



CRITICAL ANALYSIS OF ENERGY LAW AND POLICY

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Abstract

Until they discovered how to harness energy, humans were fundamentally no different from other animals. Their competitive status and survival were undoubtedly improved by social organisation and the employment of tools to promote speed, strength, and combativeness; nonetheless, the primary divergence in the evolutionary path adopted by Homo sapiens awaited the use of external energy sources. Throughout the past century, energy sources have steadily become more sophisticated, but the foundations have remained mostly same. A variation of the photosynthesis process, which is how plants store solar energy as biomass, is the conversion of solar energy into electricity.

1. ¹Introduction

It goes without saying that India's main prescription for advancement is access to energy, which is referred to as the "growth engine" and the indicator of economic and human development in the 21st century. The availability of energy gets more problematic because it can even require countries to redistribute their political boundaries.

2. Energy

Energy is a physical entity that is well understood, thus since it can be quantified, its seemingly straightforward definition in the dictionary—"it is the ability to do work"—needs to be expanded upon in the context of

this "cause ce'le'bre" work. The researcher humbly requests that you provide a more thorough scientific analysis of the numerous manifestations of this priceless resource. Energy is Transformation of Energy from One Kind to Another.

3. Transferred from one form to another and work is produced when a force moves an object.

Energy can be expressed in a variety of ways, according to the rules of energy. According to the classical law of conservation of energy, energy cannot be created or destroyed. Like James Joule (1818–89), who demonstrated how mechanical energy may be converted into heat energy, it may be transferred from one sort to another.

'Energy' cannot be destroyed, it must exist someplace; hence, "seek, and ye shall find; knock, and it shall be opened into you."¹

4. Classification of Energy Resources:

1. Conventional which covers a) Nuclear and b) Fossil fuel (coal, oil and natural gas) c)Hydel
2. Non convention which includes a) wind b) solar c) geothermal d) micro and mini hydel e) ocean energy (wave , tidal and ocean Thermal Energy conversion (OTED) and f) biomass and biofuel etc...

In the category of non-conventional energy sources falls in renewable energy According to one definition, renewable energy sources are "new and renewable sources developed by new technology and new material, different from

¹ www.digitalpuritan.net



conventional fossil fuel resources in that they can be continuously developed, obtained endlessly, can be "renewed" and supplied after use, produce little to no pollution, and have no adverse effects on the environment."

5. Rationale behind The Study

Energy is without a doubt essential for progress, but in the modern world, it is also an issue of basic requirements. As the link between energy production and consumption and environmental alteration, energy law could not have emerged independently of environmental law.

Thus, it is crucial to comprehend these connections and the legislation governing energy in order to determine how much it aids in achieving energy security and promotes sustainable development, especially in a developing country. To determine if the law is effective in attaining its societal aim, it is crucial to have a clear understanding of it because the energy law is not comprehensive and has not been established methodically.

6. The Research Problem

Therefore, the particular issue or subject that the research study focuses on is "What is the current law in India relating to energy?"

What are the potential policy directions or goals? What legal reforms are necessary to ensure the nation's energy independence and promote sustainable development?

7. Title of the Study

The study largely focuses on energy conservation in India. In order to achieve sustainability, or the preservation of energy sources and protection of the environment, numerous present energy laws and

regulations in India have been critically analyzed. The thesis is titled "The Legal and Policy Framework" since the investigation is limited to this framework. India's energy laws and policies.

8. Scope and Limitations

The study largely focuses on energy-related legal and policy concerns. A component of the investigation is the judiciary's interpretation of the law. The study is restricted to the setting and law of India. To the extent required to understand the legal system, technical issues are discussed. Except when the topic necessitated it, and even then only to a limited extent, the social, economic, and political dimensions are not discussed.

9. Hypotheses

1. the energy law is not comprehensive and has not been established methodically
2. As the link between energy production and consumption and environmental alteration, energy law could not have formed independently of environmental law.

10. Objectives of The Study

This research's overarching goal is to examine Indian energy legislation and policy. The particular goals are:

1. To research and evaluate the energy policy papers, particularly The Integrated Energy Policy, 2000, The Electricity Policy, 2005, and The Renewable Energy Policy.
2. To carefully examine the provisions of the 2003 Electricity Act.
3. To research and assess the existing energy laws; (a) in the context of sustainable development; (b) in light of the moral dimensions of energy challenges; and (c) to examine the proposed energy laws.



4. Submitting constructive conclusions.

11. Sources of Data

Data are collected from primary, secondary, and tertiary sources. The primary source of data comes from an examination of pertinent texts from statutes, policy documents, journals, periodicals, reputable newspapers and those that deal with energy issues, news magazines like Power Line, and judgments. Additionally, secondary sources of data have included books, journals, and survey results. As a secondary source of information, news articles from other newspapers, news magazines, and newsletters have also been used. Websites are the final type of tertiary sources of information.

