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*Economic Policy Reform and
Competitiveness Project*

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ABBREVIATIONS AND ACRONYMS

CES	Central Energy System
CHP	Combined Heat Plant
DH	District Heating
EES	Eastern Energy System
EPRC	Economic Policy Reform and Competitiveness Project
ERA	Energy Regulatory Agency
FDI	Foreign Direct Investment
GoM	Government of Mongolia
HO	Hearing Officer
MoF	Ministry of Finance
MoFE	Ministry of Fuel and Energy
NGO	Non Governmental Organization
PPA	Power Purchase Agreement
RHA	Regional Housing Authorities
SOE	State Owned Enterprise
SOJSC	State Owned Joint Stock Company
SPC	State Property Committee
UB	Ulaanbaatar
UBDH	Ulaanbaatar District Heating
USAID	United States Agency for International Development
WES	Western Energy System

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EXECUTIVE SUMMARY

This report is designed to review the progress of the Energy Regulatory Authority (ERA) in establishing and operating an effective energy regulatory body for the energy sector of Mongolia. The Report examines the accomplishments of ERA and measures these against the goals for the Mongolian energy sector. The goals are based on the Energy Law, USAID objectives and international best practices.

The conclusion to be drawn is that significant results have been achieved by ERA in a short time, less than five years. Those indicators that described the work of ERA for which it was responsible according to law, namely the content indicators such as accountability, ERA scored very high.

The methodology required interviews with decision-makers in the energy sector, an assessment administered to ERA and EPRC, literature review and preparation of a bibliography, quick reference to current international best practice and peer review with EPRC Energy Team members.

The Report will also highlight the urgent next steps needed to be taken by both the Government of Mongolia and ERA to ensure a reliable, sustainable supply of electricity and heat for the people and economy of Mongolia.

ERA must continue to be sustainable, independent, transparent and accountable, if the projected high level of critically needed investment is to be realized. The downside risks for failing to make the needed changes regarding investments are:

- Investments urgently needed in energy sector won't happen as quickly
- Economic growth targets will not be met on a timely basis
- Jobs will be lost; new job growth won't occur
- Standard of living will not rise as high
- Potential for power and heat failures (even collapse) increases which is very dangerous in the winter months
- Without this investment, the anticipated cumulative growth in GDP through 2015 will be seriously dampened

The Report is therefore a critical step in the reform process. How well has ERA done? How is their performance measured by ERA? By EPRC? What should be their next steps? How can their work be made fully consistent with international best practices? We developed a methodology that was designed to provide answers to these questions that will give EPRC and ERA confidence in the report and value in the results and recommendations.

SECTION I: INTRODUCTION

A. Background

This Preliminary Assessment Report is designed to review the progress of the Energy Regulatory Authority (ERA) in establishing and operating an effective regulatory body. The Report will offer suggestions for the next steps needed to be taken to improve regulation of the energy sector and to ensure a reliable, sustainable supply of electricity and heat for the people and economy of Mongolia.

Preparation and issuance of this Assessment is very timely. ERA was established five years ago; they will be celebrating their fifth anniversary in the fall of 2006. An assessment now is appropriate, given that there has been sufficient elapsed time for the organization to be well established, for them to develop into a viable regulatory organization and for the energy sector to respond to direction issued by the regulatory organization.

The methodology we followed included these steps:

1. literature review
2. interviews
3. description of methodology to ERA and EPRC
4. assessment
5. discussion of assessment
6. development of recommendations
7. review of report

There is a large body of literature relating to the ERA in particular and the Mongolian Energy Sector in general that has been prepared by EPRC, other USAID projects and projects supported by the Asian Development Bank, the European Bank for Reconstruction and Development or the World Bank. A bibliography appears at the end of this Report. This literature points to the critical role played by ERA in the urgent task of building a sustainable, reliable energy sector in Mongolia and to prepare Mongolia for private investment. There is compelling economic and humanitarian evidence offered in these reports proving the need for continued enhancement of ERA's regulatory processes and performance.

We interviewed: Mr. Ganjuur Raddii, Chairman of ERA; Mr. Damdinsuren Gungaarentsen, Regulator; Mr. Myagmar Ravdan, Regulator; Mr. Khishigt Tamir, Head of the Legal, Information and Administration Department, ERA; Mr. Luvsansharav, Consumer Affairs, Legal, Information and Administration Department, ERA; Mrs. Ganchimeg Mujaan, Head of the Price and Tariff Department at ERA; Mr. Munkhtulga Munkhuu, Head of the Licensing Department at ERA; and Mr. D. Jargalsaikhan, Director of the Electric Transport Company and Chairman, ERA Advisory Board. We also interviewed people at the State Property Committee, including Mr. D. Bailikhuu; SPC is one of the owners of the SOJSCs (State Owned Joint Stock Companies).



International best practices continue to emphasize the need for transparent rules and procedures in regulatory commissions as a means to provide confidence and risk mitigation support to private investors, as well as a means to build public support for reform and restructuring. ERA was created by the 2001 Energy Law. Many of the recent activities of ERA and EPRC, working together, have been focused on enhancing independence, transparency and

effectiveness in the energy sector. This report is intended to complement and augment those efforts.

B. Comments on USAID Support

As many respondents noted, USAID has had an important, historical role in support of reforms of the Mongolian energy sector. Upon withdrawal of Russian economic support in 1991, Mongolia faced a serious shortfall of electricity and heat supply. USAID provided substantial emergency assistance to maintain existing generation, transmission and distribution.

USAID invested \$40 million in emergency aid in 1991 – 1995 so there would be adequate electricity and heat. USAID then initiated sector reform in 1997 to improve and modernize the energy infrastructure, reduce losses, improve collections, and to improve operational efficiency thus making more money available for needed upgrades. They also contributed support for developing proper legislation to promote regulatory independence and attract private investment. USAID will continue that commitment to the power sector through 2008. With support from USAID, the energy sector has been able to:

1. upgrade the accounting processes and systems (development and implementation of a Uniform Code of Accounts and incorporation of International Accounting Standards) and trained all 18 licensees and ERA in their use;
2. license all energy SOEs in CES and the EES and WES, for a total of 58 as of June, 2006;
3. establish an audit function within the ERA with three trained auditors;
4. produce rules for the new electricity market and the methodology for a modern two-part tariff system. They have issued procedures for public hearings, dispute resolution and consumer protection; and
5. augment efforts at ERA to develop a financial and technical benchmarking system and related performance agreements

One of the key questions to be addressed in this Assessment Report relates to the sustainability of these efforts. In other words, do people feel that ERA has arrived at a point where all its accomplishments will enable ERA to maintain its activity and continue to grow its efforts to regulate a viable energy sector? We will address this question further in the Report.

Many of the people interviewed for this project offered comment on the benefits that have been gained by support from USAID. There was a strong perception that many of the accomplishments in the energy sector would not have happened without USAID support.

One of the main purposes for extension of USAID support to the energy sector through EPRC, from mid-2006 to mid-2008, is the need to insulate and protect the ERA each time there are changes in the government and personnel in the ministries. The fear is that each new Cabinet member will assert their own interests into pending legislation, such as the revision of the energy law currently under review. One main problem is that key points in the law for the sustainability of the ERA could be lost. Independence of ERA exists on paper, yet 100% independence is hard to attain. ERA coordinates their work with the policies of government. Weakening ERA's role in the power sector would be a step backward for improvements in electricity service delivery and attraction of investment capital (foreign direct investment) in Mongolia.

⚙ **1. Many respondents emphasized that the key issue is continued support from USAID for reforms of the energy sector.**

⚙ **2. Current efforts to ensure sustainability for changes in the power sector need to be strengthened by enactment of an amended Energy Law.**

SECTION II: UPDATED STATUS OF ENERGY REGULATORY AUTHORITY

A. Review of History

New national energy legislation was enacted in 2001. Since then, implementation of the Energy Law has largely been accomplished. New legislation for the next decade may well be needed to advance the power sector and provide the foundation for economic development of Mongolia's rich natural resources.

Because regulation was so new a concept in 2001, rules and the framework for regulation, including connection rules, licenses, and prices had to be drafted. Rules to govern the operation of ERA had to be written. This has been thoroughly done. Transparent rules have been promulgated by ERA; licenses have been issued for over 58 companies operating in the power sector. Tariffs have been set. Customer complaints are being addressed. Capacity building is taking place and a competent professional staff has been built.



Photo here is of three coal-fired Combined Heat and Power plants in Ulaanbaatar, critical facilities in serving the energy needs of the people in the city and in the region.

