

**CENTRAL AND EASTERN EUROPE &
NEW INDEPENDENT STATES
REGULATORY CONFERENCE
LICENSING COMMITTEE**

Series of Licensing Related Issue Papers

December 1998

- **Financial Qualifications and Creditworthiness of License Holders for New and Existing Utilities**
- **Capacity Limits in Licenses and Licensing Periods**
- **License Enforcement**
- **Monitoring**
- **Elementary Elements of Licensing**

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2nd Annual Energy Regulatory Conference for Central & Eastern Europe and
New Independent States

December 1998

Dear Colleague:

As Chairman of the Licensing Committee of the 1st and 2nd Annual Energy Regulatory Conference for Central and Eastern Europe and the New Independent States (NIS) of the Former Soviet Union, I am pleased to present the first five papers in an occasional series of licensing energy activities in nations with transitional economies. Created in November 1997, the Licensing committee is a component of the USAID sponsored network that has been designed to encourage information sharing between newly established energy regulatory commissions in the region.

During the past year, committee members from Armenia, Georgian, Hungary, Kyrgyzstan, Latvia, Moldova, Poland, Ukraine and Russia, met on three occasions to discuss licensing issues that are specific to the region and to nations with transitional economies. The enclosed papers represent the committee's consensus on licensing in the CEE/NIS region and, with the recommendations they contain, provide an authoritative guide on the subject for newly established regulatory commissions and their regulated utilities. They demonstrate both theoretical aspects and practical strategies related to licensing to help new regulators through the licensing and monitoring processes.

We hope that our work is a beginning. The enthusiastic consensus of our Committee proves these cooperative efforts are invaluable. Coming together to work out questions of common interest is a vitally useful tool that has increased in value over time.

I would like to thank all the participating members of the Licensing Committee, USAID, the United States Energy Association, Pierce Atwood, Bechtel, and Hagler Bailly for the support provided in developing the papers. I look forward to continuing our collaboration over the next year.

Sincerely,

Dr. Gábor Szörényi
Deputy Director, Hungarian Energy Office
And
Chair of the Licensing Committee

Licensing Committee

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**Financial Qualifications and Creditworthiness of
License Holders for New and Existing Utilities**

December 1998

Licensing Committee Member Countries:

**Armenia; Georgia; Hungary; Kyrgyzstan; Latvia; Moldova;
Poland; Ukraine; and Russia**

Financial Qualifications and Creditworthiness of License Holders for New and Existing Utilities

1. Introduction

- 1.1 Regulatory concern about the financial capability of energy companies arises from the special nature of utility services as compared to other goods and services in the economy:

Modern societies depend on adequate, reliable and affordable energy services as the foundation for: (i) developing and supporting industrial enterprises and all other businesses which contribute to the national economy, and (ii) providing essential services necessary to sustain an acceptable standard of living conditions for all citizens.

Energy investments tend to be large and of relatively long duration. Once a license has been granted to a particular entity, it is difficult, expensive and time-consuming (and, from a practical point of view, almost impossible) to change providers by substituting one utility company for another.

- 1.2 Therefore, in order to protect consumers from service interruptions, reductions in service quality or increased costs resulting from poor financial performance by a licensee, regulators need to have reasonable assurance of the financial capability and continuing solvency of energy utilities.

2. Statement of the problem

In order to protect energy consumers, what are the minimum financial qualifications which regulators should demand from applicants before issuing a license, and licensees as a continuing obligation to demonstrate adequate financial capabilities and acceptable performance?

3. Analysis

3.1 Regulatory Objectives

- 3.1.1 Commercial markets have a natural tendency to force enterprises to produce goods and services at economically efficient prices in order to remain competitive and survive. In market economies, the role of the energy regulator is to supplement, when necessary, the normal operations of commercial markets, especially in sectors where there is no direct competition. Therefore, regulatory intervention in the business affairs of utilities should be limited to cases where:

A monopoly licensee might exploit consumers because there is no direct competition in its market,

or

Market imperfections produce results contrary to the regulator's statutory responsibilities.

- 3.1.2 Another fundamental and important characteristic of a market economy (which is of particular relevance in this discussion) is the ability of private financial markets to allocate capital resources efficiently and impose a high degree of financial discipline on any entity which relies on access to external financial resources in the conduct of its business – which is the case for all energy utilities. Essentially, this means that energy utilities cannot obtain access to either capital funds or commercial bank loans unless they

demonstrate continuing financial practices and results which meet standards satisfactory to their creditors.

- 3.1.3 Since creditors are usually very cautious about lending their money and monitor the performance of borrowers very carefully, the normal operation of credit markets, which is designed to protect the private interests of lenders, will provide, in many important respects, a reasonable assurance to regulators that the utility's financial behavior does not abuse consumers' interests.
- 3.1.4 However, the interests of the private capital markets are not the same as those of consumers. In some cases investors might find ways to protect their money, but leave consumers vulnerable to high prices or poor quality of service. For example, a monopoly utility borrowing at high interest rates could produce excellent financial results from the creditors' viewpoint while exploiting consumers by charging high prices.
- 3.1.5 The regulator's main purpose for establishing financial criteria is to ensure that licensees have adequate financial resources to conduct the licensed activity and that licensees manage their financial resources prudently on a continuing basis in order to assure reliable, high quality service which will meet the current and future needs of consumers.
- 3.1.6 The principal attributes or indicators of a financially healthy utility which meets the regulator's objectives are access to capital markets sufficient to insure that necessary long-term investments in utility facilities can be made as required, and the ability of the utility to obtain short-term bank loans to meet working cash requirements.
- 3.1.7 Access to either investment capital or commercial bank loans, and the associated cost of borrowing, is based on the credit rating established by the utility. A poor record of revenue collections and a failure to meet payment obligations to creditors on time makes it much more difficult for any business to obtain funds, either in international capital markets, where the competition for scarce monetary resources is intense, or from local banks.
- 3.1.8 Lenders at any level require assurance that they will be able to recover their investments or loans (principal amounts) plus a return (or interest payment) which reflects the business risk associated with the specific investment.
- 3.1.9 As the energy industry evolves from state ownership and control to private ownership and commercial business operations, regulators can assist this transition process by imposing standards which mandate the strong financial and accounting discipline which is necessary to permit utilities to attract private ownership and investment capital, as well as to access commercial banking resources.
- 3.1.10 Standards established by regulators to measure or enforce financial objectives need to recognize important differences between types of licenses as a function of the licensed activities (e.g., competitive market or monopoly) or licensee ownership characteristics (e.g., state-owned or private investors).
- 3.1.11 In establishing financial performance standards, regulators should be careful to avoid:
(a) interference with the normal operation of commercial financial markets (unless these are detrimental to consumer interests); (b) duplicating requirements already established in

these markets; or (c) imposing regulations which substitute for day-to-day operating decisions which should remain the prerogative of utility managers.

3.2 Existing Entities

3.2.1 The objectives of the regulator in monitoring the fiscal solvency of the licensee will vary

according to the extent to which the energy sector is characterized by competition among privately owned and operated utilities. The interaction between the regulator and licensee regarding financial stability can be grouped in three phases: 1) the initial licensing of existing state-owned entities; 2) regulatory control over privatizing license holders; and 3) more limited regulatory oversight in a mature market.

3.2.2 Phase one is characterized by the granting of licenses to existing entities. Generally, these are state owned utilities in the transition from non-commercial to commercial operations in a market characterized by minimal competition. During this phase the regulator is interested in improving the financial stability of the licensee and monitoring its fiscal health. This is achieved through policies designed to: a) separate the financial accounts for licensed and non-licensed activities conducted by licensees; b) improve revenue collection by recovering past debt and permitting disconnection of delinquent accounts; c) ensure that tariffs provide full cost recovery and a reasonable rate of return for the remaining monopolies; d) require licensees convert to internationally accepted accounting standards.

3.2.3 Very few, if any, of core, state-owned entities that have received (or are scheduled to receive) the initial licenses issued could meet any reasonable set of desirable financial criteria that the regulator might wish to impose.

3.2.4 However, since the only realistic hope of obtaining the capital funds needed to repair existing utility infrastructure or prepare for future energy needs lies in attracting private sector investments, it is imperative that financial reform be initiated, including the establishment of a program of increasingly strict regulatory standards applied to licensees.

3.2.5 For existing entities, financial standards adopted by regulators should address: (a) the negotiation and settlement of accumulated past arrears due creditors and mechanisms to fund payment of this debt; (b) elimination of energy theft; (c) prompt disconnection of non-paying consumers in accordance with the laws of the specific country; (d) reduction or elimination of privileged tariffs and transfer of the responsibility for providing social benefits to government authorities; and (e) mechanisms to guarantee that amounts paid by consumers are transferred to the various utility entities involved in providing energy services in proportion to their approved tariffs.

3.2.6 A transformation of existing entities into “new entrants” occurs as the result of the transfer of utility ownership (controlling interest) to private investors (a well-designed privatization of existing state-owned utilities should be designed to attract strategic investors) or through a tender process for the construction of new facilities, both of which introduce a different set of financial issues for regulators.

3.3 New Entrants

3.3.1 Phase two is characterized by private participation in the energy sector through the privatization of existing state-owned licensees and through the development of new

generating plants, in addition to introducing competition. With increasing private sector

interest in the energy sector, the regulator can assist the government to select new entrants by examining the fiscal well being of potential investors. Increased private interest in the energy sector gives the regulator freedom to demand financial guarantees in the form of cash, performance bonds or a letter of credit to assist in the selection process and ensure proper performance after the license is granted.

- 3.3.2 Private firms which purchase shares in existing state enterprises or those which enter the market to built new facilities (e.g., new generation) are generally expected to meet normal market standards of financial capability and operational responsibility. This means demonstrated access to capital markets to insure that necessary investments in utility infrastructure can be made as required, as well as showing that adequate credit lines have been established with commercial banks.
- 3.3.3 Some of the regulatory objectives of requiring specific financial standards or guarantees might include: (a) ensuring that new entrants have the ability to make the initial investments claimed and that future investment commitments are actually made; (b) protecting against an “acquire/operate/abandon” strategy by unscrupulous investors; (c) having some concrete assurance that the enterprise will be able to pay its obligations, including payment of regulatory license fees (where permitted); or (d) in the event of a license revocation due to abandonment or failure to perform in accordance with license provisions, providing sufficient funding to continue operation of the enterprise for a period of time sufficient to replace the original licensee.
- 3.3.4 Provided there is authorization under the law, a financial guarantee might be in the form of a cash deposit, letter of credit, performance bond or other undertaking acceptable to the regulator. The regulator will have to determine how to administer the guarantee, conditions under which the guarantee may be forfeited by the licensee, and the best means to exercise appropriate control over the custody of the guarantee. Some flexibility should be given to the regulator to adjust the type and level of financial guarantees required over time, as conditions change.
- 3.3.5 Generally, the cost of tying up capital is quite high. If the financial guarantee covers a long period of time (more than just a few months), then the opportunity costs to be recovered through tariffs could be high. The regulator may want to consider alternative, less costly ways for a licensee to provide the same sort of assurance that is intended by requiring a guarantee.
- 3.3.6 In some countries the banking system is in crisis and bank failures are commonplace. There may also be no domestic insurance industry to underwrite financial guarantees. It may be necessary in such circumstances to permit foreign firms to participate in providing the necessary financial assurances.
- 3.3.7 Non-recourse financing is a type of financing used by many investors to develop new generating capacity. Under this financing regime, the investor often creates a new company to undertake the project in an effort to limit the investor’s risk to a parent company sponsor. The new company structures the project for financing by developing a mutually reinforcing set of contracts to provide security for banks and other investors in the new generation project. In addition to the financing agreement itself, the contracts include the power sales agreement with a government or private entity, the fuel purchase agreement, the operation and maintenance agreement, and other contracts. In this case, the regulator must determine what, if any, guarantee it will require from the parent

company and its newly created project development company to ensure that the project is

completed and operates in a timely manner.