12. Method of Data Collection

Law-specific literature including legislation and court decisions have been read. In addition to legal material, content analysis is used to analyze social and technical data gleaned from periodicals and newspapers. Technical data has undergone peer review with the Researcher's former co workers and compatriots who held responsible positions in the Indian industry as well as with individuals who are currently in positions of authority.

13. Survey of Literature

An interdisciplinary subject like energy necessitates the study of literature in Environmental sciences, Sociology, Economics, and so on, but it would be appreciated that a very broad practical knowledge (field experience) in the field of Engineering, particularly in the domains of both Electrical and Mechanical Engineering, would be welcomed for the correct assessment of the problem at hand. pertaining

to Environmental sciences, Sociology, Economics etc., but it would be appreciated that a very wide practical knowledge (field experience) in the field of Engineering especially in the domain of both Electrical and Mechanical Engineering would be welcome for the correct assessment of the problem on hand. The statement "Sciences such as geology, chemistry, physics and many other scientific branches play an important role as source of knowledge for the formulation of legal norms" (Alexandre Kiss, The law of Energy for sustainable Development, Ed. Adrian J. Bradbrook et al, first published 2005, p 9) provides the firm foundation for this opinion. Textbooks, journals, technical periodicals, newspaper pieces, and snippets from seminar proceedings are among the references in the aforementioned domains. Related statutes, textbooks, law reports, excerpts from the magazine of the Indian Law Institute, and the Indian Council of Arbitration make up the bulk of the literature on law.

Environmental and Energy Links

Everything is interconnected with every other thing. There is no such thing as a free lunch since "everything has to go somewhere" and "Nature knows best".

It goes without saying that "Energy and Environment are Intertwined" because a child cannot exist without a mother. But throughout history, mankind (=child) has been overly eager to exploit the environment (=mother) for economic or other reasons, or to covet luxuries without any regard for the detrimental effects imposed on the environment. To claim that energy can be created or produced without causing any harm, no matter how slight, to the



environment would be a "suggestion falsi". These effects may be felt locally, regionally, nationally, or globally. India must use and develop all forms of energy resources optimally given its size, diversity, and current rate of growth, particularly if it hopes to achieve its goals for eradicating poverty.

1. Environmental Protection

Energy production, transmission, and consumption all have an unavoidable impact on the environment. The impact on the environment can be regulated, controlled, or mitigated in India thanks to environmental regulations.

Environmental issues haven't really influenced how energy law has evolved. Up until recently, environmental law's guiding principles did not seem to matter much when it came to energy law, which was viewed as an addition to public administration law. Energy ethics has similarly focused on social justice issues including access to and fair distribution of energy. Environmental issues weren't that important.

Major environmental laws now in effect include:

PRESENT MAJOR ENVIRONMENTAL LEGISLATIONS :

1. The Water (prevention and control of pollution) Act, 1974
2. The Water (prevention and control of pollution) Rules 1974
3. The Water Cess Act 1977
4. The Water Cess Rules 1978
5. Forest Conservation Act 1980

6. The Air (prevention and control of pollution) Act 1981

7. The Air (prevention and control of pollution) Rules 1982

8. The Environment (protection) Act/Rules 1986

9. The hazardous wastes (management and handling) Rules 1989

10. The public liability insurance Act/Rules 1991

> Notification on submission of "environmental statement" under E.P Rules.

> E.I.A. notification on "environmental clearance" under E.P Act and rules the national environmental tribunal Act 1996

> Notification on "public hearing as per EP Act/Rules

> Bio-medical waste (management and handling) Rules under E.P Act 1986

> Municipal Solid waste (management and handling) Rules under E.P Act 1986, 1999

> Notification on Standards for Coal Mines 2000

> Noise Pollution (Regulation and Control) Rules 2000

> E.I.A Notification amended by including New construction projects and new industrial estates - 1000 persons and above (or generating effluents 50 kid or above or with an investment of Rs. 50 crores and above)

> New EIA notification on Environmental clearance under EP Act and Rules.

3. Environment Impact Assessment

Environment Impact Assessment is a regulation to foresee, quantify, and socio-economic changes that could result from a project or industrial endeavor that is being considered. For project evaluation, it contains both substantive and procedural requirements. It includes the evaluation of environmental harms, both immediate and long-term, to



people as well as to flora and animals in addition to humans. Thus, the precautionary principle puts into action all the actions planned before the start of any undertaking. Experts from related professions such as geology, forestry, economics, anthropologists, and in the case of energy projects, engineers of the relevant discipline (chemical, electrical, and mechanical) are required, as well as input from all of these areas. The Indian Government issued a notification on January 29, 1992 (Notice No. S.O.85(E)). Published on January 29th, 1992 in Section 3(i) of Extra Part II of the Gazette of India. This precautionary concept was codified in the law on January 29, 1992, pages 7–11 (No.Z-12013/4/89-[A][C][W][P]).