Since it has now been 5 years since the establishment of ERA, many people interviewed at ERA and SPC recognize it is appropriate to consider amendments to the Energy Law. Many countries follow a similar path, rewriting sector legislation after the first set of reforms have been implemented. Mongolia will want to ensure that any new legislation is indeed a step forward.

B. Investment Requirements

Mongolia has three currently unconnected electric systems: the Western (WES), Eastern (EES) and Central (CES) Energy Systems. It is expected that the three systems will be interconnected by 2020. During the next decade, Mongolia will need to make significant investment in the power sector, for generation, transmission and distribution. There are very high investment requirements for the energy sector over the next decade. It is the imperative provided by investment needs that drives sector reforms. Without a well functioning regulatory authority it will be especially difficult to attract the necessary capital investment.

Summary of Investment Requirements Through 2015

(Note: All estimates are purely EPRC estimates and based on internationally accepted construction costs without taking site specific conditions into account.)

		(in million USD)
<u>Generation</u>		
Replacement of existing generating assets (CES)	774 MW	1,165
Capacity additions	620 MW	930
Additional Capacity (S. Gobi)	650 MW	<u>975</u>
Total Generating Assets @ \$1,500/kw		3,070
<u>Transmission</u>		
Rebuilding of existing transmission system		250
Completion of new transmission lines		<u>525</u>
Total Transmission System @ \$300,000/km		775
<u>Distribution</u>		
Rebuilding of existing distribution systems		250
New distribution systems		<u>400</u>
Total Distribution Systems		650
<u>Renewable Energy</u>		
Renewable Energy	100 MW	<u>250</u>
Total Renewable Energy @ \$2,500/kw		<u>250</u>
Total Est. Investment Requirements through 2015*		USD <u>4,745</u>

The table above was developed by EPRC to show the estimated investment needs in the energy sector to 2015. These are admittedly informal estimates.¹ In order for Mongolia to realize these investments, ERA must be functioning at peak performance levels, measured against international best practices. To put this bluntly, ERA must be sustainable, transparent, accountable and free from political control if the projected high level of critically needed investment is to be realized. To make this point as clearly as possible, Section VI of the Assessment Report discusses new research that directly links performance of the regulatory authority to increased investment in electricity generation capacity.

EPRC estimates that a total of approximately \$4.745 billion will be required to rehabilitate or replace aging infrastructure, to support normal growth and to support new mining operations and further industrialization. While this is only an estimate, it does point to the very large capital requirements for the power sector over the next ten years.

¹ EPRC, Ulaanbaatar, Mongolia, 2006. The first line item under Generation (\$1.165 billion) assumes all 5 CES CHPs will be replaced. However, since PP#4 and Darkhan have useful lives to 2020 (and maybe beyond) the actual need is to replace the available capacity of PP#2, PP#3 and Erdenet, which totals approximately 145 MW. This would be at an estimated cost of approximately \$225 million.* Assuming that only PP#2, PP#3 and Erdenet require replacement, this number then becomes approximately \$4.5 billion.

Of the total investment, approximately \$1.165 billion will be required to replace the entire, current generating capacity of the CES, and approximately \$500 million to rehabilitate and modernize transmission and distribution infrastructure. An additional \$3.076 billion will be required for new investment.

Overall, about 33% of the population does not have access to electricity and 43% is without access to central heating. This lack of access to electricity is especially acute outside of urban areas, where there is limited energy infrastructure.² Any long term vision for economic development in Mongolia will necessarily take this into account.

The Government of Mongolia is well aware of the close links between investment in power sector capacity and a strong regulatory authority. A comprehensive report, entitled “Market Study and Company Analysis Report” prepared for the State Property Committee by the European Bank for Reconstruction and Development in October 2003³, noted five keys to successful investment strategies:

- Stability and enforcement of laws and contracts
- Government responsiveness to the needs and time frames of investors
- Investors’ control over their investments
- Regulatory independence
- Availability of Credit enhancement or risk guarantees

C. Energy Law of 2001

The Energy Law of 2001 mandated the energy sector to operate on market-economy principles, that is to move away from the current single-buyer market model to a market for electricity and heat based on bilateral contracts and to prepare the sector for limited competition in the base-load and spot market arenas. The law also called for establishment of an independent, transparent regulatory authority.

The Energy Regulatory Authority was established on April 16, 2001, by Government Resolution #83 in compliance with clause 5.12 of the Energy Law of 2001. ERA regulates the energy sector in the CES. Article 8.1 of the Energy Law states that the “Duties of the Regulatory Authority shall be to regulate generation, transmission, distribution, dispatching and supply of energy”. ERA has been at the center of restructuring of the energy sector in Mongolia. ERA has been charged with statutory responsibility for licensing, tariffs and dispute resolution.

² <http://www.state.gov/r/pa/ei/bgn/2779.htm>

³ “Energy Sector Privatization and Advisory Services, “Market Study and Company Analysis Report, Part I: Market and Tariff Analysis, EBRD for the State Property Committee, October, 2003, pp. 41-42.



Photo here shows the major transmission system feeding power to the capital city and moving electricity from generation to distribution.

The vertically integrated utility has been restructured into 17 state owned joint stock companies and one limited liability company, all of which have been licensed by ERA. Most of the Joint Stock Companies are fully state owned enterprises; only a few have been privatized.

The energy sector of Mongolia began restructuring following enactment of the Energy Law. The "Single buyer model" has been adopted in the Central Energy System. In accordance with this model "Central Electricity Transmission Network" Co., Ltd is responsible for the wholesale market and operating as a single buyer. The single buyer purchases electricity from generators and sells it to distributors.

Other small regulatory bodies in Aimags and capital cities regulate heat-only boilers and small stand-alone generators. They are responsible for implementing government regulations on energy supply in their aimags and the capital city. By law, they consist of three part-time members. They cover their expenses related to issuing licenses by charging licensing fees. They are required by law to issue, amend, suspend and revoke licenses and to control compliance with conditions and requirements of licenses in their respective territories.

ERA is governed by the Regulatory Board, which consists of three Regulators, appointed by the Prime Minister of Mongolia. The Energy Law states that "The Chairman and Regulators of the Board shall be appointed by the Prime Minister based on a proposal of the Cabinet Member in charge of energy. They shall be appointed initially for 2, 4, and 6 years, respectively, and thereafter for 6 years, so that expiration of their terms of service have intervals of 2 years. The terms of service may be extended once".

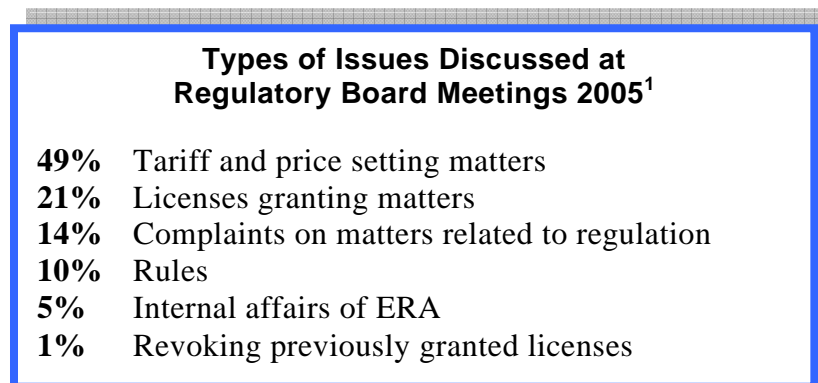
The reason their terms are staggered is so that the terms would not all expire at once, depriving ERA of their collective experience. Mr. Ganjuur was first appointed in 2001. Mr. Damdinsuren was also first appointed in 2001 and reappointed. Mr. Ravdan was appointed in 2005.

ERA has an annual budget for 2006 of approximately \$360,000. Revenues are derived from charges for regulatory services provided to licensees based on a general sales of each licensee. Fees are proposed by ERA and approved by the Cabinet. 36.6% percent of the budget is allocated for salaries and 7.5% for social insurance. 8.5% is allocated for training, travel and

capacity building. The remainder of the budget is allocated to miscellaneous operating expenses⁴.

Regarding approval of ERA's budget and the financial independence of ERA, ERA prepares its own budget, and then after review, it is finalized by the Cabinet. The 2006 budget took five months to complete. Approval was needed from many ministries. The GoM must have a role, of course, but having to do only with policy and strategy. Currently there are efforts to have the MoFE approve the budget, ostensibly because it streamlines the process. This is an important issue because the SOEs are owned by the government and the government, with budget approval, effectively controls the regulator. Having policy, operation and regulation under one institution is not good practice as it poses definite conflicts of interest. To avoid such conflicts and to make regulation transparent is one reason why restructuring has been so common in so many countries.