- 3.3.8 The conditions of specific guarantees should be modified to fit the situation of particular licensees. There is no reason why a small hydropower licensee should be required to have the same financial guarantee as a 1,500 MW thermal station. Similarly, a gas distribution enterprise differs from an electricity distribution enterprise. While it is customary in market economies to seek a performance posting from a private enterprise, especially for a new entrant in any commercial field, requiring a similar guarantee from a state-owned enterprise (provided to another state entity) is very unusual.
- 3.3.9 During **phase three** competition in generation and power supply is prevalent and private firms are well established. The market sorts out the financial feasibility of new entrants and the regulator is less concerned with their financial health.
- 3.3.10 Financial guarantees, including remedies for non-performance, by licensees building new power facilities are a normal requirement included in the contractual agreement between the builder (e.g., the new generator) and the power purchaser. In these circumstances it may be sufficient for the regulator to simply review the commercial arrangements and determine whether the interests of consumers are properly protected, without imposing its own, separate requirements which might interfere with the contractual terms.
- 3.3.11 After a new entrant is established, based on license conditions, the regulator should protect consumer interests in the continuing proper financial conduct of the firm by establishing financial performance criteria, perhaps tied to tariff incentives, which require that licensees adopt prudent and acceptable financial and business practices.
- 3.3.12 Regulators need to establish effective data collection and analysis systems to provide for the continued monitoring of the financial performance of licensees on a continuing basis.

3.4 Legal Infrastructure

- 3.4.1 In order to exercise its proper regulatory responsibilities concerning licensees' financial strengths, capabilities and performance, regulators need to have sufficient legal authority to obtain the information required to make informed judgments and to impose specific requirements on licensees in order to supplement normal financial market mechanisms when necessary to protect consumers interests.
- 3.4.2 Existing laws which impede financial review and oversight of licensees by regulators need to be amended or replaced with new legislation recognizing this important regulatory function.
- 3.4.3 Regulators should support efforts to enact laws to implement financial reform and accountability generally in all economic activities (e.g., commercial codes, banking and accounting reforms), since the energy sector is an important beneficiary of such reforms and the regulators' tasks will be made easier as a result.
- 3.4.4 Regulators need to obtain the assistance of other government ministries and officials to recognize and support this essential regulatory activity.

4. Key Issues

- 4.1 In order to meet their responsibilities to consumers, regulators need to be assured that licensees have access to both capital funds for long-term utility investments and operating funds to meet cash flow requirements.
- 4.2 For existing state-owned entities which exhibit poor financial performance, regulators need to establish standards which will encourage improvements to enable the utilities to attract private investment and/or qualify for commercial loans.
- 4.3 When new entrants enter the market, consumers interests need to be addressed by regulators to obtain assurance that capital investment commitments are enforced, that the utility will operate in a financially-sound manner and that the effect on service quality and utility tariffs has been analyzed and found acceptable.
- 4.4 In countries with planned generation, regulators must determine what financial guarantees, if any, a parent company should provide for its subsidiary when the subsidiary is the new entrant. Planned generation refers to a system of adding generation capacity according to a nationally set schedule based on demand forecasting. If the generation plan is not met, the nation may face a capacity shortage. Thus, the regulator must have confidence in the ability of the new entrant to carry out a commitment to develop new capacity. When new generation is developed through a non-recourse regime of financing by a newly created subsidiary of a well known and stable developer, the regulator must determine if it will seek a guarantee from the parent company, or if it is satisfied with the mutually reinforcing contracts that constitute the basis for lending to the project.
- 4.5 All licensees need to be subject to regular data collection and monitoring of financial performance by regulators through specific conditions included in energy sector licenses issued by the regulator.
- 4.6 Regulatory authority to adopt and enforce standards of financial capability and performance for licensees should be clearly provided by legislative statute.

5. Options for Solutions

- 5.1 Regulators should establish clear and detailed reporting requirements which require the regular submission of financial statements with full disclosure of all material facts. Regulators should require periodic independent financial audits, including access to the licensee's books and records, as a license condition. Financial reports should require clear separation of unregulated and regulated businesses and disclosure of any affiliated transactions. Reports may be filed quarterly and annually and should include all standard financial measures: comparative balance sheets, income statements, cash-flow analysis, sources and uses of funds, etc.
- 5.2 Regulators should establish a system of regulatory accounting requirements applicable to all licensees which would supplement any established national financial and accounting standards to which a licensee must adhere as a registered business.
- 5.3 Regulators should begin taking steps necessary to move the existing, state-owned industry to a financially sound footing. For example, the regulator could impose minimum standards for bill collections or progress in eliminating barter settlements as a part of

- ongoing, increasingly stringent requirements to meet objective solvency criteria. These provisions could be enforced directly in the level of allowed tariffs or as specific incentives or penalties. Similarly, the regulator could require that the licensee discharge its payment obligations in a timely, prudent manner and monitor actual performance.
- 5.4 As financial conditions improve, regulators should require that licensees keep adequate lines of credit with local banks and financial institutions for working capital, matching the seasonal needs for fuel, scheduled maintenance, etc. Initially the regulator may periodically check these balances. Inadequate balances may adversely affect the licensee's ability to provide reliable services while excessive balances may be imprudent and costly.
 - 5.5 Regulators need to implement any steps which may be necessary to protect consumers from financial mismanagement, malfeasance or fraud, both with respect to the actions of existing utilities and new entrants. For example, licensees should be required (in most cases) as a normal business practice to carry adequate insurance to protect against the destruction or loss of utility facilities due to catastrophic events.
 - 5.6 Regulators should carefully review rules applicable in the wholesale power markets under their jurisdiction to determine that appropriate minimum bank balances, deposits, letters of credit or similar undertakings are required of all market participants in order to protect the financial integrity of market operations and assure the reliable flow of power to all consumers.
 - 5.7 Existing laws should be modified to give both regulators and licensees the authority they need to enforce the financial standards adopted (e.g., enforcing bill collections through shut-offs, civil actions for non-payments, receivership and bankruptcy, criminal penalties for thefts and frauds, etc.) For example, in the U.S, the FERC and most state commissions must approve all securities issued by the utility. This gives the regulator control over the utility's capital structure and access to information on outstanding liabilities, capitalized leases or other financial obligations.
 - 5.8 License provisions should be modified as may be necessary to clearly provide the right of the regulator to obtain required accounting and financial information and the authority to require licensees to adhere to appropriate standards of financial performance on a continuing basis.

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Capacity Limits in Licenses and Licensing Periods

December 1998

Licensing Committee Member Countries:

**Armenia; Georgia; Hungary; Kyrgyzstan; Latvia; Moldova;
Poland; Ukraine; and Russia**

Capacity Limits in Licenses and Licensing Periods

1. Introduction

- 1.1 Basic decisions as to the contents of licenses include the threshold determination as to which activities should be licensed; whether licenses should impose capacity limits; if capacity limits are imposed, how those limits should be determined; and license duration and renewability.
- 1.2 The answers to these questions depend upon (1) the activity being licensed; (2) the structure of the sector; and (3) involves balancing multiple interests of the regulator, the regulated and the public.

2. Statement of the problem

Regulators issuing licenses need to answer fundamental questions before tackling the task of drafting individual licenses:

Which activities or entities should be licensed?

Should licenses include capacity limits?

If capacity limits are imposed, how should those limits be determined?

How long should licenses last?

Should licenses be renewable?

3. Analysis

3.1 What Should Be Licensed:

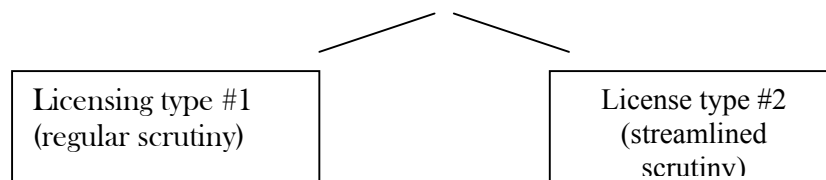
- 3.1.1. Determining what activities or entities need to be licensed involves, as a threshold matter, identifying the concerns that lead governments to require licensing in the first place. With respect to the electricity sector, these concerns can be divided into three basic categories:
 - Licensing is deemed important for the security of the system and protection of customers;
 - Licensing is deemed important due to the need to impose continuing regulatory control over the licensed activity; and
 - Licensing is deemed important to the investor's comfort.
- 3.1.2 An evaluation of the importance of these concerns as applied to significant activities in the sector can be displayed as follows:

	Important for security of system and protection of consumers?	Important for continuity of regulatory control?	Important for investor comfort?
Small generators, 10 MW or below	No	No	No
Self-generators (unless large or selling excess power)	No	No	No
Large generators, 50 MW or above	Yes	No, when market is working	Yes
Transmission	Yes	Yes	Yes
ISO, Dispatch	Yes	Yes	Yes
Distribution (regular, large)	Yes	Yes	Yes
Supply	Depends on sector structure	Depends on sector structure	Depends on sector structure

3.1.3 As shown in the graph, licensing is most important when a natural monopoly function, such as operation of the wires (transmission and distribution), is involved. The only exception to needing to license activities involving control over the wires might be where very small distributors are involved.

3.1.4 With respect to small distributors, in some countries, large industrial complexes in the past built their own distribution systems to serve themselves. When the political system changed, these complexes were privatized, broken up and sold to different entities. The result was the creation of many small distribution companies, serving a handful of customers within the relatively small geographical area on which the formerly unified industry was located. Separately licensing all this distribution activity can create a burden on the regulator.

- 3.1.5 Ultimately, the solution to the problem of having many small distribution companies is to consolidate the distributors into one large distributor to serve the entire service territory. Economies of scale make the existence of many distributors within one major service territory inefficient.
- 3.1.6 More generally, the need for a regulator to issue large numbers of licenses (hundreds or thousands) can be a sign that: (1) the sector structure is inefficient; or (2) the legal framework requires excessive licensing. If a regulator has to issue too many licenses, the result is that it cannot devote sufficient consideration to any one license, and regulatory oversight suffers as a whole. Lawmakers and regulators should concentrate on regulating only the entities that truly need oversight, and should prioritize the application of limited regulatory resources.
- 3.1.7 As the graph shows, least important for licensing are: (1) very small entities (e.g., generators below 10 MW); (2) self-generators, at least when they are small or not selling excess to the grid; and (3) suppliers, in countries in which sector structure divides suppliers from distributors.
- 3.1.8 On the issue of district heating, generally it is best to delegate as much control to local authorities as is allowed under the law.
- 3.1.9 If the conclusion is that some licensing for less significant or more localized activities is nevertheless necessary, then one option to consider in order to reduce the regulatory burden is creation of a major/minor licensing framework.
- 3.1.10 Under a major/minor licensing framework, significant activities (such as very large-scale generation, or transmission) are subject to more detailed regulatory control and scrutiny. Less significant activities (such as small generation, district heating and small distribution) are subject to simpler, “off-the-shelf” streamlined licensing procedures and oversight. Division between major and minor licensing can be based on the amount of power produced (for generation), amount of power sold (for distribution or supply) or number of customers served (for generation, distribution or supply).
- 3.1.11 Graphically, such a major/minor licensing framework can be depicted as follows:



- 3.1.12 As is also shown in the graph in Paragraph 3.1.2, which activities need licensing can depend on sector structure. For example, with respect to generation, if a genuinely competitive market has been created and is functioning successfully, less need exists to license. When energy becomes a commodity, and a sufficient number of market players exist to ensure security of supply, then generation need not be licensed.
- 3.1.13 Whether a detailed/streamlined delineation can be made between the licensing of the use

of new plant versus ex officio licensing (licenses awarded to existing entities to continue existing activities) is open to debate.