According to Schedules I and II attached to the notification, this includes new industries that would need environmental clearance from the federal or state governments, respectively, as well as existing industries that need modernization or expansion. The most recent Notification 1533(F) dt. 1-9-2006 divides projects into A&B categories, with "A" denoting clearance from the central government and "B" denoting clearance from state governments. State EIAs must be established at the state level, with the Ministry of Environment and Forests (MoEF) serving as the central governing body. EIA must be a crucial component of the project from the very beginning, like project appraisal. As significant doubts about its dependability arise, it is felt that the environment is being neglected.

4. Energy and Climate Change and Its Impact on Environment

Man is unaware that he is an integral part of the environment that he rapaciously exploits to produce "Energy," a resource that he uses in countless ways for his comfort. Aside from this primary casualty, which is environmental degradation (the first derivative of energy creation), man causes climatic disturbances/imbances by his wasteful consumption pattern, which is a spinoff of the first, which is energy creation.

The impact of climate change on the human habitat is irreversible; it causes catastrophic disruptions in livelihoods, living conditions, and human health. The use of fossil fuels, industrial and agricultural operations, as well as deforestation, result in anthropogenic emissions and rising concentrations of a "suite" of gases known as "greenhouse gases" (GHG), which change the global climatic regime. Large-scale droughts have already raised the alarm. We cannot stop the "march of the deserts" or stop the glaciers from melting because once nature's bounty is lost, it can never be replaced. The "hand" that feeds a man should never be bit.

The United Nations Conference on Environment and Development, which took place in Rio de Janeiro in 1992, led to the creation of the Framework Convention on Climate Change, has established framework for eventual stabilization of greenhouse gas emissions while acknowledging shared but distinct obligations, individual capacities, and social and economic circumstances. This was implemented in 1994.

2. Kyoto Protocol

The developed nations have a duty to lead efforts to cut greenhouse gas emissions. Currently due to the burning of fossil fuels



carbon dioxide produced accounts for the majority of greenhouse gases produced by human activity. These emissions are produced by industrialized nations in excess of two third But as national economies and populations expand, greenhouse gas emissions in developing nations are rising much more quickly than in industrialized nations. Within one or two generations, emerging nations' net emissions of greenhouse gases would certainly surpass those of industrialized nations if they construct their energy infrastructure in a similar manner. And even if developed nations achieve the modest goals outlined in the Kyoto Protocol, there will be little chance of stabilizing greenhouse gas accumulations if that course is continued without a considerable change toward the generation of energy based on renewable resources.

Industrialized nations can fund sustainable development initiatives in developing nations as a way to meet their promises using the Clean Development Mechanism to reduce greenhouse gas emissions provided by the Kyoto Protocol.

On August 26, 2002, India ratified the Kyoto Protocol, reinforcing the significance of stabilizing GHG levels and upholding the principles of sustainable development. The Protocol established standards and rules for how much a participating industrialized nation should cut back on six GHGs:

1. Carbon Dioxide CO₂ (which accounts for 63% of GHGs)
2. Methane (accounting for 24% GHG)
3. Nitrous oxide (10% GHG)

4. Chlorofluoro carbons and
5. Hydrofluoro carbons

6. Perfluoro carbons - si 4, 5, 6 emitting 3% of GHGs

The Kyoto Protocol outlined the differing reduction targets for GHG emissions from Annex I nations in its Annex B. For instance. Japan has pledged to cut its GHG emissions by 6% on average each year from 1990 levels for the years 2008 to 2012, as stated in Annex B.³⁴ Annex 'B' addresses the goals established.

By outlining three flexible procedures to reduce the total costs of meeting emission targets, the Protocol created a new field of application. While there are differing costs associated with controlling emissions, the benefits to the climate from reductions at various sites are constant. The systems are:

1. In exchange for emission reduction units, Annex I countries must carry out projects that lower emissions or remove carbon dioxide from the atmosphere in other Annex I parties.
2. Annex I parties to implement projects that, in exchange for certified emission reductions (CERs), reduce emissions in non-Annex I parties (countries) or absorb carbon through afforestation or reforestation activities. This will help the host parties achieve sustained development and make a contribution to the convention's ultimate goal.
3. Annex I parties to purchase CER units from additional Annex I parties (Article 12) of The Clean Development Mechanism is particularly pertinent to developing countries such as India.

²² Epdf.pub

³ Kyoto-seas.org



The fact that climate change is a long-term "cumulative problem" is something that Kyoto overlooked. The degree of warming is decided by the atmospheric CO₂ concentration over millennia, not by how much CO₂ we create in a given year. We have a "carbon budget," or a maximum amount of carbon we can release into the atmosphere over time, before things start to go south, in brief.

The Indian scenario for climate change and sustainable development. The adoption of Agenda 21 and the other Conventions emerging from the UNCED united nations conference on environment and development have made sustainable development a part of all climate change policy talks (buzzword!) at the international level. The Brundtland Commission's definition, which is widely accepted and used, is "development of needs of present without compromising needs of future generations to meet their own needs."³

Climate change integration into sustainable development.