ERA is authorized by law to promulgate rules and regulations governing their own internal operation and their relations with regulated entities. They have issued rules on many subjects which are visible on their website in Mongolian. In 2005 they issued 147 regulations.



The Regulatory Board issues decisions by majority vote. ERA is funded by license fees and charges for regulatory services provided to licensees. ERA reports annually to the Cabinet on its activities and budget performance.

One common problem faced by new regulatory commissions is the reluctance of the relevant ministry, in this case the MoFE to "let go", or relinquish their previous responsibilities. In Mongolia this could potentially impact the effectiveness of the ERA and USAID work to date and for the future. It could also hinder efforts for a responsible amendment to the energy law (currently in process but not yet passed).

D. Proposal for Amended Energy Law

A new Energy Law is under consideration by the Ministry of Fuel and Energy in Mongolia, which they plan to submit to the Cabinet in late 2006, although this is unlikely. EPRC has been actively involved in providing extensive comments on the shape of the new law so as to promote a strong energy sector and a regulatory authority capable of meeting the demands of a restructured industry, including independence, autonomy, transparency and legitimacy. Detailed information about this work is available at EPRC.

The EPRC energy team has since been working with the Ministry of Fuel and Energy (MoFE) on amending this Law to change the focus to allow the existing companies to operate more on a corporatized and commercial basis. Similarly, the law should improve the political

⁴ Law on Energy Article 8.

independence of the ERA, to make its licensing, tariff setting, public hearing and dispute resolution procedures more transparent and to consolidate the licensing process in the hands of the ERA nationwide by establishing regional offices to replace the aimag boards and to eliminate licensing within each aimag.

Changes in legislation are clearly called for. For example, ERA issues construction licenses and operating licenses. Concern was raised by observers that provisions currently in drafts of the proposed energy law revision might move construction licensing functions to the MoFE. This would be a step backward, contrary to international best practice and serve the energy sector poorly.

Why? Because it has the potential to transform determinations of the need for additional infrastructure construction on an economic-need basis into determinations made on a political basis. Such politicization of large-scale infrastructure projects will dampen interest from outside public or private investors, and in the long run, raise the risk premium and retail prices paid by consumers.

If it appears that the new energy law will, in fact, be a step backward, then Mongolia should stop efforts to amend the current law. The current law is workable; much has been accomplished as a result of the law. To develop new legislation that endangers the critical steps to reform that have been made would seriously hamper Mongolia's efforts to attract investment to the energy sector.

E. Comment on ERA Annual Report.

The Annual Reports from ERA contribute significantly to the transparency and accountability of the regulatory process. The Report describes the activities that ERA has completed, the deployment of staff and resources, the decisions reached, outreach to consumers and the public, and expectations about the coming year.

These reports are available in English and Mongolian. They should also be available as a download from the website in English. For a full and detailed explanation of the work they have done from their vantage point, one is referred directly to the ERA website.⁵ Not all current information is available in English.

✿ 3. Current efforts to ensure sustainability for changes in the power sector are vitally important to the ability of Mongolia to attract urgently needed investment to the energy sector. There should be continued effort to ensure a sustainable, independent regulatory authority.

✿ 4. If it appears that proposed new energy legislation will not move the power sector forward, then efforts to pass that legislation ought to be stopped.

⁵ www.era.url.mn/english

SECTION III: RESULTS OF REVIEW PROCESS

A. Overview

How well has ERA implemented the provisions of the Energy Law, and how far have they gone to regulate the energy sector independently? The three main tasks of ERA have been well done:

- Licensing and monitoring licensees
- Tariffs
- Customer service

Currently the organization and operation of the energy sector does not allow competition, so there are limiting factors when setting new tariffs. After issuing licenses the ERA monitors the performance of all licensees. They receive monthly, quarterly, semi-annual and annual reports which form the basis for the monitoring activity. ERA monitors and benchmarks this information, and has begun to publish the information on licensee performance.

Licensing and monitoring licensees

ERA is tracking performance on SAIDI, SAIFI and CAIDI⁶. They have participated in the CIS Regulatory Benchmarking Project of 2006⁷. ERA publishes quarterly information about the performance of licensed companies.

Tariff Surcharge

ERA is developing a new tariff methodology to deal with external factors such as the price of coal or petroleum or changes in foreign exchange. There is low public acceptance for this, as no one wants to face higher electricity prices. EPRC proposed long term coal contracts, but the Ministry rejected this proposal. Regarding Sharongol and Erdenet, which are served by private coal mines; it is difficult for the power stations to keep the tariffs constant when prices for coal change.

National Meetings

Each year ERA organizes a meeting of the Regulatory Authorities for the 22 aimags. ERA offers advice during this meeting, and there is an exchange of practices. Together they evaluate the performance of aimags and capital city boards, and then sets performance targets for the following year.

Five Year Celebration

This year ERA will celebrate five years of operation as a regulatory authority. They will have a formal celebration. All staffers will make a presentation.

B. Staffing Plan

Consensus at ERA and EPRC is that the current staffing plan is adequate to do the work they have at ERA and to meet the requirements of the current Energy Law. Several key staff are carrying heavy loads as their responsibilities have expanded significantly. For example, the Licensing Department submitted the 58th license to the Board which was approved in April, 2006. Now the temporary licenses issued for the Generation Companies are set to expire and

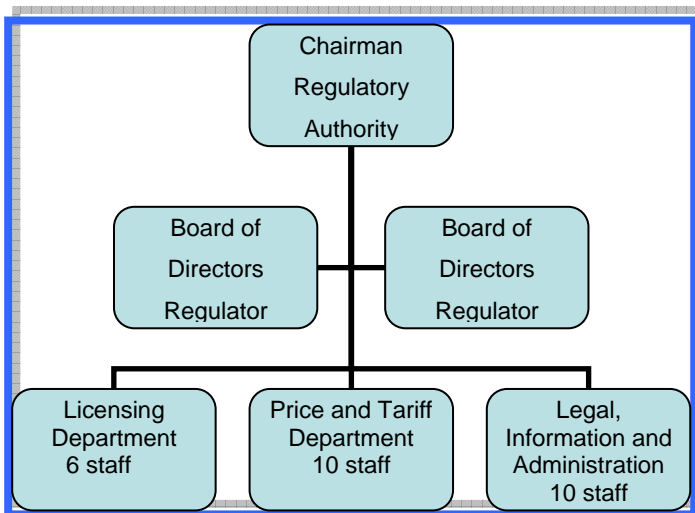
⁶ ERA tracks performance in SAIDI, System Average Interruption Duration Index, SAIFI, System Average Frequency Interruption Index, CAIDI, Consumer Average Interruption Duration Index. See the ERA Annual Report for 2005.

⁷ ERA, CIS Regulatory Benchmarking Report, www.erranet.org/Library/Searchbenchmarkingreport2006

will need to be rewritten. This may require additional technical support and/or more personnel, although no one at ERA suggested this was the case.

If and when there is an amended Energy Law, the responsibilities of ERA may expand significantly, which may result in a need for new staff. For example, if they are asked to regulate the companies now operating in the aimags and city governments, then they will need more people for licensing and also tariffs and customer service. As a further example, if coal pricing comes under ERA jurisdiction or they become responsible for energy regulation of the entire country with the need to create regional offices, then they will need more people. There are several proposals now circulating that propose different arrangements for regulation of the aimags and capital boards, all of which might have an impact on staffing requirements.

Organization of ERA



ERA has adopted a simple, straight-forward organizational structure that works well for them. The organization chart shown here appears on their website and is described in their Annual Report. The staff has been stable for five years, in spite of the increased demands and work load placed on ERA. 25-29 people were originally approved. The staff now stands at 29, 26 staff plus the three Board Members. There are, of course, service employees such as drivers. The Annual Report shows the number of personnel. ERA may expand the staff

commensurate with budgetary approval for doing so.

⚙ **5. ERA will need to track the amended energy law closely to ensure that they have sufficient financial and human resources to carry out the law and those organizations that approve the ERA budget (if any) must also recognize this need.**

C. Rules and Docket

ERA has published a robust set of rules on their website. They have developed a docket system, based in part on recommendations from EPRC in 2004. This docket system works well enough for the load of cases they currently have and are likely to have in the near future. It will need to be uploaded to the website.

⚙ **6. There are more opportunities to use the ERA website than are currently being taken advantage of, especially in English. The English language version of the website should be updated more regularly to reflect the many recent accomplishments of ERA.**

D. Service Quality

There is a nexus between service quality and customer complaints. There is a real interest at ERA to know that EPRC's Energy Team will be placing greater emphasis on customer service and service quality in the months ahead. The visit of an international EPRC expert will lend

support to the focus on service quality benchmarking, using Mongolian characteristics. This benchmarking assistance from EPRC has already commenced.