- 3.1.14 Existing entities engaged in status quo activities have a track record and were effectively operating without licenses before regulation. Therefore, an argument can be made that these entities should initially be subject to less scrutiny, and that the licensing of their existing activities can be streamlined.
- 3.1.15 Similarly situated activities, however, should be treated similarly, to avoid undue discrimination. Regulators must be careful to base disparate treatment on logical distinctions. Additionally, existing plants may have more difficulties due to age and past history of non-transparent conduct than a new plant, supporting more, not less regulatory oversight.
- 3.1.16 Related to the question which activities or entities should be licensed, is how many licenses should be issued for one activity. Generally speaking, at least two licenses are issued in the lifecycle of a licensed activity: (1) an establishment or construction license, which permits the creation of the entity or the construction of the assets used to perform the activity; and (2) an operational license, which permits operation of existing plant.
- 3.1.17 In some countries, different regulatory bodies issue the establishment license and the construction license. Generally, this is not a useful practice and should be discouraged, because this practice can create conflicts among different regulators, diminish efficiency, and reduce continuity of control.

3.2 Capacity Limits

- 3.2.1 Reasonable arguments can be asserted both for and against capacity limits. At least with respect to countries with only emerging markets, the general consensus favors capacity limits.
- 3.2.2 Capacity limits serve technical purposes, identifying the plant being used for a licensed activity and ensuring that the assets exist as described in the license. Without licenses, licensees could conceivably expand (or contract) existing systems without input from or even notice to responsible governmental authorities. The result would essentially be an evasion of the licensing process. For example, if the determination is made that generation needs to be licensed, then that determination can be subverted if the licensee can change the plant used for the licensed activity at will.
- 3.2.3 Licensing, with capacity limits, ensures that the government will know what resources exist and help it plan for the future and ensure security of supply. Such licensing allows the government to intervene and require diversity of different types of supply (e.g., thermal, hydro, wind). Finally, capacity limits provide an intervention mechanism - the need to undertake a license modification or obtain a new license - to monitor whether existing licensees are becoming too dominant in the sector and causing market abuse.
- 3.2.4 If, however, the market is healthy, then, at least with respect to portions of the sector that do not comprise natural monopolies, the market can dictate the size of the market participants and their capacity limits. Even as to the natural monopoly portions of the sector, licensees may need some flexibility to size their plant to meet needs. Therefore, if capacity limits are imposed, some flexibility should be incorporated into the license.

- 3.2.5 Typically, transmission and distribution licenses have the longest term (from indefinite to 20 to 40 years); generation is typically 20-40 years. Marketing and/or supply, if licensed at all, is 5 years.
- 3.2.6 Licenses of indefinite duration do not make a lot of sense. If the indefinite length of the license means that the licensee essentially has a license term of forever, and it is extremely hard for the regulator to modify the license, then such a duration diminishes the regulator's ability to review and influence the licensee. Conversely, if the indefinite length of the license means that the regulator can easily modify the license, then the licensee and investors in the licensee will not be able to rely on the license as spelling out its continuing rights, which is one of the purposes of a license.
- 3.2.7 The shorter the license term, the more leverage the regulator has over the licensee, because the licensee knows it has to go the regulator and obtain approval for any renewals. Also, the benefits from competition may be gained even in monopoly situations if the monopoly licensee must compete periodically to maintain its monopoly status. The more often it must compete, the more incentives the licensee has to perform.
- 3.2.8 License terms should not be too short, however. A new licensee, such as a generator, will need to finance its capital investment. The bigger the investment, the longer the time the licensee will need to operate to recoup. The institution financing the new plant may insist on a license term long enough to ensure that it will get its money back.
- 3.2.9 At least for some aspects of energy supply, licensees must be encouraged to take a long view - - be willing to make long-term investments that may not produce immediate benefits to them in the short-run, but are in the best interests of the consumers over time. This factor could militate in favor of relatively short ex-officio, streamlined licenses for existing plants, and longer terms for new plants.

3.3 Capacity Limits as Obligations

- 3.3.1 A capacity limit can be both a right and a duty. The arguments in favor of licensing in the first place, e.g., to ensure security of supply, support fixing the amount the plant will produce, not just what it is legally entitled to produce.
- 3.3.2 If limits become a duty - if the entity must, for example, generate a certain amount or level of power - then practicality requires at least some flexibility. Hence, limits may best be identified in a license in terms of ranges, if meeting that limit becomes a licensee obligation as well as a right.
- 3.3.3. Another way to deal with the problem of ensuring a minimum level of capacity while providing practical flexibility to licensees may be through issuance of licenses that include some flexibility as to the plant licensees can use to meet their limit obligations. For example, perhaps the regulator could issue a license for distribution to licensee X, allowing it to distribute a certain level and amount of power, with some flexibility as to the consumers of the power and the resources used. Perhaps licensees with multiple licenses could have total capacity limits instead or as well as individual limits.

3.4 Renewability

- 3.4.1 Arguments exist both for and against renewability. On the one hand, if a licensee has conducted itself appropriately, it may be best for consumers and security of supply to allow that licensee to continue to operate and serve. On the other hand, for licenses or

concessions involving limited natural resources, e.g., hydro, it may only be fair to allow others a chance.

4. Key Issues

- 4.1. The licensing framework must address multiple concerns: consumers should be protected, supply should be secure, regulatory oversight should continue over monopoly activities, and investors should be able to rely on rights included in licenses. These concerns in favor of licensing should be balanced with a practical concern for optimizing use of limited regulatory resources and allowing the market to govern the sector wherever possible.
- 4.2. Prioritization of application of regulatory resources should be based on rational considerations, in order to avoid undue discrimination or the perception of such discrimination.
- 4.3. Logical considerations in determining what activities should be licensed, whether capacity limits should be imposed, whether capacity limits should be a right or obligation, the duration of a license and whether licenses should be renewable can include the size, type and impact of activity involved, the regulatory burden imposed if that activity is licensed, and the structure of the sector.

5. Options for Solutions

- 5.1 Licensing generally makes sense, particularly in the beginning of private sector participation, to ensure security of supply and other regulatory goals.
- 5.2 As time passes and a market is formed, the need for licensing the non-monopoly aspects of the sector diminishes and can be eliminated.
- 5.3 A major/minor licensing framework can reduce regulatory burden and oversight over smaller sector participants.
- 5.4 The term of a license should be based on a number of factors, including the need for capital investment.
- 5.5 Generally, licenses should be renewable; some exceptions might be made for concessions for limited natural resources.

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License Enforcement

December 1998

Licensing Committee Member Countries:

**Armenia; Georgia; Hungary; Kyrgyzstan; Latvia; Moldova;
Poland; Ukraine; and Russia**

License Enforcement

1. Introduction

- 1.1 One of the main functions of the newly established energy regulatory agencies in CEE and NIS is to issue licenses and to monitor the compliance of utilities with their license conditions.
- 1.2 Where electricity or energy laws have been enacted, usually there are specific rights granted to the energy regulator for license issuance, suspension, modification and withdrawal. Often these laws call for the suspension or withdrawal of the license for violation of its requirements. Similar provisions may be included in license conditions. Provisions for regulators to impose fines for violations may or may not be included in either the law or in licenses.
- 1.3 From a practical point of view, the suspension or withdrawal of the license is an extreme measure because this kind of solution, when applied to the transmission company or to distributors, may cause either a total collapse of the entire electricity system or the loss of service in an entire region with negative consequences.
- 1.4 Revocation of a license held by a private firm will generally result in bankruptcy for the licensee. Since licenses are permits for activities such as power generation, transmission or distribution, license holders have an economic incentive to avoid license revocation that would render their investment in generation, distribution or transmission assets worthless. As a result, license holders will generally be responsive to warnings or messages from the regulator regarding unsatisfactory performance or a violation of the energy law or license.
- 1.5 Therefore, revoking a license should be a last course of action taken only after the regulator has completed a proscribed course of actions designed to inform the licensee of its unsatisfactory performance or violation of the license and/or energy law. These actions may include warnings, fines, sanctions, and a reduction in the tariff charged by the licensee.

2. Statement of the problem

What are the legal and practical problems which energy regulators must resolve in order to enforce license conditions by assessing fines for license violations or suspending or revoking a license in more serious cases?

3. Analysis

- 3.1 Energy utilities provide services which are essential to economic and social welfare. Improper behavior by licensees is a violation of license conditions (and perhaps the law) and threatens the regulator's mandate to assure adequate, reliable, high quality service to all consumers at reasonable prices.
- 3.2 The principal motives and incentives for licensees to ignore license conditions or requirements of regulations is a desire to use available cash for other purposes or simply that no one is holding the licensee accountable for its actions (or inactions).
- 3.3 Monitoring licensee performance is a critical issue and may be very difficult. In order to

be effective, regulators need to develop methods and procedures that monitor each

licensee's behavior as measured against the requirements imposed in licenses and permit the timely detection of violations. Different types and degrees of regulatory oversight are required depending on the type of licensee (e.g., monopoly utilities require greater scrutiny than those operating in a competitive environment).

- 3.4 Licensees need to know from the beginning that the regulator is monitoring both compliance with license conditions and the utility's relative performance against regulatory standards or expectations. Regulators need to identify the specific measures used as indicators of performance (usually this requires reports from licensees) and the actions it intends to take in response to the information it obtains. As a practical matter, the regulator may need to develop monitoring principles over time as it gains experience.
- 3.5 Adopting regulatory accounting systems and rules, requiring regular reports of license activity, staff visits to utilities and inspections of facilities, obtaining information from all types of consumers concerning their service quality received and relations with the utility and requiring periodic, independent audit of licensees are some of the methods which regulators can adopt to assure that utilities remain in compliance with license conditions.
- 3.6 One potential tool to ensure license compliance is the regulator's authority to approve tariff levels. Regulators can reward or penalize licensees in the level of tariffs allowed during its periodic reviews and price adjustment proceedings in response to evidence presented which indicates the utility's relative level of overall performance and takes into account its record of compliance with, or violation of, license conditions over time.
- 3.7 Since general tariff reviews are relatively infrequent, regulators will probably also want to establish a more specific schedule of sanctions which will be applied for violations of license conditions, up to and including suspension or withdrawal of the license. The regulator may want to retain flexibility in determining both the amount and type of activities for which fines or penalties may be issued. However, licensees (and potential investors) will want much more certainty as to the specific activities subject to fine and the financial risk such a fine may represent. Often the uncertainty of regulator response can be a potent deterrent. If the licensee knows the economic consequences of his actions with certainty, he may decide to take a calculated economic risk based on an analysis of the potential costs compared to the benefits gained. This is not uncommon behavior in private enterprises.
- 3.8 Regulators should adopt a system of penalties, including fines, which are the minimum necessary to prevent or deter improper behavior by licensees. The application of the penalties or sanctions should be uniform, consistent and non-discriminatory. A graduated response proportionate to the seriousness of the infraction, taking into consideration the potential magnitude and scope of public harm resulting from specific violations, might consider, for example: (a) type and seriousness of the violation; (b) specific circumstances at the time; (c) is the action willful or accidental; (d) licensee's technical or financial capability to meet the condition (particularly during the transition period from state-owned to private utilities); (e) increased penalties for repeated offences; and (f) lessons learned from prior experience with similar cases.
- 3.9 Sanctions are normally applied to the corporate entities, rather than to the owners or specific employees of the firm who may be involved in license violations. It is the responsibility of the corporation itself to discipline its employees who violate standards established within the company. This approach may represent a significant change from