A wide range of government efforts to incorporate climate change concerns into sustainable development can be seen in the environmental education in educational institutions and diffusion of renewable energy and water resource management.

The National Environment Policy of 2006 serves as the foundation for incorporating environmental factors into the policy of different sectors. The "polluter pays" approach is emphasized in the 1992 policy statement for pollution abatement, whereas the 1988 Forest Policy emphasizes

environmental conservation by preserving and reestablishing natural equilibrium. The goal of the policy is to increase India's forest cover.

The Air (Prevention and Control of Pollution) Act (1981), the Water (Prevention and Control of Pollution) Act (1974), The Indian Forests Act (1927), and the Environment (Protection) Act (1986) , the Forest (Conservation) Act (1980) , all contribute to the legal framework for the environment and energy efficiency. Public Liability Insurance Act of 1991, and Electricity Act 2003 , National environment Tribunal of 1995, Energy Conservation Act 2001, National Environment Appellate Authority Act of 1997, , are further statutes. The "polluter pays" and "precautionary" principles, as well as ideas related to sustainable development, have also been developed upon by the courts. A vigilant media, a thriving community of NGOs, and the judiciary, which has acknowledged the importance of public interest concerns, successfully communicate issues of public interest in India, particularly those relating to the environment.

Everyone has a duty to save the environment., so the researcher has a sanguine hope that good sense will prevail in the community of nations and that everyone will take the necessary precautions to protect nature's bounty so that future generations will have access to clean energy.

Energy Legislation and Policy

1. Electricity Act 2003

Electricity is not primary energy. Rather, electricity is generated by a process of changing mechanical energy from natural



resources into electrical energy. Electricity is generated from various sources such as hydro, thermal, biomass, nuclear, solar or wind energy. Some of them being conventional, production of energy from biomass, solar, wind or geothermal sources is nonconventional. Generation, distribution and transmission of energy/electricity need to be regulated by law, irrespective of the source or process of generation. In India, legislations do exist which specifically deal with energy such as the Electricity Act 2003 or the Energy Conservation Act 2001.

Electricity is a need in all aspects of our lives. All areas of our lives require electricity as a basic necessity. It is acknowledged as a fundamental requirement of people. The socioeconomic development of the nation is dependent on this vital infrastructure.⁵ Rural India must have affordable access to energy if it is to grow fully. It is equally crucial that Indian industry has access to dependable, high-quality power at affordable prices to enable it to compete worldwide and to fully realize the enormous potential for job creation.

The Indian power sector is undergoing significant development. Since India's independence, the power sector has seen notable growth. The expansion in supply hasn't kept up with the demand for power, though. There are severe peak and energy shortages nationwide. This is a result of insufficient generating, transmission, and distribution systems as well as ineffective power use. Unsustainable financial operations are the result of a very high degree of technical and commercial losses as well as

a lack of a commercial approach to the administration of utilities.⁴

Electricity is a capital-intensive sector with a long gestation period. The nation's power-generating resources are unevenly distributed. A commodity that cannot be held in the system, where supply and demand must always be balanced, is electricity. The nation's widely dispersed and quickly escalating demand needs must be served in the best possible way. The government has started reforming the power sector in light of these factors.

Power Sector Reform

The Indian Electricity [Supply] Act of 1948 created the State Electricity Boards (SEBs). The Boards are responsible for carrying out the party's social commitments. However, changes made to the way money was collected in order to gain important political support during elections and some trade-union activities have reduced the administration to a farce. Overall, it had the effect of a growing illness that had gotten worse with time. The current Act, which supersedes the three earlier Acts that governed the nation's power business in 1910, 1948, and 1998, is comprehensive. By incorporating certain conceptual changes (already in use in some countries in Europe), such as power trading, open access, and even parallel distribution networks, this Act is intended to bring in a market-oriented approach to the traditional regulated monopoly character of the electricity supply industry. These will completely deregulate the generation, partially regulate the transmission, and entirely control the

⁴ Submitted to university of glamorgan



distribution. The stated long-term goals are (i) reduced prices as a result of competition, (ii) better power quality, and (iii) more options for consumers. According to the new Act, electricity trading can be done directly between producer and consumer or through a third party both inside the state and interstate. Cross-subsidization is strongly opposed in the subsidy debate, but if a state government wants to offer subsidies, they must be paid up front, not afterwards. The Act authorizes numerous distributors to operate in one location, even if their lines are parallel. The Act has eliminated all licensing requirements for rural power provision in an effort to promote rural electrification. In rural areas, anyone can generate and sell electricity, and the state has little influence over this sector of the economy.⁵

Electricity Act 2003

"Electricity" is listed as item 38 in the concurrent list (list III) of the 7th schedule of the Constitution, both the Parliament and State legislatures are permitted to adopt laws related to electricity under Article 246 (2) of the Indian Constitution.