As is often the case in other countries, there is a real concern with the quality of data being received in the reports from licensed companies. This is potentially a big problem. The concern is that as they move to more complex cost-based tariffs there must be sufficiently reliable data for assessing financial performance of the licensees. ERA may not be able to rely on all the information from licensees. And this is why they are conducting audits, with support from EPRC.

In 2005 the ERA started using three international performance indicators, SAIDI, SAIFI and CAIDI.⁸ The numbers reveal poor performance, because there have been many outages. ERA decided not to push licensees because ERA did not want false reports; they wanted to receive accurate information and data, and hence did not want to take steps that might dampen the reporting process. Reports on these three indicators come to ERA quarterly. EPRC has undertaken work to support development of a robust performance measurement system at ERA. ERA has also participated in international benchmarking activities.⁹

ERA currently uses five key performance indicators (KPIs) in its financial benchmarking work:

1. Net Income
2. Current Liabilities
3. Accounts Receivables
4. Total Cost
5. Sales Revenue

The first three KPIs are used in the ERA's monthly evaluation of companies. All five KPIs are used in ERA's quarterly "ranking" of all 17 major companies and 8 smaller energy companies.

✪ 7. ERA should continue their efforts to benchmark performance of regulated, licensed companies, including the development of performance agreements with licensees.

E. Public Relations

Recently ERA has worked hard on public education issues. For example, if the price of petrol rises, there must be an increase in prices. But state government ownership means that the public sees the government as being in charge, so the public complains to the government, not the ERA. ERA is now spending some of its budget on educating the public, but they need to do more. They have started public relations work examining the role of ERA.

The public relations activity at ERA is being expanded. ERA should assign one person on the staff to have responsibility for public relations. Even if that person has other responsibilities, that person should be recognized as the person to go to for the media and for the Board. This will facilitate media and public relations.

For example, the designated staffer would be charged with keeping the media informed by press release, on a weekly basis, if ERA has anything to report. Even if the press only reads the releases, and even if they don't print anything, they will become informed about regulation, ERA and restructuring. In each press organization, there is one key person, and if he or she is

⁸ ERA tracks performance in SAIDI, System Average Interruption Duration Index, SAIFI, System Average Interruption Frequency Index, CAIDI, Consumer Average Interruption Duration Index. See the ERA Annual Report for 2005.

⁹ Eastern European Regulators Association op cit, 2006.

informed, that will be a big step forward. The public relations staffer will want to communicate things that are interesting enough for the press to follow up.

✿ **8. ERA should designate one person from the ERA staff as the person responsible for all public relations.**

F. Public Participation

Under the Procedures of Organizing Public Hearings, issued by ERA, the hearings process is required to be open to the public. The Authority organizes public hearings and then announces the date in daily newspapers to allow interested parties to attend. Anyone who wants to be present in public hearings may attend and has the full right to present her or his comments or opinions freely without restriction; persons who wish to attend regulatory board meetings that are not public hearings may do so, but may not comment.

ERA's first three hearings, concerning tariffs for heat and electricity, held in 2004, were both open to the public and televised. ERA has made a concerted effort to provide opportunities for public participation. In their Annual Report for 2005, they show pictures and describe the process they set forth for encouraging public participation before major decisions affecting the public are issued by ERA. The importance of these activities cannot be underestimated.

ERA recognizes the value of public participation. They say that it will be a challenge for ERA in the coming months to build upon current experience so that there is broader public appreciation for the work of everyone involved in the energy sector, reflecting national efforts to provide more capacity to improve the standard of living in Mongolia.



Photo on left is a general picture of Mongolian people enjoying a lovely summer day. These are the people for whom public communication and participation becomes important.

Board Members have conducted several public hearings in Ulaanbaatar, such as one on Distribution Network on service quality held in 2006. During the public hearings they received many comments and complaints. They need better responsiveness at ERA. The key to success will

be to learn how to resolve customers' complaints quickly. ERA will need to focus on customer follow up. They have a set of standards they employ for customer complaints. These may need to be expanded to include follow-up from events where there is public participation. Several countries have developed good practices for addressing follow-up by requiring regulated companies to be present at public events and to be prepared to address public complaints on the spot instantly. This has worked very well where it is practiced.

✿ **9. ERA should develop an action plan for responses to customer complaints that are raised at public hearings.**

G. Advisory Committee

The Advisory Board was established pursuant to clause 8.5 Chapter 8 of the Energy Law of 2001. It is designed to be a Part-time Advisory Board that consists of 8 members, with an equal number of representatives from consumers and licensees. Members are generation and transmission companies and users, including large users.

Members include:

1. Mr. Jargalsaikhan, Chairman,
2. Mr. R. Battulga, Director, UB Electric Distribution Network,
3. Mr. Byarbaatar, Director of Power Plant #4,
4. Mr. Byamba Ochir, Director of the UB Heat Network Company,
5. Mr. Gambaatar of the UB Municipal Housing Authority,
6. Mr. Jamien, a reporter of the Mongolian News Company,
7. Ms. Dulamsuren, Director of Temuujin Mensh Company,
8. Ms. Ouyentsetseg, UB Consumer Protection Association.
9. Mr. Luvsansharav is the Secretary of the Advisory Board.

The Advisory Committee meets with ERA once per year but may hold other meetings as needed. There are no fixed schedules. By Law they may offer recommendations but ERA is not bound to follow them (as emphasized by Messrs. Ganjuur and Jargalsaikhan). Last year they shared the same opinions as the Board; they both wanted higher tariffs.

The main obligation is to foresee and review current issues facing ERA and give recommendations in advance to enable the Regulatory Board to consider when issuing resolutions related to the interests of consumers and licensees.

The most recent meeting of the Advisory Board was in April 2006. They first listened to a report from Mr. Ganjuur on performance of the licensees in 2005, tariffs and consumer affairs. Then the Advisory Board members talked among themselves. Then they proposed recommendations to Mr. Ganjuur on the following topics:

1. Tariff adjustment mechanism
2. Cost benefit analysis of transmission line extensions.
3. Eliminate subsidies to socially vulnerable customers.
4. National policy on renewables.
5. Dispute resolution.
6. Outages and power loss reduction at licensees.

Mr. Jargalsaikhan said these recommendations were very well received by ERA. ERA accepted all of the recommendations and expressed thanks for defining these recommendations clearly and effectively. Mr. Ganjuur said these were important for the Government of Mongolia.

H. Corporate Governance

Corporate governance is the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled¹⁰. The energy sector in Mongolia is dominated by State Owned Enterprises, SOEs.

The major challenges to reform of corporate governance of state-owned enterprises concern the balance between active exercise of ownership functions by the state and avoiding undue

¹⁰ Organization for Economic Cooperation and Development, 2004, www.oecd.org See Corporate Governance Principles for State Owned Enterprises.

political interference with the management of the company or with the regulatory process. Key elements of corporate governance policies include:

- Transparency
- Accountability
- Predictability
- Legitimacy

OECD Principles offer a useful set of guidelines. Using an international standard will be helpful to Mongolia in assuring international acceptance and recognition while helping to avoid dilution and changes by special interests. Good corporate governance standards and practices will help attract much needed private capital

AND reduce the risk premium the people of Mongolia would have to pay for future energy sector investments OR forego the opportunity for more jobs and economic growth.

A Working Group of professionals involved in the power sector would contribute to expanding the knowledge of corporate governance and serve as a core group of people to act on corporate governance principles when the time to do so is appropriate, probably in 2007.

✿ 10. ERA will want to consider principles of corporate governance as a regulatory instrument in the coming months. Stakeholders, including SPC and ERA should consider establishing a Working Group on Corporate Governance.

I. Independence

Frequently new regulatory authorities encounter difficulties asserting their independence. Ministries are understandably reluctant to devolve their powers to an outside organization. Where there are state owned enterprises whose reliability is the political responsibility of the Ministry, it becomes especially hard to enable regulatory independence.

Several key decision-makers elaborated on the subject of independence and political interference. One respondent cited the example of a proposed tariff increase in 2002. ERA issued a decision to increase tariffs. There was public opposition. The Parliament Standing Committee reviewed the tariff increase. ERA was required to slightly reduce the increase in tariffs. Subsequently there was more concern paid by ERA to public hearings.