- the personal responsibility of officials under the state-run or owned system. Under a system of private ownership, penalties hurt the bottom line and, therefore, attract the immediate attention of shareholders and senior managers. Often violations occur because they are perceived to serve the licensee's economic interests. Vigilance by regulators combined with appropriate economic penalties, the denial of price increases or cost disallowances can be an effective deterrent to this behavior.
- 3.10 The process by which regulators enforce licenses or levy penalties can provide opportunities for the regulator to enhance the public image of the regulator, reinforce the principle of open, transparent regulatory processes through public hearings in significant cases, educate the media (and the public generally) about the regulators' mandate and effectiveness and, by publicizing the negative consequences of violations, deter similar behavior by other licensees.
- 3.11 The disposition of monies collected from fines imposed by the regulator (by deposit into the state budget, as an offset to regulator expenses or as a reduction in consumer tariffs) should be made clear at the outset to prevent any appearance of improper incentives as a motivation for license enforcement by regulators (in contrast to certain historic practices). It is particularly important that potential private investors view the regulator's ability to levy fines as an appropriate (and transparent) enforcement process, rather than as a way to impose an implicit tax on the investor or reduce rates to consumers.
- 3.12 As part of a general license enforcement policy, regulators should also consider using positive incentives in addition to penalties (the carrot sometimes being more effective than the stick). For example: (a) In some countries provisions have been made for the adoption of performance contracts between the licensee and its regulators. These agreements would identify specific performance targets or goals and provide for both rewards for superior performance and penalties for failure to meet agreed expectations; (b) Regulators can create annual performance reports which rank each licensee's performance relative to standards (normatives) and other licensees. When such reports are circulated to the media, the energy industry, the general business community and government offices, they can be an effective regulatory tool to motivate licensees to behave properly in order to preserve and protect their professional and public reputations.
- 3.13 Any system of license enforcement needs to address the relationship between the seriousness of license violation and the use of fines as compared to license suspension or revocation (withdrawal or termination). In general, the use of suspension or revocation should be infrequent and reserved for only the most serious offences. Suspension, for example, might be used where a licensee continues to violate license provisions, ignoring the continuing application of fines. Similarly, license revocation may be necessary as a last resort when the licensee fails to remedy the conditions which cause the regulator to suspend a license.
- 3.14 If the regulator should decide to suspend or revoke a license, it must take steps to ensure that service continues to be provided during the period of suspension or, in the most extreme case, until a new licensee can be found to take over the operation of the enterprise. As a practical matter, it is the tariff approval authority of the regulator which is likely to cause the licensee (utility owners) to comply with the regulator's license enforcement actions, up to and including replacing the utility's management personnel if necessary.
- 3.15 The regulator needs to have adequate statutory authority to impose penalties for violations of license conditions. In some countries the regulator is permitted to suspend or revoke a

license for failure of the licensee to conform to rules and regulations promulgated by the regulator. This broad authority may be viewed as too much

regulatory power to interfere in their business by potential private investors. What provisions can the regulator place in the license, or what rules can it make, that will make it clear that suspension and revocation will only occur under very specific and egregious circumstances?

- 3.16 In some countries there are conflicts between existing laws, which specify systems of fines or penalties for violation of laws or regulations in general across all economic sectors, and the appropriate authority in the energy sector which has been assigned to independent regulators in the restructured system. These conflicts need to be resolved in order for the regulator to effectively exercise its mandate in the reformed environment.
- 3.17 In addition, there may be jurisdictional conflicts with other state organizations which will require further amendments of existing laws or government resolutions. For example, conflicts may arise from the Law on Licensing which in the past applied to all sectors or with the Energy Supervision Inspectorate over regulating the behavior of licensees or consumers.
- 3.18 Effective monitoring of license conditions to prevent abuse may require the enactment of other types of legislation primarily aimed at other sectors of economic or administrative reform. For instance, in some countries, there is a restriction on licensees holding ownership shares in other “core” sector enterprises (i.e., a generation licensee cannot have an ownership share in distribution or transmission). However, practically this is difficult to enforce as there is no accurate share registry and any registration process is easily avoided.
- 3.19 In order for the regulator’s enforcement actions to be effective, the courts must support lawful actions taken by the regulator when appeals are made by licensees. Under current circumstances, the outcome of such appeals may not favor regulators and efforts to introduce economic reform to the energy sector. First, many courts have no expertise in energy matters and, secondly, they may have even less in matters involving economic reform generally or the specific reform framework which is being introduced into the energy sector. For example, the judiciary cannot be considered independent in its actions if it is politicized. In some countries, regulatory decisions related to tariffs cannot be appealed, unlike fines. In this situation, the regulator may be in a better position to try to provide penalties/incentives through tariff provisions, since these are not subject to appeal.

4. Key Issues

- 4.1 In order to meet its responsibilities under law, the energy regulator must develop effective systems to monitor and enforce the conditions contained in energy licenses.
- 4.2 Regulators need to develop systematic processes which provide the data necessary to measure licensees’ performance and compliance with license conditions in situations characterized by poor financial reporting practices, unreported commercial activities of unregulated affiliates, “dual” sets of books, etc. Lack of adequate shareholding/ownership information also complicates matters.
- 4.3 Rules and regulations should be adopted by regulators to provide a consistent, fair regulatory approach to sanctions imposed in response to license violations which vary in

proportion to the nature and severity of problems observed.

- 4.4 Shareholder and public attention should be focussed on improper management behavior as a deterrent to repeated offences.
- 4.5 Energy regulators need to obtain clear authority to enforce all matters covered within the license framework vis-a-vis other state authorities.
- 4.6 To be most effective, enforcement activities should be widely publicized in the press and violators exposed. This will afford an opportunity to promote understanding among the populace regarding the role of the regulator and the consumers' rights to complain to the regulator regarding licensee performance related to quality of service.

5. Options for Solutions

- 5.1 Regulators should establish clear rules and standards which define what constitutes improper behavior by licensees and noncompliance or breach of license conditions.
- 5.2 Regulators should rely on their tariff authority as the primary vehicle to enforce compliance with license conditions, supplemented by a system of incentives or penalties as appropriate.
- 5.3 The regulator needs to have the right to require full access to all company records, while at the same time having explicit confidentiality procedures in place to ensure that proprietary information remains confidential.
- 5.4 The regulator should perform, or cause to be performed, periodic compliance and financial audits of the licensees, particularly the monopoly entities. Reported adverse findings should result in a demand for corrective actions wherever necessary.
- 5.5 The regulator should possess a plan of actions to be taken in response to specific violations, including conditions resulting in suspension or withdrawal of the license, applicable penalties or fines and the enforcement process to be undertaken.
- 5.6 Regulators need to establish information reporting and analysis systems as the basis for monitoring license compliance as well as an essential resource for other fundamental regulatory activities.
- 5.7 The legal basis for regulatory enforcement actions needs to be clearly established, giving appropriate powers to the energy regulator and eliminating any existing conflicts with other ministries or government authorities.
- 5.8 The regulator needs to develop benchmarks that can be tracked to measure performance. Benchmarks are a collection of best practices within an industry that are used to compare operations, costs and service reliability. Companies in a specific country can be benchmarked against one another and with external companies. Publication of this information in the press and other media in a form, which shows the relative performance of different licensees may also be useful as an incentive for improved performance and to build public support for the role of the regulator.
- 5.9 The regulator needs to retain the right to suspend or revoke a license in the case of a

flagrant violation of the license provisions.

- 5.10 Regional regulator offices, or some sort of consumer councils, would be helpful to ensure public participation, improve public perception and provide the regulator with a better means for ensuring licensee compliance with provisions directly affecting services provided to consumers.

**CENTRAL AND EASTERN EUROPE &
NEW INDEPENDENT STATES
REGULATORY CONFERENCE
LICENSING COMMITTEE**

Monitoring

December 1998

Licensing Committee Member Countries:

**Armenia; Georgia; Hungary; Kyrgyzstan; Latvia; Moldova;
Poland; Ukraine; and Russia**

Monitoring¹

1. Introduction

- 1.1 A major task of the regulator is to enforce license conditions and applicable laws, regulations and norms. To enforce the law, the regulator must develop mechanisms to monitor a licensee's conduct.
- 1.2 The mechanisms developed by the regulator to monitor a licensee's conduct must be efficient and focused, given the regulator's limited resources.

2. Statement of Problem

How should a regulator monitor whether and how a licensee is complying with the conditions of its license and the requirements of the law and applicable regulations?

3. Analysis

3.1 Information Processing

- 3.1.1 The most important mechanism available to a regulator to monitor compliance is the creation of a framework for gathering and processing documentary information from licensees.
- 3.1.2 Given the limited resources of a regulator, it is important to develop an information processing mechanism that prioritizes the information gathered and reviewed, focuses on important issues, and optimizes use of computers.
- 3.1.3 The regulator needs to create a computer data base it can use to organize the information it receives and to track issues that the regulator finds most important. Often the initial creation of a data base will be very general; the regulator will not be able to identify the items on which it wishes to focus specifically until it has operated for a period of time. The type of information a regulator may want to concentrate on can differ from country to country, so the regulator must take care to customize the database system it uses.
- 3.1.4 The regulator must take care to organize its office so that information is processed in an efficient manner. Individual departments should not engage in duplicative work; the personnel gathering information should coordinate with the multiple departments of the regulator to ensure that information gathering and tracking is maintained in a unified, comprehensive effort.
- 3.1.5 The regulator must take care in its use and citation of the information it gathers. Typographical errors, mistakes, and mis-citation of data in the regulator's public statements can discredit the office. Similarly, the regulator must be able to respond to inquiries in a prompt and efficient manner, or the public will lose confidence in the regulator's ability to oversee the sector.
- 3.1.6 The scope of information the regulator can require should be broad; to use resources efficiently, however, the regulator must focus and only gather and process information it needs and has the ability to review.

¹ This paper deals with license monitoring; more specific, technical safety reviews are typically the task of the state inspectorate, and are not discussed here.

3.1.7 Information the regulator can or should require can include:

- Technical indices of power plants by units – a short (e.g., a few pages) of key information (e.g., 50 numerical figures), such as the available capacity, fuel type, emissions, and outage numbers. The regulator should avoid gathering substantial detail as a routine, in the absence of any indication of a problem that needs follow-up. The regulator should be able to use the indices to spot tendencies and problems – the indices should be provided at least annually to allow the regulator to track ongoing operations. The regulator should not concern itself with minor divergences, but instead focus on serious issues.
- Outage information – reports regarding individual outages, breakdowns of cumulative information, such as total per year.
- Quality of supply – measured for distribution/supply companies. This can be measured in various ways, such as a customer satisfaction level, outages (number, average duration), and guaranteed service figures (e.g., the time it takes to respond to a residential ratepayer’s telephone call). These measurements can then be compared to those from other distributor/suppliers within the country, or, if looking at transmission measurements (such as line losses) from outside the country.
- A yearly technical report
- A yearly financial report

3.1.7 The type of information the regulator will need will depend on the sector structure. For example, if a healthy competitive market exists in generation, with import availability and no undercapacity, the regulator need not concern itself with the operational efficiency of individual generation plants.

3.1.8 Regulators with engineering backgrounds have a tendency to focus on generation issues. The regulator’s major concern, however, is often with the service provided to end-users. Therefore, the regulator needs to focus on the distribution-supplier and retail customer satisfaction.

3.2 Inspections, Audits and Complaints

3.2.1 Another method of monitoring compliance is through inspections and audits. To maximize efficient use of resources, the regulator should use a mix of regular (e.g. annual) and unscheduled inspections and audits. These inspections and audits should also take place on both a random and prioritized basis. For example, the regulator can prioritize scrutiny of licensees with problems in the past, and/or new licensees. The regulator should still, however, have at least some random inspections of all licensees to keep every licensee alert.

3.2.2 Another mechanism for monitoring compliance is through the complaints of interested parties. Such parties can include consumers, non-governmental authorities, and employees of the licensee.

3.2.3 To protect licensee employees, the law should prohibit employer retaliation for complaints made in good faith to the authorities by employees.

3.2.4 With respect to consumer complaints, the regulator needs to develop a mechanism to deal with a potentially large group of complaints in an efficient manner. For example, the

regulator can require that the first level of complaint be treated within

the licensee. The licensee must record information regarding each complaint and how it was dealt with, so the regulator can review the overall conduct of the licensee in treating complaints. If an individual complaint cannot be resolved at the licensee level, then the consumer can have its complaint reviewed by the regulator. The regulator should try to deal with consumer complaints on a generalized basis, noting and treating common problems by creating guidelines and general solutions.