1. Drive for the completion of rural electrification and provision for Panchayats, Cooperative Societies, NGOS, Franchisees, etc. to manage rural distribution.
2. The availability of license-free production and distribution in rural areas.
3. Generations are released from their licenses while captive generations are given free rein. However, hydro projects would require approval from the central electrical authority.
4. The planned and coordinated development of the transmission network will be the responsibility of a government-owned

enterprise known as the transmission utility, both at the federal and state levels.

5. Allowance for private licensees to participate in distribution and transmission through a separate network. Open access during transmission from the beginning.

6. Cross subsidies and surcharges for present levels of cross-subsidy will be gradually phased out concurrently with the introduction of open access in distribution. There will also be a requirement to provide SERCS with the information necessary to develop laws governing the phasing of open access within a year. Distribution license holders would be free to engage in generation, while producing businesses would be free to engage in distribution.

7. It is necessary to have the State Electricity Regulatory Commission.

8. A budgetary provision for subsidy payment.

9. The recognition of trading as a distinct activity is protected by the regulatory bodies' authority to, if necessary, impose limits on trading margins.

10. Provision for the continuation or reorganization of SEB's.

11. Mandatory metering of all provided electricity.

12. An appellate tribunal will consider appeals against CERC and SERC decisions.

13. Strengthened provisions regarding the theft of electricity.

14. A provision that protects consumer interests.

15. Consumer complaint resolution Ombudsman program.

4. A Critical Analysis of The Electricity Act 2003

A. Licence

According to S-10.2 of the Act. S-14 deals with the granting of licenses for the



transmission, distribution, and trade of electricity, while S-15 specifies the license-granting process. Although licensing has practically become a "Open sesame," the GMR and GVC plants established in A.P. show that the goal of attracting competition through this provision has not yet been accomplished.

B. Generation

Hydels: S-7, any generating company may set up, run, and maintain a generating station without needing a license, provided that it adheres to technical grid connectivity standards. In accordance with S-73(b) and S-8 requirements.

These sections have been added in an effort to increase the number of participants in the power generation process and to provide a "buffer." However, having numerous power producers at the lower and middle levels is not a business that can be sustained economically or environmentally. This has a potential drawback of inter State disputes.

D. Transmission

(Ss 26 (2) 27(2) 31(2)) S-26 (2) specifies that the national load dispatch center is not permitted to conduct power trading activities. According to S-27 (2), the regional load dispatch center must operate an electricity producing or trading company. S-31(2) states that no State load dispatch center may conduct business in the selling of electricity or other commodities.

It will be understood that S-26 deals with national load dispatch center, S-27 deals with constitution of regional load dispatch center, and S-31 deals with "Constitution of State

load dispatch center" and as such they are the monitoring authorities and therefore they themselves should not deal with the generation/trading activities. In this context, the aforementioned phrases seem suitable. The best legal illustration of this is that a person cannot serve as both a judge and a prosecutor.⁵

E. Captive Power Plants

Captive Power Plants (Sections 9 and 2 and 38(2) d) Anyone may build, maintain, or run a captive generating plant under S-9. However, S-2(8) defines it as a power plant established by any individual to generate energy primarily for his or her personal use, and this definition includes a power plant established by any cooperative society or association of persons to generate electricity for the use of its members.

As S-38 (2) states, "Provided also that such surcharge shall not be leviable in case open access is provided to a person who has established a captive generating plant," this may attract persons to create bogus cooperatives. Thus, this will result in the waste of resources and the depletion of revenues.

The State Electricity Board or other parties should be able to purchase excess power from a captive power plant without any delays. The CPP should be permitted to sell the same to a third party at a price that both parties agree upon in the event that the SEB is unwilling to purchase the same.

The state should be reimbursed by paying wheeling fees, and the power should be delivered through the state grid line to the

⁵⁵ Electricity Act 2003



intended location of consumption. This will enable the CPP to operate at full capacity and improve the supply of power.

Decentralized generating has minimal T&D losses because the plant is near to the load center. The recovery of waste heat results in increased thermal efficiency. These power systems are modular and are simple to adapt to a specific demand. Theft of power won't affect them. (from wires).

There are several drawbacks to centralized electricity generating. Such projects have extensive gestation periods and require a lot of investment in transmission networks. Due to the centralized position, T&D losses are substantial, and environmental risks are also considerable.

F. Distribution Through Licensing

A license may be granted to two or more people for the distribution of electricity through their own distribution systems within the same territory under S-14I. Regarding the obligations of the second person, there is uncertainty as to whether the second person must expand his or her activity to the entire area covered by the first person, whether the second person can choose his or her consumers at will, choose his or her own area of operation, or even the category of sustainers. Obtaining a licence is easy for MNCs and corporates but for other it is difficult. Notwithstanding their sincerity or capability the middle class people will be denied this opportunity.