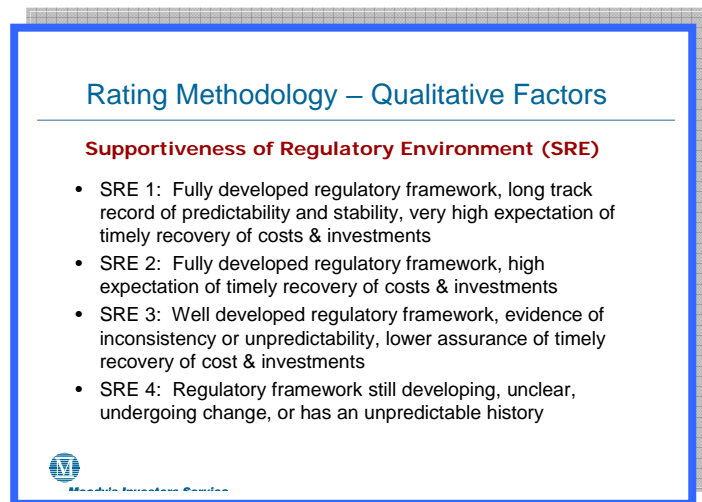


Photo here shows the combined heat and power system that characterizes the retail energy business in Ulaanbaatar. The integrated nature of this system requires that all elements function efficiently, and that all customers are willing to pay for use of the system. Given the cold climate in Mongolia, reliability of this system is very critical.

As a further example, in early 2005 the Prime Minister suggested that there be no increase in tariffs until the Spring. ERA decided not to wait

and ERA, and stayed with their proposed tariff increase. Observers say this tariff increase went smoothly. Such an example indicates that ERA has achieved significant independence, at least in this case.

ERA is the final approving body for tariff increases. Before approving final tariff changes, ERA goes to Parliament to explain the proposed changes as part of the actions on public education and conducts a public hearing. This is designed to build public consensus. Predictability of tariff setting and the independence of the tariff setting entity from undue political pressure are major factors in investor confidence in investment the climate. For example, Moody's Investor Service has repeatedly shown that investor confidence in the outcome of the regulatory process is a major factor in risk assessment.¹¹



The diagram here shows the rating methodology used by Moody's Investment Business as it relates to the regulatory environment a company operates in. SRE1 provides the highest rating and SRE4, provides the lowest.

In the case of Mongolia, it is difficult to speculate about a rating, without all the facts that Moody's would examine. SRE 2: is for a fully developed regulatory framework, high expectation of timely cost recovery of costs & investments. This description is consistent with the long term goal of ERA, to provide for a high expectation of timely recovery of costs and investments. Political interference in tariffs, licensing or market design would lower the rating to SRE3 or even SRE 4. Interest costs and retail prices would rise as a direct result.

✿ 11. ERA is required by law to set tariffs. This is one of the most critical functions of any independent regulatory authority. Any effort to change national legislation diminishing ERA's role as the tariff setting authority ought to be stopped.

¹¹ Public Utility Fortnightly, "Another Look at What's Driving Utility Stock Prices", January 15, 1997, By John L. Domagalski, Agustin J. Ros, and Philip R. O'Connor Which matters most: Cost? Price? Sales? Regulation?

SECTION IV: ANALYSIS BY DEPARTMENT

This material was developed from interviews with ERA staff in the three key line departments, and was corroborated in meetings with regulators and the SPC.

A. Legal, Information and Administration Department

Consumer Relations in LIA Department

There is one person at ERA working exclusively on consumer relations. The work is first to address the terms of the Energy Law of 2001, namely to implement transparency, regulation and relations with consumers. Much of his work deals with dispute resolution; they wish to make the process as transparent as possible. Consumer Relations activities consist of two parts:

1. Consumer complaints about licensees
2. Licensees disputes among each other

They conduct public hearings. For the past three years they have conducted public hearings on tariffs. Now they are trying to expand the public hearings to other issues. They cooperate with the mass media, such as newspapers, TV and radio. There are sometimes problems with the media. Reporters are keen to report on government, but slightly reluctant to talk about independent regulatory activities; this means it is difficult to get coverage of issues they are focusing on.

Complaint Procedures

ERA has formally approved Complaint Procedures; they are now implementing the procedures. The public hearing procedures are also in place and they are implementing them as well. In all they have adopted eight rules and procedures protecting Mongolian consumers. A list of some of the key laws and rules enacted to benefit electricity consumers appears below.

Laws and Rules Enacted/Promulgated to Benefit Energy Consumers	
Instrument	Institution
Energy Law of 2001	Parliament
Consumer Protection Law	Parliament
Electricity Consumption Rules	Cabinet
Business Rules between Consumers and Businesses	ERA
Heat Consumption Rule	Cabinet
Rules Protecting Networks (Safety Zones)	Cabinet
Connection Instructions	ERA
Complaint Resolution Rule	ERA

The job of the Department is to follow these eight rules. Complaints are rising. We noted that rising complaints are a good, positive indicator at this point in their development. Rising complaints probably indicates rising confidence in ERA as a place for resolution of consumer complaints and building consumer confidence.

Complaints Tracking

ERA keeps statistics on the number and nature of consumer complaints. Complaints may come to ERA through a variety of channels, designed to increase opportunities for consumers to register complaints and to feel comfortable doing so. These channels include in person, by letter, or by email. Most of the complaints arise because the consumer does not know the laws and rules.

Sometimes the complaints are transferred to the companies. ERA will examine the issues; if the final result involves a distribution company, then ERA transfers the complaint to the company. They advise consumers to provide documentation relating to the nature of their complaint.

Advice to consumers requires a large percentage of the consumer affairs time and effort. The process is computerized. They have developed an intake form that translates into their tracking system. This is an informal format which has not been approved by ERA. It reports when, what subject, who involved and the date that the complaint was resolved.

The main reason for complaints is the lack of information about consumer obligations to licensed companies and about the role of the ERA. ERA is seeking to implement a public relations campaign that would address these complaints, but there is a lack of financial resources to do so. Here is a summary of the nature of complaints received at ERA¹².

Percentage	Issue
34.0%	Tariffs and payments
15.3%	Suspension and disconnection
10.5%	Quality of service and supply
10.0%	Contracts between companies and consumers
07.3%	Meters
08.6%	Requests for new connections

ERA may benefit from development of informal guidelines for the companies to use when replying to consumers, perhaps in the form of a Manual. Such a Manual might contain information about when and when not to disconnect customers, and information on meter monitoring, for example. As noted elsewhere in this Report, the Manual may need to be expanded to include protocols for response to public complaints raised at public meetings. This Manual represents an important accomplishment. By offering standardized responses to common customer complaints, ERA is providing a framework for consistent, responsive customer service.

⚙ 12. ERA should prepare a Customer Service Manual. The Manual should include guidance on appropriate responses to customer complaints raised at public hearings, recognizing the duty of regulated companies to meet the needs of their customers.

¹² Based on information from ERA, 2006.

Public Hearings

Since 2004, they have conducted four large public hearings. Three were in Ulaanbaatar. On May 19, 2006 they conducted a hearing in Ulaanbaatar jointly with the UB Distribution Company and they prefer to conduct future hearings jointly with the licensees, as this is more fruitful. They have scheduled a Heat Tariff and Network Hearing in September or October of 2006 in Ulaanbaatar. Outreach by the distribution companies to their consumers is low. ERA often advises the companies to improve their relationships with their customers.

✿ 13. Public hearings are an important element in the promotion of public participation and the building of consensus for reform of the energy sector; ERA should continue outreach efforts to the residential consumers.

Quarterly Reports on Service Quality

Since 2005 ERA has been receiving brief quarterly reports from the licensed companies relating to consumer service quality. These include tracking performance on standard indicators of electricity company performance. They want to expand these reports. The World Bank Report in has recommended more consumer communications by the distribution companies, which they hope will become a model for others. Although the Consumer Service Centers in UB are having initial start up problems, they show promise on better customer service

Companies are also filing Quarterly Reports on Complaint Handling (and other indicators as discussed above). The information includes the number of complaints, number resolved, time to resolve.

Horoo Requests

ERA also considers consumer related requests from local governments. For example, ERA might receive a request for connections from a Horoo. They seek to respond to these requests and/or complaints.

Market Research

Since 2002 ERA has been conducting market research among licensed companies to obtain feedback on how ERA is doing. This feedback enables them to assess their relations with regulated companies and make improvements where warranted.

Consumer Survey

ERA conducts a Consumer Survey each year among consumers connected to the power grid. The survey results assist ERA in their efforts to be responsive to consumer issues. As of March, 2006, there were 315,688 consumers connected to the grid or heat network.

Cold Weather Disconnect Rule

ERA is currently working on a cold weather disconnection rule. They have prepared an informal, internal draft. They may ask for support from EPRC on winter disconnect rules in the future.