- 3.2.5 A great motivator for licensees can be the publication of data. For example, the regulator can publish information as to which distributor/supplier has the fewest consumer complaints and which has the most complaints. This type of publication can motivate the licensee – particularly a privately owned licensee – to improve its conduct.
- 3.2.6 Where shortages exist, and licensees lack funds to improve service and rehabilitate plant, the regulator must take reasonable action to optimize the use of existing resources and encourage improvement. State-owned companies need to adopt commercial attitudes; privatization may be the best route to achieving this objective. Use of limited resources must be rationed in a logical manner.
- 3.2.7 The regulator should delineate between outages, which are the supplier's fault, and outages and shortages beyond the supplier's control. The government needs to regulate closely how resources are rationed in emergency situations, with regulations that are broadly discussed and published to obtain public approval.

4. Key Issues

- 4.1 The regulator must develop systems to monitor compliance that are efficient and maximize effective use of limited resources.
- 4.2 The regulator needs to prioritize and focus on the most important aspects of the sector, such as the service to the retail customer.
- 4.3 Treatment of shortage and emergency situations must be objective, transparent, logical, and be the product of participatory governmental determination.

5. Options for Solutions

- 5.1 The regulator should develop an information processing system that gathers only the most important information, processes that information in an efficient manner, and focuses on large trends and problems, not minutia. While the regulator should have the legal right to obtain whatever information it wants, it should concentrate on gathering and tracking only the most relevant data.
- 5.2 The regulator should focus on development of processes and general solutions, instead of becoming bogged down in individualized treatment of too many complaints or specific situations. Development of a computer data base and tracking system is vital to processing information and monitoring licensee conduct in an efficient and effective manner.
- 5.3 Information processing must be combined with focused inspections and audits and

intelligent, primarily collective treatment of complaints by the regulator.

**CENTRAL AND EASTERN EUROPE &
NEW INDEPENDENT STATES
REGULATORY CONFERENCE
LICENSING COMMITTEE**

Elementary Elements of Licensing

December 1998

Licensing Committee Member Countries:

**Armenia; Georgia; Hungary; Kyrgyzstan; Latvia; Moldova;
Poland; Ukraine; and Russia**

Elementary Elements of Licensing

1. Introduction

- 1.1 A license sets forth in one document the specific parameters and criteria pursuant to which an economic enterprise may carry out a regulated activity, such as the generation, transmission or distribution of electricity.
- 1.2 The licensing process should be objective, transparent and non-discriminatory to ensure that similarly-situated sector participants are treated the same.
- 1.3 The change from a command and control system of government brings change in the regulatory oversight of the energy sector. Under a command and control system, where the government owns all sector participants, the sector reflects the influence of political considerations and can neglect principles of economic efficiency.
- 1.4 When the system of government changes, and the determination is made to privatize some sector participants, the creation of an independent regulator with the authority to enforce a transparent, objective and nondiscriminatory licensing scheme can maximize investor confidence and increase investment, while ensuring protection of the public interest, including national economic interests, consumer protection, environmental protection, and safety. Such a licensing scheme is also required under the European Union's 1996 Directive on liberalization of the electricity market.
- 1.5 A licensing program is one of the principal tools that a regulatory authority can use to carry out its responsibilities. The ability to issue or revoke the license of a sector participant is a powerful tool for ensuring compliance with applicable energy laws and regulations.
- 1.6 The specific substantive requirements of a licensing program can be adapted to satisfy a range of differing regulatory needs. For example, the process for licensing participants in a competitive supply market might be relatively simple since the market, rather than regulation, will be relied upon to balance the interests of consumers and investors. On the other hand, where competitive markets do not exist, the licensing process may be considerably more complex.
- 1.7 Some activities, such as nuclear power generation, may require special procedures or licensing conditions.

2. Statement of the problem:

The transition from state ownership to private enterprise in the electricity sector requires the government to develop new institutions to carry out its continuing role in developing and implementing national energy policy, and ensuring fair treatment of all sector participants. These new institutions often include regulatory authorities with the power to issue or revoke licenses for sector participants and to monitor and enforce compliance with applicable requirements. What are the fundamental issues involved in developing such a licensing program? What are the basic contents of a license issued to a participant in the electricity sector?

3. Analysis

3.1 Definition of a License

- 3.1.1 A license is a document that sets forth the specific parameters, conditions, and criteria pursuant to which the licensee may engage in licensed activities.

3.2 The Purpose of Licensing

- 3.2.1 Licensing is a versatile tool that can be used to further a number of important energy policies and goals. Governments typically implement licensing programs as a means of maintaining some level of control over entities engaged in strategic industries and as part of a program for regulating industries that are not fully competitive. In the electricity sector, licensing is used as a method of overseeing the activities of companies engaged in the electricity business and of enforcing compliance with energy, environmental and other laws or regulations applicable to sector participants.

- 3.2.2 One of the most common purposes of licensing is to create a procedural mechanism that the government may use to exercise some degree of control over the construction of new power plants. The government may simply review new generating projects as they are proposed (authorization procedure), or the government may take a more active role in determining capacity needs, soliciting proposals for new projects and choosing the winner of the solicitation (tendering procedure). In either case, the government may consider the economics, fuel source, and environmental impact of the plant, as well as other issues, before granting a license.

- 3.2.3 Licensing of electricity sector participants may also serve other purposes, including the following:

The initial licensing process may be used to ensure that business enterprises participating in the electricity sector have adopted the appropriate corporate form and have demonstrated adequate financial resources and technical ability to carry out the licensed activity.

The licensing process may include procedures for revoking or modifying licenses in order to enable the government to monitor and enforce compliance with applicable laws and regulations.

License conditions may impose requirements regarding accounting practices and the right of the government to review and audit a company's books and records. These conditions may assist regulators when reviewing a company's tariffs and may help protect investors and consumers from improper business practices.

As a condition of licensing, sector participants may be required to compile and make available information on their operations that will assist the government in developing long-term national energy policy.

The licensing process may be used to establish the obligation of sector participants to comply with national and international technical and safety codes.

If strategic investors have agreed to fund upgrades to existing facilities to improve performance or reduce pollution, the licensing process may be used to monitor compliance with these commitments.

3.3 The Licensing Authority

- 3.3.1 In many countries where the electric sector is commercialized and/or privatized, participants in the sector are licensed by an independent [autonomous] regulatory authority that also oversees pricing and other aspects of the electricity sector. Indicia of an autonomous regulator include: a head (or commission) with a fixed term of service, who cannot be terminated before the end of the term without compelling cause; and the ability to set licensing fees itself, which are then used as the regulator's sustaining budget; direct appeal of the regulator's decisions to court, without intermediate review of any ministry.
- 3.3.2 In some countries, licensing is performed at the ministry level. This approach is not preferred, because private investors seek an independent [autonomous] regulator, and may perceive the ministry as being more susceptible to the influence of political considerations.
- 3.3.3 Licensing also can be performed by a separate, single-purpose agency. For example, the California Energy Commission in the United States is responsible for licensing new generating facilities in California, while a separate state agency oversees the rates of regulated utilities. This approach may not make the most sense for countries with limited resources, or countries seeking to streamline the regulatory process and simplify participation in the energy sector.

3.4 Who Must Obtain A License

- 3.4.1 Licenses may be required before an entity engages in any activity related to the generation, transmission, distribution or supply of electricity.
- 3.4.2 There may be license exemptions for small power producers or others who engage in activities that fall below a certain threshold of impact on the sector. For example, both the California Energy Commission and OFFER do not license generation in power plants with a capacity of less than 50 MW. In Hungary, a license is not required for a public power plant that has a capacity of less than 20 MW. Similarly, the construction of high voltage transmission lines may require separate licensing or other approval that is not required for low voltage distribution lines.
- 3.4.3 There are often licensing exemptions for self-generation (autoproduction, self-use). Self-generation is often defined to allow the generator to provide power to a limited number of third parties, such as tenants, affiliates, or companies located in the same industrial complex or geographic area.
- 3.4.4 There may also be licensing exemptions for pre-existing facilities. For example, FERC has no authority to require licenses for hydro-electric generating projects that were constructed prior to 1935 and have not been substantially modified. In addition, a more streamlined (ex officio) licensing procedure may be appropriate for existing plants.

3.5 What Is Licensed

- 3.5.1 Licenses allow the licensee to carry out a specific activity, such as the generation, transmission, distribution or supply of electricity. Generation licenses are usually awarded for the use of specific equipment that forms a generating unit or group of units.

Transmission, distribution and supply licenses, on the other hand, are awarded to permit activity in geographic service areas.

- 3.5.2 In most countries, all newly-constructed power plants or new generating units must be separately licensed. The typical generating license identifies the equipment that the licensee uses to generate electricity. E.g., Hungarian generation licenses identify each power plant and individual generating unit, and the nominal capacity of each unit that is to be licensed. There is no widely-used standard regarding the degree of specificity required in identifying the equipment used by the generator. The necessary specificity may be influenced by a number of factors, such as the desire to ensure a clear division between generation and transmission activities.
- 3.5.3 Entities engaged in transmission or distribution activities often are only required to obtain a single license covering all of their transmission and distribution activities within a specified geographic area. For instance, a distribution licensee may usually build new distribution facilities without obtaining a new license. Given the frequency with which a distribution utility must modify and upgrade its system in order to serve new customers, it would be impractical to require a new license proceeding for each change. It may also be less important to identify specific facilities in a transmission or distribution license if the licensee's activities are also reviewed in the context of the enforcement of the national grid code. In any event, licenses for transmission or distribution activities usually contain less specific information about the licensee's facilities than a generation license.
- 3.5.4 Entities engaged in supply or marketing activities are also usually awarded a license for a specific geographic area. Suppliers provide a service function that uses little or no specialized, capital-intensive equipment. Accordingly, the license issued to a supplier typically does not identify the facilities used to carry out the licensed activities.
- 3.5.5 Licenses are not required for activities that do not require regulatory oversight. For instance, some licensees may also engage in the sale of engineering, energy efficiency, or other services that are not directly related to the generation, transmission or distribution of electricity.

3.6 Licensing Standards

- 3.6.1 When reviewing license applications, regulators may have the authority to exercise a very large or very small degree of discretion. The regulatory scheme must strike a proper balance, depending upon the circumstances of each country, between clarity of what is expected from the licensee, and flexibility to respond to changing conditions. Investors want security and clarity; regulators need flexibility.
- 3.6.2 A broad, flexible standard is workable in a country with a history of successful exercise of regulatory control and whose top priority is not infusion of private capital into the sector. Under such conditions, investors are not alarmed by regulatory discretion. For example, before deciding to license a hydropower project, FERC must balance the competing interests in developing hydro-electric resources, environmental protection, improving navigation, flood control, water supply and recreation. In essence, this standard leaves FERC with a broad policy choice in which it must weigh the costs and benefits of a project.
- 3.6.3 More limited regulatory discretion can be expected in countries without a track record of successful oversight of private entities, which need to convince investors that every

applicant will be treated in a similar way. The EU Directive makes clear that authorization procedures must specify all required criteria for licensing in laws and regulations. For instance, under Polish law the URE is generally limited to determining whether an applicant has adequate financial resources and sufficient technical expertise to be licensed. Even in such countries, however, the regulator is typically given some

discretion in determining whether the licensee has the financial and technical expertise to carry out the licensed activity. The paper entitled *Financial Qualifications and Creditworthiness of License Holders for New and Existing Utilities* treats the issue of financial capability more fully.

- 3.6.4 The degree of scrutiny placed on a licensee can differ as well. For example, there may be less need to scrutinize an existing entity, particularly if the license period is short. Some types of activities need less oversight than others, depending on the importance of that activity to the public interest and whether a competitive market exists with respect to that activity. The same factors determining whether to require a license in the first place can affect the degree of scrutiny required in the licensing process. For example, small generators may be subject to fewer demands and less scrutiny than a monopoly transmission company, if a market in generation has developed. As the privatized electricity sector matures, there may be less need to scrutinize the qualifications of license applicants seeking to participate in competitive markets for generation or supply services. In the latter case, the regulator may rely on the rigors of competition to eliminate unqualified entities. However, it may still be necessary to ensure that licensing standards are adequate to protect consumers from the consequences of a licensee's inability to compete.