G. Provisions Of Supply

S-47 (4) Security deposit .The distribution licensee must reimburse the security upon the request of the person who provided it and pay interest on it that is at least equal to the bank

rate. According to S-57 (4), “the licensee shall be liable to pay such compensation to the person affected If the licensee fails to meet the standards specified.”

These safeguards safeguard the interests of consumers, although it is anticipated that they will inevitably lead to litigation. The corruption in this field has undoubtedly decreased to some extent, and today all departmental employees are literally on their toes. Although much has been accomplished, there is still need for improvement, according to others who believe that these provisions are strict.

Judicial Interpretation

In this case Tata Steel Ltd and another vs. Jharkhand State electricity regulatory commission Ranch that The TSL commission denied the appellants' request to treat the two power generating units held by appellant No. 2 TPCL as captive power plants of appellant No. 1 TSL exclusively for the purpose of steel industry. therefore appear present.

The appellant argued that because S-44 of the Act of 1948 had granted them authority to be captive. e units, they should be classified as captive generating units under S-9 read with S-21 of the Act of 2003. It was decided that the two units entirely belonged to appellant No. 2, TPCL, a corporation in its own right and in no manner a subsidiary of TSL, even before any supply from any of the units was supplied to TSL/TISC.

It cannot be stated that electricity in units produced by Appellant No. 2 TPCL and sold to Appellant No. 1 is being consumed from that party's own source of production. S-



185(2) of the Act of 2003 cannot transform the 2 units into captive units since they were not captive units even before the Act of 2003 entered into effect. (S-185 repeal and savings) Appeal is denied.

In this second case Vinod Kumar Jain vs BSES Rajdhani power Ltd.

The petitioner requested a new power meter since the old one was running too quickly and wasn't accurately measuring consumption. Upon inspection, it was discovered that the electricity meter was running 5.07% too quickly, and the respondent DISTCOM decided to disconnect the customer rather than rectify the bill. It led to the writ petition. The petitioner argued that because the electrical bill was based on a malfunctioning meter and that rule 19 applies when a consumer complains and the meter is tested and found to be broken or operating too quickly, he is not responsible for paying it. According to regulation 19, when a meter is inspected and found to be fast, the DISTCOMs are required to replace the meter within 30 days. Additionally, the consumer's bills paid up until the date of the inspection will be corrected, and the excess amount paid will be refunded to the customer or adjusted in future bills to be paid by the customer, depending on the percentage of error.

The meter is assumed to be broken if it has been charging for excess energy for six months. The consumer only receives benefits that are retroactive for six months. The DISTCOM is responsible for calibrating the meters and making sure they are within the established parameters. Writ of mandate partially granted.

In this third case Gajendra Haldea vs CERC and Ors

Whether the electrical regulatory commission has the authority to set prices for the sale of electricity made by a generator to a trader or intermediary, a distributor to a trader, or a trader to any other person.

According to the court, the relevant commission under S-62 (1) read with Ss. 79 (1) a and (b) and 86 (1) of the Act has the authority to set the price at which a generating firm will sell electricity to a distributor. It does not put any tariff restrictions on the distribution licensee or the generating company's ability to sell electricity to a trader or an intermediary, or on the trader's ability to sell electricity to any individual.

This frees up the generator to engage in direct business dealings with traders or intermediaries, which is crucial for fostering competition, which is crucial for ensuring power for consumers at fair prices. petition is dismissed.

In this fourth case Dakshin Hariyana Bijli Vitran Nigam Hisar, Hayyana and ors vs electricity ombudsman, Hariyana and Another.

Against the order of the electricity ombudsman, the appellant filed the current appeal. The issue that needed to be resolved before this tribunal was whether or not the electricity ombudsman is an adjudicating officer and whether or not an appeal is allowed against his decision. The appellant argued that because the ombudsman is an officer charged with adjudication, he or she is an adjudication officer covered by S-111 of the Act.



In light of the specific provisions provided in the electrical Act, a civil court is not required to accept a suit for a declaration and an injunction against a specifically established forum. In light of the provisions of Sections 153 and 154 of the Act, a special court has the jurisdiction to resolve any dispute regarding the quantum of civil liability specifically in theft cases, and the said court can act as both a civil court and a criminal court while conducting the cases before the Act. As a result, disputes about civil liability in theft cases are impliedly excluded from the jurisdiction of civil courts. Appeal is denied.

Judicial Interpretation in the General Cases

LIMITATION - Ajmer Vidyut Viteran Nigam Ltd. v. Rajasthan Electricity Regulatory Commission and Others⁵³ Limitation Act 1963 general law or S-56 (2) held that the amount claimed by the AWNL is subject to the general Law of limitation under the Limitation Act and that nothing due prior to 3 years from the date the claim is made would be legally barred.

PROMISSORY ESTOPPEL-Kerala State Electricity Board vs. Kusumum Hotel (P) Ltd. and others⁵⁴, the theory of promissory estoppel may be removed, among other things, in the interest of the public, even though a different policy decision may be made, but due notice should be given. This is true if the doctrine of promissory estoppel applies for the purpose of enforcing the concession granted in favor of entrepreneurs.