B. Licensing Department

There are four main areas of responsibility for the Licensing Department. These are as follows:

1. Receive, review and process license applications
2. Monitor activities of licensed companies for compliance with license conditions
3. Review procedures to be followed by Licensees
4. Dispute resolution between Licensees

Receive, review and process license applications

Their first task is to issue licenses. The Licensing Department has responsibility for reviewing license application at ERA. They receive the applications, process them and make proposals to the Board of Regulators to approve or deny a grant of license. They also make recommendations on revocation of licenses when necessary.

The Energy Law gave ERA the right to set minimum levels of service for licensees. Parliament subsequently passed a Licensing Law which relates to actions of any licensee (in any business), and the provision of the Energy Law was removed. The Licensing Law says that “detailed procedures with regard to the licensing of the particular type of business will be regulated by each separate law.”¹³ This presents a potential problem to ERA. ERA believes that this law may restrict the rights of ERA to set the provisions under which licensees may operate. ERA feels that once the license is granted, ERA will have jurisdiction, but their ability to set general guidelines and procedures may be questionable. One of the proposed changes in the Energy Law would restate the provision of the Energy Law (Article 9.1.1) so that the licensing procedures at ERA would be consistent with the Licensing Law. An alternative solution, less attractive from the regulatory perspective, is for the Energy Law to be amended to detail the licensing procedures that are required in the Licensing Law. Either solution would eliminate the potential problem.

ERA has issued licenses to 58 companies. They licensed their 58th company in April 2006 to a small housing service company in Ulaanbaatar. In 2006 ERA has issued 7 new licenses for heat distribution and supply. There are an additional 273 licenses which have been issued by aimags for small facilities. In 2003 ERA set a floor for licenses based on the quantity of energy produced. Some applications have been refused by ERA because the facility is too small.

In 2001, ERA issued short term licenses. The short term distribution licenses were temporary and expired in 2004/2005. New distribution licenses were issued for ten years. In 2001 they also issued 5-year temporary generation licenses. These generation licenses will expire in 2006. Long term licenses must be issued now for the seven CHP generation plants. Two heat only facility licenses expire in 2007.

Monitoring

Their second task is monitoring. The Licensing Department is responsible for monitoring activities of licensees not related to tariffs. One of the tools ERA uses for monitoring licensees is benchmarking. Tasks include monitoring technical and operational performance and service quality. Licensed companies file monthly, quarterly and annual reports with ERA. The Licensing Department said that the reporting requirements that relate to the benchmarking activity include the following elements:

A. Monthly reports include

- transmission and distribution losses
- internal station use by power plants
- financial arrears

Last year (2005) they also started collecting monthly information on customer services

- outages
- disconnections
- SAIDI (system average interruption duration index)

¹³ Licensing Law of Mongolia, Article 7.3.

- SAIFI (system average interruption frequency index)
- CAIDI (customer average interruption duration index)

B. Quarterly reports include

- Changes in heat rates
- Forced outage information
- Plus summaries of monthly information

C. Annual reports include

Annual reports include information on performance of licensees fulfilling the terms and conditions of their license. The elements listed here are intended to be a representative sample of requirements, not an exhaustive list. Full information on licensee reporting requirements is available from ERA. ERA has issued procedures for conducting and evaluating the performance review of licensed companies. They have approved targets which are different for each company. They use benchmarking to set the targets. Since 2005 ERA has been using 6 indicators for company performance.

- Profitability
- % losses
- changes in accounts receivable
- % electricity for internal use
- Collection rate
- Cost projection/revenue requirements

They publish annual performance reports relating to the performance of licensed companies on the indicators described above. These are published in the media and sent to the companies and Ministries involved.

Review of Procedures

Their third task is to review the procedures to be followed by licensed companies. These include connection instructions for new users and business rules. They draft any amendments to procedures and submit them to the Board in cooperation with the Legal and Administration and Information Department.

Dispute Resolution

Their fourth task is Dispute Resolution. This task covers disputes that arise between licensed companies. Topics for disputes usually include payment, voltage levels, meter disputes and disputes with the National Dispatch Center, such as “we don’t get dispatched; this is not right!”). In 2006 they have addressed the following complaints

- Payment: 4-5
- Voltage levels: 2
- Meters: 3-4
- Dispatch 3-4

Advice and training to 22 Aimags

The Licensing Department also provides advice and training to the 22 Aimags. 273 companies have been licensed by the Aimags, the Boards and the capital city regulators. ERA continuously provides support. These include small facilities, heat only plants, hospitals and the like.

ERA hosts an Annual Meeting for the boards. At this meeting, they set performance targets for the next year for performance of the boards. These performance targets focus on the regulatory boards. The targets have a positive impact on performance of licensed companies operating under board jurisdiction.

Consumer Issues

In case of a disconnection due to technical problems, the License Department is involved. The Business Rule regulates the relationship between the licensee and consumers. There is a Service Contract between the suppliers and the consumer.

One of the responsibilities of ERA is enforcement of License Terms and Conditions. There are maximum penalties for companies and individuals. When a license is actually suspended, it is not clear what happens. They have seen in other suspension laws, that tariffs or profits can be reduced by penalties being assigned. This is not possible in Mongolia. The Licensing Department needs tools.

One of the problems is that there are potentially conflicting laws. There are main or base laws, and there are sector laws. The Punishment Law says monetary fines can only be levied by the State Inspector, a Court, Policeman or local governor. ERA has State Inspector status, according to the Energy Law; however, ERA has not been able to exercise this authority due to apparent conflicts between the Energy Law and the Law on State Supervision. The State Specialized Supervisory Authority has refused to grant ERA inspector status, claiming it is not authorized under the Law on State Supervision. In order to facilitate the full authority of ERA, the main laws should make the legal status of ERA clear.

✿ 14. EPRC will want to ensure that there is no language in any proposed new legislation that diminishes their authority over the critical area of licensed company performance improvement.

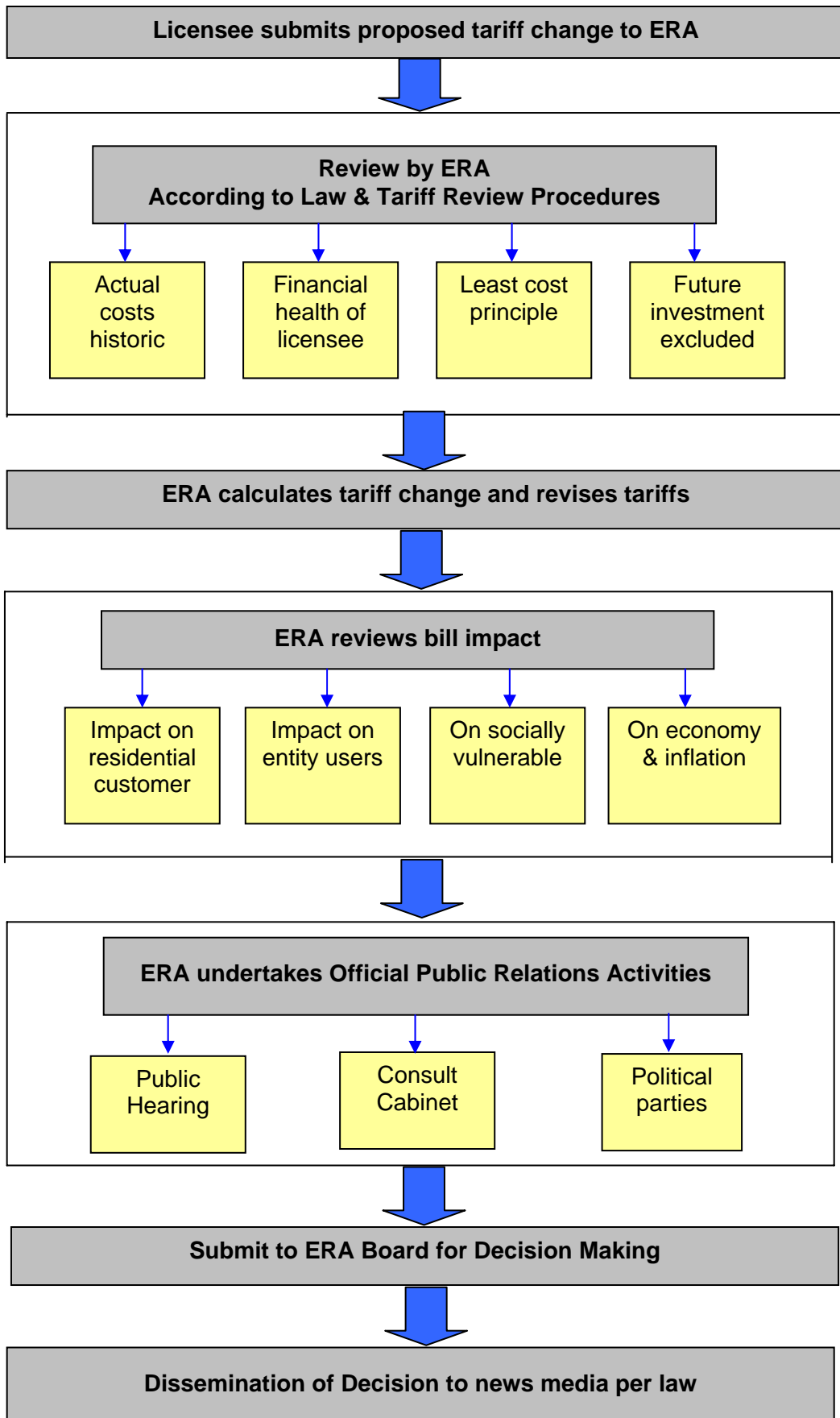
The activities of ERA are still at the early stages. They have had difficulty monitoring service quality, as metering is hard. They know they need to work on rules, monitoring and performance assessment. They will be moving to new market rules and an upgraded benchmarking system, which will have a big impact on the license structure.