3.7 The Licensing Process

- 3.7.1 The application process involves procedures designed to ensure that licensing decisions are conducted in a fair and objective manner. Such procedures are used because they enhance the legitimacy of the licensing process in the eyes of the public, including both investors and consumers.

Fair and objective licensing procedures may include the following:

Public and reasonably clear standards regarding the qualifications necessary to obtain a license.

Published notice when an application has been submitted.

The right of third parties to submit comments supporting or opposing an application.

A requirement that licensing decisions be in writing. Ideally, a written decision would include a detailed summary of the facts and history of the proceeding, a description of the applicable legal standards, a list of any disputed factual or legal issues, and a discussion of the application of the law to the facts.

The right to seek rehearing or clarification of a licensing decision from the regulator.

The right of the applicant to appeal an adverse decision to a higher authority, such as the energy minister or an appellate court.

The license is a publicly available document, which anyone may review.

- 3.7.2 The EU Directive requires member countries to adopt one of two procedures for permitting new generation capacity, authorization or tender. Regardless of which procedure is used, Article 4 of the Directive requires that licensing of new generating facilities be conducted in accordance with objective, transparent and non-discriminatory criteria and procedures. To the extent that an authorization procedure is used, Article 5 of the Directive requires that authorization decisions must be subject to appeal rights.

3.8 License Enforcement and Compliance

- 3.8.1 The regulatory authority that issues a license also is usually responsible for monitoring and enforcing compliance with the conditions of the license. This subject matter is dealt with in more detail in the paper entitled *Monitoring*. The regulatory authority is usually allowed to modify, suspend or revoke a license, or to impose fines or penalties when a licensee violates the terms of its license. The authority to take such actions may be provided for by law or regulation, or included as a condition of the license when it is issued.
- 3.8.2 The mechanisms available to the regulatory authority usually permit enforcement actions that are proportionate to the seriousness of the license violation. In order to satisfy this principle, it is necessary for the regulatory authority to have access to the full range of enforcement tools (including license modification, suspension and fines). In many cases, the law limits the regulatory authority's discretion to determine the appropriate amount of any penalties or fines by requiring that such penalties be related to the seriousness of the license violation, or by imposing specific parameters, such as maximum fines, or limiting revocation to situations involving repeated violations or the threat of serious harm to public safety.
- 3.8.3 Most enforcement programs also rely on compliance monitoring. This subject of enforcement is treated in more detail in the paper entitled *License Enforcement*. Compliance monitoring allows the regulatory authority to detect and avoid problems at an early stage. A compliance monitoring program often includes mechanisms such as audits, inspections, customer complaints and reporting requirements.

3.9 Terms and Conditions of Licensure

- 3.9.1 The duration of a license can vary significantly. Transmission and distribution licenses may be for 40 years or more. Generation licenses bear some relation to the expected life of a typical generating plant (e.g., 20-40 years). Licenses for marketers, if any, typically have a shorter duration of 5 years or less. This issue is discussed in more detail in the paper on *Capacity Limits in Licenses and License Periods*.
- 3.9.2 The specificity of a license also differs from country to country and type of licensed activity. For example, the actual license issued to a nuclear generator in the United States is very brief. The regulations governing how nuclear generation activities are carried out, however, are very lengthy, and volumes of technical specifications are incorporated as a part of the license. Other licenses, however, may contain far more detail and, consequently, may be 30, 40 or more pages in length. It is important to achieve a balance between too much detail, which may limit the licensee's flexibility, and too little detail, which may signal a lack of effective oversight.

3.9.3 Attached is a simplified, generic example of a generation license. The sample contains the provisions that are typically included in a license. Specific provisions may vary according to the underlying legal framework, the nature of the licensed activity, the degree of competition in the sector and other circumstances. For example, provisions regarding the transfer of “controlling interests” need to be consistent with anti-monopoly laws. Terms defining insolvency should be consistent with bankruptcy law. Insurance requirements must match the actual availability of suitable insurance.

4. Practical Suggestions

- 4.1 The staff of the regulator which deals with substantive regulatory issues should be familiar with and periodically trained in the content of the license.
- 4.2 When communicating with the licensee, the regulator should refer to the source of its authority. For example, when sending a letter to a licensee on a particular subject matter, the regulator should refer to the specific provision in the license, law and/or secondary legislation discussing that subject matter and identifying the regulator’s authority in this area.

Sample Generation License

License to Generate Electricity

1. Object and Term of License

1.1 Pursuant to the *[reference to applicable licensing law]* (hereinafter, the “Act”), the License Holder:

[INSERT REGISTERED NAME AND ADDRESS OF LICENSE HOLDER]

is hereby authorized to:

Generate Electricity

in the Power Stations and Generating Units described in Schedule A, in the manner described in, and subject to the terms and conditions of, this License.

1.2 This License shall be effective as of *[effective date]*, and shall continue and remain in force for a period of *[e.g., twenty-five (25)]* years.

2. Interpretation

2.1 Unless the context otherwise requires, the following words and phrases appearing in this License and the schedules hereto (hereinafter the “Schedules”) shall, when capitalized, have the following meanings:

“**Installed Capacity**” shall mean the total nominal active capacities (in Watts) measured at the generator terminals of the installed Generating Units in respect of which the Term of this License has not expired. The Installed Capacity is set out in Schedule B hereto and shall be modified from time to time as necessary in accordance with the terms of this License;

“**License Holder**” shall mean *[name of applicant]*;

“**Power Station**” shall mean any energy transformation installation which generates Electricity through the use of coal, gas, oil, fissile material, renewable energy or any other energy source;

“**Insurance**” shall mean reasonably sufficient financial resources to provide for the replacement of any elements of the Generation Assets damaged or destroyed through malfunctions, accidents or other fortuitous events, taking into account the existing reserve assets at the disposal of the License Holder, and shall also mean reasonably sufficient financial resources for the payment of any amounts lawfully due in connection with any liability claims against the License Holder, in the form of:

an insurance policy or policies providing property and liability insurance, issued to the License Holder by a duly qualified insurance agent;

a reserve fund established by the License Holder, alone or in association with other license holders; or

any other form;

in all cases as approved by the Authority;

“Authority” shall mean the *[Regulatory Authority]*, or any successor thereto having jurisdiction over the License Holder;

“Laws” shall mean the Act and all other relevant statutes or regulations of the Government that are presently in force, as they may be amended from time to time, and such other statutes and regulations that may be duly enacted by the Government in the future;

“Controlling Interest” shall mean the interest entitling the holder to exercise a controlling influence over the License Holder;

“Minister” shall mean the *[Minister having jurisdiction over energy sector]*;

“Dispose” in relation to any Generation Assets, shall include, without limitation, any sale, gift, lease, loan, mortgage, charge, relinquishment or transfer of the right of operation, grant of any other encumbrance or allowance of any encumbrance to be taken, over any Generation Assets;

“Generation” shall mean the primary activity of the License Holder by which it produces Electricity, and shall include the operation, maintenance and development of the Generation Assets, the whole in accordance with the Act, this License and applicable Laws;

“Generating Unit” shall mean any one of the individual units and/or main equipment of the Power Station or Power Stations operated by the License Holder as more fully described in Schedule A hereto;

“Generation Assets” shall mean all of the systems and equipment, including without limitation the Power Stations and Generating Units listed in Schedule A and the auxiliary equipment thereof, the units producing fuel, high-tension switching equipment and certain objects outside the site (for example, water works, slime area), and all other rights and assets, tangible or intangible (for example, intellectual property) which are:

owned in whole or in part, at the date of coming into force of this License or acquired in whole or in part at any time during the Term by the License Holder and used by the License Holder for the purposes of Generating Electricity (including the Generation of Electricity in connection with heat supply); or

owned in whole or in part, at the date of coming into force of this License or acquired in whole or in part at any time during the Term by the License Holder and used by another person within the Electricity System;

“Operational Code” shall mean the comprehensive code containing detailed rules, procedures and guidelines for the operation of the Electricity system.

“Electricity” shall mean, for the purposes of this License, both electric energy and electric capacity unless the context requires otherwise;

“Electricity System” shall mean the national system for the generation, transmission and distribution of Electricity;

“Act” shall mean the *[Basic Energy or Electricity Law]*; and

“Material Breach” shall mean a breach that is defined as a material breach elsewhere in this License, or a breach that involves repeated License violations or the threat of serious harm to public safety.

- 2.3 The following Schedules to this License are incorporated into the License by reference and deemed to be an integral part hereof:

Schedule A Description and List of Power Stations and Generating Units owned by the License Holder.

Schedule B Installed Capacity of each Generating Unit

3. Right to Generate Electricity

- 3.1 The License Holder shall, during the Term of this License, have the right to Generate Electricity by means of such Generating Unit operating at the capacity stipulated in Schedule B in respect of such Generating Unit and shall also have the right to use for its own purposes and provide for public purposes such Electricity.
- 3.2 The License Holder shall, at all times and in all aspects of its Generation activities, produce Electricity in accordance with the standards set forth in the Operational Code.
- 3.3 In fulfilling the obligations of this and all sections of this License, the License Holder shall comply with all relevant Laws and the requirements set out in any regulations adopted by the Authority.
- 3.4 Notwithstanding any other provisions of this License, the License Holder may authorize a third party to carry out any of its Generation activities only under contract and subject to Section 8. The License Holder shall not authorize any third party to carry out any significant Generation activities without the express written prior consent of the Authority. For the purposes of this Section, a significant Generation activity means a Generation activity without which the License Holder would be unable to ensure the security, safety, quality and continuity or standards of performance of the Generation of Electricity. In all such cases where third parties are authorized to carry out any Generation activities, the License Holder shall be liable for the actions of the third party as if the Generation activity had been carried out by the License Holder itself.

4. Accounting for Separate Businesses

- 4.1 The License Holder shall implement a transparent system of accounting in which its books, records and accounts associated with its licensed activities are maintained in accordance with international accounting practices, and are kept separate and apart from any books, records and accounts associated with any unlicensed activities of the License Holder.
- 4.2 Without limiting the generality of Section 4.1, the License Holder shall comply with all other book-keeping and information requirements prescribed by the Authority in connection with accounting as shall be required to allow the Authority to perform its duties and exercise its powers under all relevant Laws.

5. Preservation and Disposal of Generation Assets

- 5.1 The License Holder shall only Dispose of any material portion of the Generation Assets or any Generation Assets in accordance with the following provisions.
- 5.2 If the License Holder intends to Dispose of any material portion of the Generation Assets or any element of its Generation Assets, the License Holder shall give notice to the Authority of such intention at least ninety (90) days prior to the date upon which the Disposal is intended to become effective. The notice shall provide a full description of the Generation Assets concerned. The License Holder shall, thereafter, also provide to the Authority any additional information requested by the Authority in relation to the Generation Assets in question, the circumstances of the intended Disposal or the intentions of the person in favor of whom the Generation Assets are to be Disposed.
- 5.3 For the purposes of this Section 5 only, any elements of the Generation Assets shall be conclusively deemed to be a “material portion” of the Generation Assets if the absence of such elements would, or could be reasonably expected to, negatively affect the security, safety, quality, continuity, cost, or standards of performance of the Generation activities.
- 5.4 The License Holder may Dispose of any of the Generation Assets specified in a notice given to the Authority only if the Authority confirms in writing that it consents to the Disposal of the specified Generation Assets, subject to such conditions as the Authority shall specify.
- 5.5 The Authority shall respond in writing to the notice of the License Holder, either consenting to or refusing permission to Dispose of the relevant Generation Assets, within ninety (90) days of receipt of such notice by the Authority.

6. Transfer Restrictions

- 6.1 The Authority’s prior written approval is required for all transactions involving:
- the sale, merger or other Disposition of the License Holder to or with another person, company or other entity;
 - any acquisition of a Controlling Interest in the License Holder; or
 - the reduction of the initial capital of the License Holder, in one instance or in the aggregate, by [25%] or more.