ACQUISITION-In Kerala State Electricity Board v. C.P. Sivasankara Menon⁵⁶, the appellant board claimed that it had to take down some fruit-bearing trees in order to install a 220 kV electric line. respondents

were not happy with their remuneration. There was a disagreement over the amount of money granted as compensation for valuing the trees' yield as well as their future ages and interest payments.

petition filed to the trial court arguing that extra compensation was permitted. The High Court dismissed the appellant's civil revision plea. Hence the appeal at hand. Regarding the compensation for fruit-bearing trees, it would also rely on the specifics of each case's facts and circumstances. Claims made on a yield basis are also important when figuring out how much compensation is required by the Land Acquisition Act. Ratio in the Livisha rehied v. Rural State Electricity Board case. Disputed orders are annulled. Appeal accepted.

Alternative People's Plan for Power Sector Reform

According to renowned energy expert Prof. Amulya Reddy, this idea was a "conceptual and methods breakthrough and an outstanding example of strategy and policy formulation based on creative analysis." He claimed that "inadequate appreciation of the objectives of power sector reform" was to blame for the failure of the changes in the power industry. It established a straightforward goal-oriented strategy with the goals of accessibility, affordability, and availability.

Redesigning the electricity sector reform began with a focus on low-income households and irrigation pump sets. From a purely socio-economic standpoint, the proposed approach suggests that the "availability" goal might be met by allocating supplies among three streams of generation.



⁶the demand of existing consumers (poor households and agriculture) above their entitlement would be met from the pooled power of utilities; and, the emerging large demand would be satisfied by new private / public / captive power stations through mutually agreed-upon commercial contracts using the transmission / sub-transmission lines of utilities bearing pre-announced wheeling. Such users would essentially pay the marginal cost of power.

The extension of "accessibility" can only be accomplished by having this end-use/user mindset. As a result, the people's plan for the reform of the power sector takes a fundamentally different tack from established frameworks.

Pump sets and low-income homes have historically been the pariahs of the power industry, and they are mostly to blame for the sector's significant financial issues. Current World Bank-led reforms have failed to address the financial issues they were intended to address because they ignored the demands of these marginalized groups, making them politically unviable. Assigning distinct generation systems to each region is a fundamental aspect of this division of electricity generation. But this task is not arbitrary. The oldest and least expensive plants are reserved for domestic connections and agricultural pump sets that fall below entitlement levels. The remaining plants are reserved for domestic connections and agricultural pump sets that fall above entitlement levels as well as for other existing consumers. The expensive plants that have not yet been built or completed are intended to meet the large demands that are expected to emerge.

When the generation is sorted in this way and allocated to the end users/uses as stated, the below-eligibility agricultural pump sets and domestic end users/uses have the lowest average generation cost, the above-eligibility agricultural pump sets and domestic connections and other existing consumers have the next highest average cost, and the emerging large demand has the highest and Rising cost of new plants, i.e., the marginal cost, giving rise to the term "demander. Similar to the "polluter pays principle" in environmental policy, what has been advocated is a demander pace principle, meaning that individuals who make minor demands for power pay less than those who make huge demands.

The Electricity Act, 2003 is an important piece of legislation that was implemented in India with the intention of changing the country's electricity industry. The Act also addresses the security and protection of consumers' interests and significant concerns relating to power generation, distribution, transmission, and trading. On the other hand, the Electricity Act of 2003 solely protects electricity consumers, whereas the Consumer Protection Act of 1986 protects the interests of the entire community of consumers, including those who use electricity.

National Electricity Policy (Renewable Energy)

According to the ELECTRICITY Act of 2003, the Central Government is periodically tasked with developing the national power policy and tariff policy, in cooperation with the State Governments and others, to ensure the best possible use of all resources, including renewable energy sources.

⁶ www.helio-internation.org



Recently, the National Electricity Policy government-issued document. In order to encourage the rapid development of nonconventional energy-based power generation, the Act of 2003 contains a number of enabling clauses, which are outlined below:

According to Section 86(1)(e), "The State Commission shall promote co-generation and the generation of electricity from renewable sources of energy by providing suitable measures for grid connectivity and the sale of electricity to any person, and shall also specify, for the purchase⁷ of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licence."⁸

In accordance with Section 3 (1), the Government of India (GoI) must periodically prepare the National Electricity Policy and Tariff Policy in consultation with the State Governments for the development of the power system based on the best possible utilization of resources such as coal, natural gas, nuclear, hydro, and renewable sources of energy.

Section 4 mandates that the GoI create a national policy allowing stand-alone systems, including those utilizing renewable energy sources, for rural areas after consulting with the State Governments.

