, has fallen from 12.7 per cent in the 60s to 7.3 per cent in the 1990s (Power Group of PwC: Indian Power Sector).</p> <p>The aggregate losses of SEBs more than quadrupled in the last eight years of the last decade. In fact, four of the eighteen major SEBs incurred a loss of ` 1,000 crore each in 1999-00. Some of the reasons for such disastrous performance of SEBs are the increasing hiatus between the tariff and cost, sub-optimal capital structure, low plant load factor (PLF), high transmission and distribution (T&amp;D) losses, and insufficient capital expenditure.</p> <p>About 30 per cent of electricity is supplied to agriculture (including lift-irrigation) at a tariff about 130 paise below cost per unit. Domestic 'sector gets 15 per cent of the electricity at around 65 paise below cost. Such cross-subsidies distort the demand for electricity by failing to convey its true cost to the consumers.</p> <p>Each year, an SEB develops a capital-spending programme and obtains funding from financial institutions and through the budget process of the State Government concerned. Generally, funding is not arranged on a project-specific basis.</p> <p>Whereas the private-sector has a PLF of 73 per cent, against the overall average of 63 per cent, the corresponding figure for SEBs is only a paltry 58 per cent. Even the IPPs have a PLF of around 69%. It has been argued that a high PLF is difficult to achieve in India, since the peak-timings vary across seasons, requiring generation to be harnessed towards that. Low PLF, on the other hand, pushes up SEBs' cost of power.</p> <p>Such high figures are indicative of power theft, which takes different forms such as un-metered supply, unauthorized connections, wrong billing, and non-distribution of bills. These are non-technical losses, some of which are aided by low voltage transmission, which accounts for the biggest chunk of transmission in the country. High levels of technical losses, on the other hand, are largely driven by inadequate maintenance of and investment in the transmission and distribution systems.</p>		
Q 1	What do you understand by the Belfast Agreement, 1998? Discuss the features of it.	<b>10</b>	<b>CO2</b>
Q 3	Why SEB is required to set tariff? How the liquidity problems of SEB can be improved?	<b>10</b>	<b>CO2</b>