For the purposes of Section 6.1(d), the term “initial capital” shall mean, at any given time: (i) the License Holder’s capital as at the date of issuance of this License; or (ii) if the initial capital of the License Holder is increased or decreased, in accordance with the provisions of this Section 6, on one or more occasions following the issuance of this License, the initial capital of the License Holder following such increase(s) or decrease(s) at the relevant time.

- 6.2 The Authority shall respond in writing to any request for consent to effect any of the transactions contemplated in this Section 6 within ninety (90) days of receipt of such request by the Authority.
- 6.3 If the Authority refuses to grant its consent to any of the transactions contemplated in this Section 6, then the License Holder shall not effect or consent to any of such

transactions and shall, notably, refuse to record in the list of quota holders of the License Holder any transfer or transfers of quotas of the License Holder which would be in contravention of the Authority's decision in this regard.

- 6.4 Failure to obtain the prior written approval of the Authority for any of the transactions referred to in this Section 6, or other contravention of this Section 6, shall constitute a Material Breach of this License.

7. Insurance

- 7.1 The License Holder shall arrange and maintain Insurance sufficient to ensure the safe and continuous operation of its Generation activities.
- 7.2 Failure to effect or maintain Insurance shall be conclusively deemed to constitute operation of the Generation Assets in a manner which exposes the safety of supply, life, health, property and the environment to severe danger, and may provide grounds for the revocation of this License.

8. Compliance with Laws and Secondary Legislation

- 8.1 The License Holder shall at all times during the Term comply with the provisions of the following:

 this License;

 the Act, as it may be amended from time to time;

 all relevant Laws, including without limitation, laws governing environmental protection;

 all relevant secondary legislation disseminated by the Authority;

 all applicable technical and safety regulations, including without limitation, the Operational Code.

- 8.2 Unless otherwise stated by Law, failure to comply with the Laws and other requirements set out in Section 8.1 shall be deemed to constitute a Material Breach of this License and shall authorize the Authority to levy a fine and, in certain cases, to amend or revoke this License.

9. Duty to Supply Information

- 9.1 The Authority shall be entitled to request, inspect and prepare copies or extracts of all information, records or documents of the License Holder related in any manner to the business and activities of the License Holder and including information containing, without limitation, state, service and business secrets, as required to ensure the continuity and safety of Generation and the fulfillment of the terms and provisions of this License, and all applicable Laws.
- 9.2 The License Holder shall submit to the Authority by June 30 of each year annual financial statements, prepared in accordance with international accounting principles, the appendices of which shall clearly distinguish between licensed and unlicensed activities, and which shall include an analysis of the costs of Generation.

9.3 The License Holder is required to prepare and submit to the Authority by March 31 of each year, an annual report relating to its operations in the previous calendar year and containing the following:

a summary and analysis of:

the License Holder's Generation activities and Electricity sales in the year;

the quality of Generation and details of any measures taken for the improvement of Generation quality;

any malfunctions occurring in the year; and

details of any changes made to the Generation Assets, including details of any elements that have been expanded, decommissioned or replaced during the year.

the short-term (three year) and current year's business plan of the License Holder, containing the following details:

the forecasted capacity expected to be available from the Generating Assets;

any scheduled outage lasting longer than necessary according to the norms of the industry and the terms of the Operational Code; and

estimates of all transactions in which the value of the investment will exceed 0.5 % of the invested assets of the License Holder.

9.6 The License Holder shall inform the Authority verbally, without delay and without any further notice, of any event in connection with the License Holder, affecting a wide range of consumers, having nation-wide importance or causing an outage to especially important institutions. In addition, an individual report describing and evaluating the event shall be submitted to the Authority for all such events and notably for events where:

material environmental damage or pollution occurs; or

the License Holder is the victim of a terrorist action.

In addition, the License Holder shall maintain records of any malfunction of the Generation Assets. The License Holder shall submit to the Authority, upon request, the documentation prepared in connection with any malfunction.

10. Non-Transferability of License

10.1 This License may not be transferred, in whole or in part, without the approval of the Authority.

10.2 Any transfer or purported transfer of this License shall constitute a Material Breach of the License.

11. Sanctions for Non-Compliance with License Terms

11.1 The Authority may levy fines against the License Holder for any breach by

the License Holder of any of the terms and provisions of this License or any breach of the Act.

- 11.2 The levying and/or the payment of any fine under this Section shall not affect or limit the right of the Authority to revoke this License in cases of continued breach of the Act or the License.

12. Revocation of the License

- 12.1 Upon the written request of the License Holder, the Authority may revoke this License at its discretion, taking into consideration the security of supply.

- 12.2 The Authority shall revoke this License upon not less than 30 days notice in writing to the License Holder if any of the following circumstances occurs:

if the License Holder fails or is unable to perform its obligations under the Act or other Laws; or

in cases of Material Breach of the License.

The License Holder shall notify the Authority within eight (8) days of acquiring knowledge of the occurrence of any circumstance or event which does or could constitute any of the situations or events described in this Section 12.2.

- 12.3 Notwithstanding Section 12.2, the Authority shall not revoke this License where the circumstances described therein are remedied by the License Holder within 30 days of receipt of the notice set out in Section 12.2 or the License Holder has diligently taken all actions required or useful to remedy or alleviate such circumstances and the actions so taken are likely, in the judgment of the Authority, to alleviate or remedy such circumstances within the delays acceptable to the Authority, having regard to the duties of the Authority under the Act.

- 12.4 Where bankruptcy, liquidation or final accounting procedures are commenced in relation to the License Holder, the Authority may immediately revoke this License as of the initial date of the bankruptcy, liquidation or final accounting proceedings. The License Holder shall notify the Authority within eight (8) days of the commencement and termination of any proceedings described in this Section 12.4.

- 12.5 The Authority may revoke this License without additional notice in cases where the License Holder continues to operate the Generation Assets in a manner which exposes the safety of supply, human life, health or property or the environment to serious harm despite prior notice and the levy of a fine by the Authority in connection with the offence.

- 12.6 In cases of revocation of this License, the Authority may initiate proceedings at the relevant judicial court for the cessation of operations and the winding up of the License Holder.

- 12.7 During the course of the procedure referred to in Section 12.6 or until the proceedings set out in Section 12.4 have been completed, the License Holder, or another license holder appointed for such purposes by the Authority, shall continue to operate the Generation Assets and perform the business and activities of

the License Holder.

- 12.8 If a license holder other than the License Holder is appointed by the Authority for the purposes of ensuring the continuing and uninterrupted performance of the business and activities previously conducted by the License Holder, as provided in Section 12.7, the License Holder shall, upon the resolution of the Authority, place

the Generation Assets and all other books, records, information and other assets within the possession of the License Holder and necessary for continuous and safe Generation of Electricity at the appointed license holder's disposal.

13. Amendments to the License

- 13.1 The Authority may amend this License upon the written request of the License Holder in cases where a significant change in the circumstances of the License Holder or the activities licensed hereunder has occurred. The License Holder shall notify the Authority within 30 days of any change to the information contained in the Schedules and shall apply for an amendment of this License.

- 13.2 The Authority may amend this License where, despite notice having been duly given by the Authority and a fine having been imposed, the License Holder continues to operate its Generation Assets in a manner which exposes the safety of supply, human life, health or property, or the environment to serious harm.

14. Notice Provisions

- 14.1 Any notice, consent, authorization, direction or other communication required or permitted to be given under this License shall be in writing and may be delivered by telecopier provided that, in all cases, the original shall be delivered by hand or by registered mail and addressed as follows:

in the case of the Authority:

[address, telephone number, etc. of the Authority]

in the case of the License Holder:

[address, telephone number, etc. of License Holder]

- 14.2 Either the License Holder or the Authority may change its address for receipt of notice, or the person designated to receive such notice, by notice given as provided in Section 14.1, and such change shall be deemed not to constitute an amendment to this License.

15. Fees

- 15.1 The License Holder shall be obliged to pay to the Authority such registration fees, annual charges or other fees as may be applicable pursuant to the Act, or any other Laws.

16. Legal Remedy

16.1 Decisions of the Regulatory Authority regarding the granting, revocation, amendment of this License, or regarding any fines or fees assessed by the Regulatory Authority, may be appealed to the appropriate judicial court.

Sample Generation License

License to Generate Electricity

1. Object and Term of License

1.1 Pursuant to the *[reference to applicable licensing law]* (hereinafter, the “Act”), the License Holder:

[INSERT REGISTERED NAME AND ADDRESS OF LICENSE HOLDER]

is hereby authorized to:

Generate Electricity

in the Power Stations and Generating Units described in Schedule A, in the manner described in, and subject to the terms and conditions of, this License.

1.2 This License shall be effective as of *[effective date]*, and shall continue and remain in force for a period of *[e.g., twenty-five (25)]* years.

2. Interpretation

2.1 Unless the context otherwise requires, the following words and phrases appearing in this License and the schedules hereto (hereinafter the “Schedules”) shall, when capitalized, have the following meanings:

“**Installed Capacity**” shall mean the total nominal active capacities (in Watts) measured at the generator terminals of the installed Generating Units in respect of which the Term of this License has not expired. The Installed Capacity is set out in Schedule B hereto and shall be modified from time to time as necessary in accordance with the terms of this License;

“**License Holder**” shall mean *[name of applicant]*;

“**Power Station**” shall mean any energy transformation installation which generates Electricity through the use of coal, gas, oil, fissile material, renewable energy or any other energy source;

“**Insurance**” shall mean reasonably sufficient financial resources to provide for the replacement of any elements of the Generation Assets damaged or destroyed through malfunctions, accidents or other fortuitous events, taking into account the existing reserve assets at the disposal of the License Holder, and shall also mean reasonably sufficient financial resources for the payment of any amounts lawfully due in connection with any liability claims against the License Holder, in the form of:

- an insurance policy or policies providing property and liability insurance, issued to the License Holder by a duly qualified insurance agent;
- a reserve fund established by the License Holder, alone or in association with other license holders; or
- any other form;
- in all cases as approved by the Authority;

“**Authority**” shall mean the *[Regulatory Authority]*, or any successor thereto having jurisdiction over the License Holder;

“**Laws**” shall mean the Act and all other relevant statutes or regulations of the Government that are presently in force, as they may be amended from time to time, and such other statutes and

regulations that may be duly enacted by the Government in the future;

“Controlling Interest” shall mean the interest entitling the holder to exercise a controlling influence over the License Holder;

“Minister” shall mean the *[Minister having jurisdiction over energy sector]*;

“Dispose” in relation to any Generation Assets, shall include, without limitation, any sale, gift, lease, loan, mortgage, charge, relinquishment or transfer of the right of operation, grant of any other encumbrance or allowance of any encumbrance to be taken, over any Generation Assets;

“Generation” shall mean the primary activity of the License Holder by which it produces Electricity, and shall include the operation, maintenance and development of the Generation Assets, the whole in accordance with the Act, this License and applicable Laws;

“Generating Unit” shall mean any one of the individual units and/or main equipment of the Power Station or Power Stations operated by the License Holder as more fully described in Schedule A hereto;

“Generation Assets” shall mean all of the systems and equipment, including without limitation the Power Stations and Generating Units listed in Schedule A and the auxiliary equipment thereof, the units producing fuel, high-tension switching equipment and certain objects outside the site (for example, water works, slime area), and all other rights and assets, tangible or intangible (for example, intellectual property) which are:

owned in whole or in part, at the date of coming into force of this License or acquired in whole or in part at any time during the Term by the License Holder and used by the License Holder for the purposes of Generating Electricity (including the Generation of Electricity in connection with heat supply); or

owned in whole or in part, at the date of coming into force of this License or acquired in whole or in part at any time during the Term by the License Holder and used by another person within the Electricity System;

“Operational Code” shall mean the comprehensive code containing detailed rules, procedures and guidelines for the operation of the Electricity system.