C. Price and Tariff Department

ERA has established a methodology for tariff reviews which they use for tariff cases. The accompanying graph describes the process they employ. The tariff review process follows approximately this format:

1. A licensee submits a proposed tariff change to ERA.
2. ERA reviews the application according to the Energy Law and ERA's tariff review procedures. Factors considered are actual historic costs, the financial sustainability of the licensee, including external factors and local factors; least cost principles and system efficiency; and excluding future investment requirements, i.e. there is no allowable depreciation for future investment.
3. ERA calculates the changed tariffs
4. ERA reviews the bill impacts and considers the impact of new tariffs on residential customers, business users and entity users, the socially vulnerable as well as on the economy.
5. ERA begins public relations activities, including a public hearing and consultations with Parliament, the Cabinet and political parties
6. ERA submits the proposed tariff change to the Regulatory Board for a decision
7. Dissemination of Decision to news media per law

Graph Showing the Tariff Review Process at the Energy Regulatory Authority



Recently the tariff review process has gone well. ERA emphasized public relations in 2005; the last tariff increase was in February 2005. ERA reports that there was no real resistance from the public. The increase of 8% (electricity) to 19% (heat) was accepted.

ERA had initially planned to increase tariffs in July 2006, but since the Energy Law is potentially under revision, there may be a suspension of tariff increases. Other issues relating to the financial health of the licensed companies, such as arrears and reduction of the interest rate of on-lending monies are being discussed. If these two issues are resolved, then the need for a tariff increase now will be reduced. By current law, licensees can request a tariff change every six months.

There is no uniform national tariff, although CES has a uniform end user tariff. Tariffs are set differently for CES, EES and WES. Wholesale tariffs for each CHP are governed by contract with the Transmission Company and are based on revenue requirements approved by ERA. There is a postage stamp rate for transmission.

Audits

They have introduced an important step in regulation with audits. They are performing regulatory audits of two generation companies. EPRC located the personnel and trained these auditors.

⚙ 15. The key issues ERA is dealing with include: rate design (two-part tariffs) and cross subsidization. They will be involved in changes to market design. These key issues should continue to be the primary focus of ERA tariff activities.

SECTION V: ASSESSMENT OF PROGRESS TO DATE

This section of the Assessment Report describes a process to evaluate the performance of ERA. It is designed to provide results that use internationally recognized evaluation tools. Thus the work of ERA can be measured by world standards, against indicators that are proven to produce better results for the power sector, such as increased generation capacity.

What makes an effective regulatory authority? EPRC has undertaken this assessment with the intention of enumerating the successes of ERA and defining those areas where improvement is warranted.

It makes sense to examine measures of effectiveness that have been used successfully in measurement of other regulatory authorities. It is useful if those measures have been applied, and if there is evidence of their value. These studies point to areas that make for successful results, which is especially useful for our purposes in Mongolia.

A. Methodology: Measures of Effectiveness

Jon Stern and Steve Holder, of the London Business School, published a landmark report about measuring effectiveness of electricity regulatory agencies in 1999¹⁴. In 2006, Jon Stern revisited this study and published an article that examined regulatory governance and realization of its expected impact on investment. Stern demonstrated a 15-20% average investment increase in electricity generation capacity for average performance on his 1999 indicators¹⁵.

Stern concluded that regulatory governance does matter. In the long-run (i.e. after about 10 years or more), best quality regulatory governance is associated with about 15-20% higher generation capacity per head. Each one point increase in the index implies 4-5% increase in generation capacity per head in long run

But, effects take time to build up. There was very little effect for the first three years, and even after five years, there was less than half the effect that was obtained after ten years. In other words, it takes time for the benefits of regulation to be observed. Stern found that the biggest single impact comes from having a regulatory law in place.

How should we interpret these results? The results mean that an average developing country with an average fixed effects score could expect enough extra investment to give 15-20% higher generation capacity per head after about 10 years

This would be with an average quality law, a regulator with average staffing levels, average country governance, etc – and an average (unobservable) fixed effects score. Countries with above average quality laws, staffing levels, country governance, etc could expect larger impacts than 15-20%. Countries with below average quality laws, staffing levels, country governance, etc should expect smaller impacts than 15-20%.

¹⁴ Stern, Jon and Steve Holder, “Measures of Effective Regulation”, World Bank, March, 1999.

¹⁵ Cubbin, J.S and Stern J., (2004), “Regulatory Effectiveness: The Impact of Good Regulatory Governance On Electricity Industry Capacity And Efficiency In Developing Countries”. AEI Brookings Joint Center for Regulatory Studies, June, 2004. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=695385

Cubbin and Stern say in the conclusion of their 2004 article¹, that “the key point is that regulatory agencies with better {scores} are:

- Less likely to make mistakes
- More likely to correct mistakes speedily
- Less likely to repeat mistakes
- More likely to develop procedures and methodologies that involve participants and develop good practice.”

He goes on to conclude that “all of these reduce uncertainties for commercially operating companies - particularly private and foreign companies. This is especially important to sustain and encourage long-lived, investments in highly capital-intensive industries at a reasonable cost of capital. As such, regulatory agencies, which have and maintain good governance, provide an effective underpinning for the operation of contracts as well as sound regulation of monopoly elements.”

So there is good evidence that the indicators for regulatory effectiveness chosen by Stern and Holder in 1999 are good measures. Above average performance on these indicators will result in above average performance on investment in electricity generation capacity.

B. Application of Methodology to ERA

Stern and Holder chose six obvious indicators to assess performance of regulatory agencies. These six are:

1. Clarity of roles and objectives
2. Autonomy of the regulator
3. Public Participation
4. Accountability of the regulatory
5. Transparency of the process
6. Predictability of outcomes

In addition to the six indicators above, Stern and Holder offered amplification of each indicator. Additional questions relating to each indicator were asked during the Assessment. These questions appear in the Evaluation and in the Appendix.

We proposed to assess the performance of ERA against these six indicators and the associated sub indicators. The purpose was to offer ERA and others operating in the energy sector suggestions on areas for improvement. ERA has accomplished much in their five years' of existence; this is not intended as a criticism of their fine work. Rather it is intended to provide information about how they and other key players in the energy sector measure up on each of these regulatory performance indicators and offer suggestions where they might make improvements.

This information will be vital to the efforts of Mongolia to attract several billion dollars in needed investment for the energy sector over the next decade. Evidence increasingly demonstrates the link between good regulation and increased investments, as we will see when

we look at Jon Stern's own assessment of his indicators in real regulatory agencies working to attract real investment capital.

EPRC prepared a PowerPoint presentation that described the evaluation methodology and the questionnaire. The presentation contained 24 slides that described the Assessment Matrix and provided explanation of the meaning of each of the six indicators. We met with Chairman Ganjuur to review the proposed methodology. Mr. Ganjuur made several changes and additions. He invited us to meet with the ERA leadership to complete the Assessment Matrix jointly at ERA. Four members of the EPRC Team and six members of ERA worked on this Assessment.

C. Assessment Meeting

EPRC Energy Team held an Assessment Meeting at ERA on Friday, June 23, 2006. The purpose of the meeting was to discuss the methodology we employed and the questionnaire we would use. The further purpose was to present the questionnaire. We offered instructions for completion. We discussed the scoring system so that everyone was clear what each response meant.