The broad principle of action is contained in this. The Government would announce the tariff policy. The State Electricity Regulatory Commissions (SERCS) will have to put these regulations into practice for publishing tariffs, fees for wheeling and banking, etc., within the corresponding States. While

preferential tariffs would last for a while, eventually a competitive method would be used to buy power distributing firms.

Renewable Energy Policy (Renewable Energy)

A 2005 New and Renewable Energy Policy Statement has also been released by the Ministry of Non-Conventional Energy Sources (MNES). The following factors have been highlighted by 47It as new and renewable energy technology product and service drivers:

- > A diversified and sustainable fuel mix that helps achieve national energy security by reducing reliance on energy imports;
- > Mainlining faster deployment of renewable energy systems and devices through domestic design, development, and production in addition to developing new energy sources to advance the goal of energy independence;
- > Increase the amount of new and renewable energy in the fuel mix to achieve equity by expanding cost-effective energy supply to bring per capita energy consumption on par with world average
- > In order to further the goal of accessibility, increase energy delivery to remote and underserved locations so that normative consumption levels are available to all segments of the population across the nation; and,
- > Fuel switching via the installation of new and renewable energy systems and/or equipment in support of the conventional energy conservation goal.

Integrated Energy Policy

Oil & Natural Gas-Indian Scenario

⁷ www.nri.org



At the current rate of production, India's meager oil and gas reserves would run out in 23 and 38 years, respectively, and it is anticipated that oil imports will rise to 80% (from the current level of 70%). India imports oil from 25 nations, with Nigeria and the Gulf of Mexico accounting for two thirds of that total. The use of "oil diplomacy" is regarded as a key instrument for establishing energy security. Some of the issues highlighted in the Government of India's Integrated Energy Policy publication.

- a. Ensuring crude oil and gas supply in a market that is limited and experiencing price increases
- b. Controlling the demand for petroleum products
- c. Reasonable gas and petroleum product pricing
- d. lowering entrance barriers for private businesses in the retail and distribution industries to foster true market competition.
- e. improving the way LPG and kerosene subsidies are handled, and
- f. environmental control via product improvement

(NEP) National Environmental Policy 2004

India is firmly committed to the idea that different nations have varying degrees of responsibility for combating climate change. The Draft Environmental Policy statement released by the Ministry of Environment and Forests in 2004 makes this quite evident. "Emerging global environmental issues including climate change, stratospheric ozone depletion, and biodiversity loss present another significant set of challenges. The secret is to put the idea of countries having different levels of responsibility for these

issues into practice. The multilateral programs and regimes created to address these global environmental problems must not have a negative effect on poor nations' chances for growth. Additionally, only equal per-capita distribution across all nations should be used as the basis for sharing the world's natural resources.

Conclusion

Life is an expression of energy, and it cannot exist—certainly not in the way we understand it in modern society—without a steady stream of fresh energy. Most inanimate objects used by humans can be recycled because of chemicals. The second law of thermodynamics, one of the fundamental tenets of physics, states that energy cannot be regenerated. Every time energy is changed from one state to another (i.e., whenever energy is "used"), a portion of it is degraded into heat, which is lost to the ecosystem and unusable for the majority of human purposes. Both living and non-living systems depend on energy for organization, and as it is continually depleting, a constant input is necessary to maintain system integrity.

References

I. Books

1. Bradbrook, Adrian J. et al, The Law of Energy for Sustainable Development (I.U.C.N Academy of Environmental Law Research studies)' New York: Cambridge University Press U.S.A., 2005.
2. Dworkin Ronald, Taking Rights seriously, Delhi: United Book Traders, 1996.
3. Edward M.C. Nail Burns et al, World Civilisations - Their History and Their culturz, Delhi, Goya) Saab, 1991, Wis 1&2.



Research Report

1. Raju Ramalinga K, A Critical Analysis of Electrical Energy consumption of various sections of consumers with emphasis on Energy Conservation & Audit - An Indian perspective. Thesis, Jawaharlal Nehru Technological University College of Engineering, Kakinada May 2004.

3. Articles

1. Jayant Sathaye et al, Climate change, Sustainable development and India, Global and National Concerns, Current Science vol 90 Feb 2006, pp 314-325.

2. Swapna Naik, Energy efficiency & Conservation Scenario in India, Indian Electrical and Electronics Manufacturers "Association, leema Journal, Mumbai, Dec 2008.

3. V.K. Srinivasan, Electricity Act 2003, Competition Main Objective, The Hindu Survey of Indian Industry 2004.

4. Prime Minister's speech of energy conclave 2006, Implementing Integrated Energy Policy, July 28. 2006.

4. Journals

1. Journal of the Indian Law Institute New Delhi-110001.

2. Journal of Institution of valuers, Indian Valuer, Delhi-110009.

3. Inwind chronicle, A wind energy International Quarterly Journal, Published by Inwind Energy Association, New Delhi-110016.

Law Reports

1. ELR Energy Law Reports
2. AIR All India Law Reports
3. ALT Andhra Law times
4. SCC Supreme Court Case