“Electricity” shall mean, for the purposes of this License, both electric energy and electric capacity unless the context requires otherwise;

“Electricity System” shall mean the national system for the generation, transmission and distribution of Electricity;

“Act” shall mean the *[Basic Energy or Electricity Law]*; and

“Material Breach” shall mean a breach that is defined as a material breach elsewhere in this License, or a breach that involves repeated License violations or the threat of serious harm to public safety.

2.3 The following Schedules to this License are incorporated into the License by reference and deemed to be an integral part hereof:

Schedule A Description and List of ²Power Stations and Generating Units owned by the

License Holder.

Schedule B Installed Capacity of each Generating Unit

3. Right to Generate Electricity

3.1 The License Holder shall, during the Term of this License, have the right to Generate Electricity by means of such Generating Unit operating at the capacity stipulated in Schedule B in respect of such Generating Unit and shall also have the right to use for its own purposes and provide for public purposes such Electricity.

3.2 The License Holder shall, at all times and in all aspects of its Generation activities, produce Electricity in accordance with the standards set forth in the Operational Code.

3.3 In fulfilling the obligations of this and all sections of this License, the License Holder shall comply with all relevant Laws and the requirements set out in any regulations adopted by the Authority.

3.4 Notwithstanding any other provisions of this License, the License Holder may authorize a third party to carry out any of its Generation activities only under contract and subject to Section 8. The License Holder shall not authorize any third party to carry out any significant Generation activities without the express written prior consent of the Authority. For the purposes of this Section, a significant Generation activity means a Generation activity without which the License Holder would be unable to ensure the security, safety, quality and continuity or standards of performance of the Generation of Electricity. In all such cases where third parties are authorized to carry out any Generation activities, the License Holder shall be liable for the actions of the third party as if the Generation activity had been carried out by the License Holder itself.

4. Accounting for Separate Businesses

4.1 The License Holder shall implement a transparent system of accounting in which its books, records and accounts associated with its licensed activities are maintained in accordance with international accounting practices, and are kept separate and apart from any books, records and accounts associated with any unlicensed activities of the License Holder.

4.2 Without limiting the generality of Section 4.1, the License Holder shall comply with all other book-keeping and information requirements prescribed by the Authority in connection with accounting as shall be required to allow the Authority to perform its duties and exercise its powers under all relevant Laws.

5. Preservation and Disposal of Generation Assets

5.1 The License Holder shall only Dispose of any material portion of the Generation Assets or any Generation Assets in accordance with the following provisions.

5.2 If the License Holder intends to Dispose of any material portion of the Generation Assets or any element of its Generation Assets, the License Holder shall give notice to the Authority of such intention at least ninety (90) days prior to the date upon which the Disposal is intended to become effective. The notice shall provide a full description of the Generation Assets concerned. The License Holder shall, thereafter, also provide to the Authority any additional information requested by the Authority in relation to the Generation Assets in question,

the circumstances of the intended Disposal or the intentions of the person in favor of whom the Generation Assets are to be Disposed.

5.3 For the purposes of this Section 5 only, any elements of the Generation Assets shall be conclusively deemed to be a “material portion” of the Generation Assets if the absence of such elements would, or could be reasonably expected to, negatively affect the security, safety, quality, continuity, cost, or standards of performance of the Generation activities.

5.4 The License Holder may Dispose of any of the Generation Assets specified in a notice given to the Authority only if the Authority confirms in writing that it consents to the Disposal of the specified Generation Assets, subject to such conditions as the Authority shall specify.

5.5 The Authority shall respond in writing to the notice of the License Holder, either consenting to or refusing permission to Dispose of the relevant Generation Assets, within ninety (90) days of receipt of such notice by the Authority.

6. Transfer Restrictions

6.1 The Authority’s prior written approval is required for all transactions involving:

- the sale, merger or other Disposition of the License Holder to or with another person, company or other entity;
- any acquisition of a Controlling Interest in the License Holder; or
- the reduction of the initial capital of the License Holder, in one instance or in the aggregate, by [25%] or more.

For the purposes of Section 6.1(d), the term “initial capital” shall mean, at any given time: (i) the License Holder’s capital as at the date of issuance of this License; or (ii) if the initial capital of the License Holder is increased or decreased, in accordance with the provisions of this Section 6, on one or more occasions following the issuance of this License, the initial capital of the License Holder following such increase(s) or decrease(s) at the relevant time.

6.2 The Authority shall respond in writing to any request for consent to effect any of the transactions contemplated in this Section 6 within ninety (90) days of receipt of such request by the Authority.

6.3 If the Authority refuses to grant its consent to any of the transactions contemplated in this Section 6, then the License Holder shall not effect or consent to any of such transactions and shall, notably, refuse to record in the list of quota holders of the License Holder any transfer or transfers of quotas of the License Holder which would be in contravention of the Authority’s decision in this regard.

6.4 Failure to obtain the prior written approval of the Authority for any of the transactions referred to in this Section 6, or other contravention of this Section 6, shall constitute a Material Breach of this License.

7. Insurance

7.1 The License Holder shall arrange and maintain Insurance sufficient to ensure the safe and continuous operation of its Generation activities.

7.2 Failure to effect or maintain Insurance shall be conclusively deemed to constitute operation of the Generation Assets in a manner which exposes the safety of supply, life, health, property and the environment to severe danger, and may provide grounds for the revocation of this License.

8. Compliance with Laws and Secondary Legislation

8.1 The License Holder shall at all times during the Term comply with the provisions of the following:

this License;

the Act, as it may be amended from time to time;

all relevant Laws, including without limitation, laws governing environmental protection;

all relevant secondary legislation disseminated by the Authority;

all applicable technical and safety regulations, including without limitation, the Operational Code.

8.2 Unless otherwise stated by Law, failure to comply with the Laws and other requirements set out in Section 8.1 shall be deemed to constitute a Material Breach of this License and shall authorize the Authority to levy a fine and, in certain cases, to amend or revoke this License.

9. Duty to Supply Information

9.1 The Authority shall be entitled to request, inspect and prepare copies or extracts of all information, records or documents of the License Holder related in any manner to the business and activities of the License Holder and including information containing, without limitation, state, service and business secrets, as required to ensure the continuity and safety of Generation and the fulfillment of the terms and provisions of this License, and all applicable Laws.

9.2 The License Holder shall submit to the Authority by June 30 of each year annual financial statements, prepared in accordance with international accounting principles, the appendices of which shall clearly distinguish between licensed and unlicensed activities, and which shall include an analysis of the costs of Generation.

9.3 The License Holder is required to prepare and submit to the Authority by March 31 of each year, an annual report relating to its operations in the previous calendar year and containing the following:

a summary and analysis of:

the License Holder's Generation activities and Electricity sales in the year;

the quality of Generation and details of any measures taken for the improvement of Generation quality;

any malfunctions occurring in the year; and

details of any changes made to the Generation Assets, including details of any elements that have been expanded, decommissioned or replaced during the year.

the short-term (three year) and current year's business plan of the License Holder, containing the following details:

the forecasted capacity expected to be available from the Generating Assets;

any scheduled outage lasting longer than necessary according to the norms of the industry and the terms of the Operational Code; and

estimates of all transactions in which the value of the investment will exceed 0.5 % of the invested assets of the License Holder.

9.6 The License Holder shall inform the Authority verbally, without delay and without any further notice, of any event in connection with the License Holder, affecting a wide range of consumers, having nation-wide importance or causing an outage to especially important institutions. In addition, an individual report describing and evaluating the event shall be submitted to the Authority for all such events and notably for events where:

material environmental damage or pollution occurs; or
the License Holder is the victim of a terrorist action.

In addition, the License Holder shall maintain records of any malfunction of the Generation Assets. The License Holder shall submit to the Authority, upon request, the documentation prepared in connection with any malfunction.

10. Non-Transferability of License

10.1 This License may not be transferred, in whole or in part, without the approval of the Authority.

10.2 Any transfer or purported transfer of this License shall constitute a Material Breach of the License.

11. Sanctions for Non-Compliance with License Terms

11.1 The Authority may levy fines against the License Holder for any breach by the License Holder of any of the terms and provisions of this License or any breach of the Act.

11.2 The levying and/or the payment of any fine under this Section shall not affect or limit the right of the Authority to revoke this License in cases of continued breach of the Act or the License.

12. Revocation of the License

12.1 Upon the written request of the License Holder, the Authority may revoke this License at its discretion, taking into consideration the security of supply.

12.2 The Authority shall revoke this License upon not less than 30 days notice in writing to the License Holder if any of the following circumstances occurs:

if the License Holder fails or is unable to perform its obligations under the Act or other Laws; or in cases of Material Breach of the License.

The License Holder shall notify the Authority within eight (8) days of acquiring knowledge of the occurrence of any circumstance or event which does or could constitute any of the situations or events described in this Section 12.2.

12.3 Notwithstanding Section 12.2, the Authority shall not revoke this License where the circumstances described therein are remedied by the License Holder within 30 days of receipt of the notice set out in Section 12.2 or the License Holder has diligently taken all actions required or useful to remedy or alleviate such circumstances and the actions so taken are likely, in the judgment of the Authority, to alleviate or remedy such circumstances within the delays acceptable to the Authority, having regard to the duties of the Authority under the Act.

12.4 Where bankruptcy, liquidation or final accounting procedures are commenced in relation to the License Holder, the Authority may immediately revoke this License as of the initial date of the bankruptcy, liquidation or final accounting proceedings. The License Holder shall notify the Authority within eight (8) days of the commencement and termination of any proceedings described in this Section 12.4.

12.5 The Authority may revoke this License without additional notice in cases where the License Holder continues to operate the Generation Assets in a manner which exposes the safety of supply, human life, health or property or the environment to serious harm despite prior notice and the levy of a fine by the Authority in connection with the offence.

12.6 In cases of revocation of this License, the Authority may initiate proceedings at the relevant judicial court for the cessation of operations and the winding up of the License Holder.

12.7 During the course of the procedure referred to in Section 12.6 or until the proceedings set out in Section 12.4 have been completed, the License Holder, or another license holder appointed for such purposes by the Authority, shall continue to operate the Generation Assets and perform the business and activities of the License Holder.

12.8 If a license holder other than the License Holder is appointed by the Authority for the purposes of ensuring the continuing and uninterrupted performance of the business and activities previously conducted by the License Holder, as provided in Section 12.7, the License Holder shall, upon the resolution of the Authority, place the Generation Assets and all other books, records, information and other assets within the possession of the License Holder and necessary for continuous and safe Generation of Electricity at the appointed license holder's disposal.

13. Amendments to the License

13.1 The Authority may amend this License upon the written request of the License Holder in cases where a significant change in the circumstances of the License Holder or the activities licensed hereunder has occurred. The License Holder shall notify the Authority within 30 days of any change to the information contained in the Schedules and shall apply for an amendment of this License.

13.2 The Authority may amend this License where, despite notice having been duly given by the Authority and a fine having been imposed, the License Holder continues to operate its Generation Assets in a manner which exposes the safety of supply, human life, health or property, or the environment to serious harm.

14. Notice Provisions

14.1 Any notice, consent, authorization, direction or other communication required or permitted to be given under this License shall be in writing and may be delivered by telecopier provided that, in all cases, the original shall be delivered by hand or by registered mail and addressed as follows:

in the case of the Authority:

[address, telephone number, etc. of the Authority]

in the case of the License Holder:

[address, telephone number, etc. of License Holder]

14.2 Either the License Holder or the Authority may change its address for receipt of notice, or the person designated to receive such notice, by notice given as provided in Section 14.1, and such change shall be deemed not to constitute an amendment to this License.

15. Fees

15.1 The License Holder shall be obliged to pay to the Authority such registration fees, annual charges or other fees as may be applicable pursuant to the Act, or any other Laws.

16. Legal Remedy

16.1 Decisions of the Regulatory Authority regarding the granting, revocation, amendment of this License, or regarding any fines or fees assessed by the Regulatory Authority, may be appealed to the appropriate judicial court.