Attendees were Ganjuur Radii, Chairman, Damdinsuren Gungaarentsen and Myagmar, Regulator's Board, Khishigt Tamir, Head of the Legal, Information and Administration Department, Ganchimeg Mujaan, Head of Price and Tariff Department, and Munkhtulga Munkhuu, Head of Licensing Department. Horst Meineke, Amgalan Nordov and Mary Webster were present from EPRC Energy Team.

Methodology

An Assessment Matrix was designed for the six indicators from Stern and Holder. The Matrix appears in the Appendix. The matrix was used to score perceived performance by ERA on each of the indicators described above. Performance was assessed by the three ERA Regulators and by four professional energy staff of EPRC Project.

They stated that good performance on these indicators equals effective, sustainable regulation and will result in enhanced investment in electricity generation. We looked at ERA's performance 2001-2006 on each of the 6 indicators. Each indicator has 3 or 4 explanatory sub indicators, derived from the Stern and Holder report, and clarified for the Mongolian situation. This gives us 20 measures of effectiveness based on internationally recognized indicators

Scoring

The PowerPoint presentation also described the scoring system. We spent approximately one hour and fifteen minutes simultaneously reviewing the PowerPoint presentation and scoring the Assessment Matrix. We carefully explained what a top score would mean on each indicator and sub indicator. We posed questions that helped clarify and amplify the information in the presentation so that ERA had a full picture of the meaning of each question as it specifically related to them. They completed the scores for each indicator as we went along. EPRC also completed the scores. When we had finished, we were ready to gather the scores and tabulate them.

Possible scores ranged from zero to 5.00, with 5.00 being the best score and 0.00 being the worst possible score.

- 5.00 is perfect score
- 0.00 is bottom score
- 2.50 or better is above average performance
- 3.50 or better is very strong performance

- 4.00 or better is outstanding performance
- Scores above 2.50 indicate better than average performance and are expected to produce better than average investment in electricity generation capacity

D. Findings

ERA reviewed their conclusions together. They submitted their results to EPRC. We tabulated our conclusions together as well. Then we compared our scores with those of ERA.

Findings were remarkably similar among different scoring entities. This suggests that the assessment of ERA performance is consistent, and the conclusions are broadly shared. The results show a remarkable consensus about the strengths and weaknesses of the regulatory process in Mongolia.

The conclusion to be drawn is that significant results have been achieved by ERA in a short time, less than five years. Those indicators that described the work of ERA for which it was responsible according to law, namely the content indicators such as accountability (4.10), ERA scored very high.

On those indicators that described the work of ERA in conjunction with others in the energy sector, namely the governance indicators such as autonomy, ERA performed less well (3.12). This suggests that others in the energy sector besides ERA are performing less well in the regulatory arena. ERA has grasped their role and defined it. Some other participants are perceived to be less accepting and compliant with the regulatory process. This suggests a need for the new energy law to be very clear about the role of ERA and the regulated entities, and especially importantly, the role of the MoFE and MoF.

The findings show that improvements can be made in all areas measured. This is not unexpected. ERA is new. These are tough indicators. Regulatory commissions have existed in the USA for over 125 years, and in Europe for over 15 years. It is hoped that these results will enable the leadership in the energy sector, both inside ERA and outside ERA to see where improvements can be made in the content of regulation and the process of governance.

Perhaps the most significant finding is that ERA has outperformed other players in the energy sector. They have scored very well on transparency and public participation. Yet there are still perceived issues surrounding the role of the Ministry of Fuel and Energy and others. The Ministry continues to exert a strong influence in the power sector.

Here we examine ERA's performance on each indicator.

1. Clarity of goals: score: 2.90

The average score for clarity of goals indicators was 2.90 out of 5.00. ERA has performed slightly above average on this indicator. Where performance fell down was in the lack of clarity over the role of the Ministry. The Energy Law of 2001 assigns certain responsibilities to ERA and certain others to the State Central Administrative Authority. Lack of clarity in national legislation may be only one part of the issue here. Another part may be in the daily interaction between various participants in the energy sector, where lines of authority are not clear. There was also concern about the potential for political interference. It was noted that ERA has made very concerted efforts to be clear about their goals. However, others in the power sector also need to be clear about the goal of ERA, regulation, restructuring, and the

need to make policy changes sustainable. Only in this way will investors have the ability to predict outcomes of the regulatory process.

2. Autonomy: score: 3.12

The average score for the autonomy indicators was 3.12. ERA has performed above average here, and clearly have taken specific steps to demonstrate their autonomy in the energy sector. Where they encountered some lowering of the score was in the area of their budget, which many respondents felt did not fully accord ERA the autonomy it should have to provide for a sustainable energy regulatory process. Concern was raised about political input to the ERA budget and the potential harm this causes to the autonomy of ERA.

3. Public Participation: score: 3.70

ERA scored well above average on this indicator, and won especially high marks for their efforts to promote public participation through public hearings. Some respondents thought they could promote public participation more by being more responsive to public comments.

4. Accountability: score: 4.10

ERA scored very well on this indicator. 4.10 is a very high score for a regulatory authority that is only five years old. They were seen to hold themselves accountable, especially through publication of their very detailed Annual Reports. The less than perfect score is attributable to the fact that ERA is new.

5. Transparency: score: 3.83

ERA scored well on this indicator. They scored well for the transparency of their decisions and their orders. They scored slightly less well on the detail of documents that are available in the public domain. Especially for state owned enterprises, there should be no information that is confidential or withheld from the public domain.

6. Predictability: score: 3.71

ERA scored well on this indicator. ERA has made a concerted effort to operate in a consistent manner. However, where there is a potential for political interference in regulation of the power sector, outcomes will not be fully predictable. This will make investors less confident of their ability to make successful investments in the power sector in Mongolia.

Detailed results of the Assessment Exercise appear on the next two pages.

✿ 67. There will need to be more policy dialogue, probably hosted by ERA, to promote further restructuring in the power sector. ERA is to be commended for the work they have done to date on this subject, especially surrounding development of the electricity market. Further work needs to be done.

✿ 17. We urge ERA to administer an Assessment similar to the one used here, for the regulators and key staff, on an annual basis, to provide them with insight into areas of strength and weakness.

**EVALUATION OF REGULATORY EFFECTIVENESS
ENERGY REGULATORY AUTHORITY
USAID/EPRC MONGOLIA**

Please score each indicator as follows 5=excellent, 4=very good, 3=good, 2=fair, 1=poor and 0=failure		
Outside Indicators: Governance		
Indicator	Sub Indicator	Joint Score
1 Clarity of Goals	Average Score for Clarity of Goals Indicators	2.90
	1.1 Does the primary legislation set out clear definition of ERA's functions and duties?	3.66
	1.2 Is ERA clearly responsible for regulating licensed companies or are there any functions carried out jointly, or any that are ambiguous, between ERA and those of the relevant Ministries?	3.08
	1.3 Is it clear what is the role of the Ministries and what is the role of ERA? Is there political interference?	2.54
	1.4 Is appointment and dismissal clearly stated in the Law? Is there political interference?	2.29
2 Autonomy	Average Score for Autonomy Indicators	3.12
	2.1 Are the members of ERA appointed by the Prime Minister and only dismissed by Law?	3.54
	2.2 Does ERA have independent financing over which it has sole control?	2.50
	2.3 Can ERA issue decisions on tariffs or licenses without effective intervention from the Ministries or Parliament?	3.33
3 Public Participation	Average Score for Participation Indicators	3.70
	3.1 Does ERA formally involve regulated firms, other industry firms, consumers and others on major decisions?	3.83
	3.2 Are consultation responses made public (either in full or in a summary of responses)?	3.00
	3.3 Does ERA offer opportunities for public hearings on key issues such as tariffs and licenses?	4.25
Composite Score All Governance Indicators		3.00

PERFORMANCE ASSESSMENT MATRIX

Please score each indicator as follows 5=excellent, 4=very good, 3=good, 2=fair, 1=poor and 0=failure		
Inside Indicators: Content		
Indicator	Sub Indicator	Joint Score
4 Accountability	Average Score for Accountability Indicators	4.10
	4.1 To whom is ERA accountable (government, parliament, courts?)	4.20
	4.2 Does ERA file reports with elected officials regarding performance of the regulatory body?	4.00
	4.3 Is there a facility for judicial review under primary law?	4.00
	4.4 Is there a formal mechanism for regulated firms to challenge regulatory decisions?	4.18
5 Transparency	Average Score for Transparency Indicators	3.83
	5.1 Are major regulatory documents (eg licenses) in the public domain?	3.63
	5.2 Does ERA publish major decisions (or advice)?	3.92
	5.3 Is the evidence that ERA uses to make their decisions available for examination free of charge by interested parties or the public?	3.92
6 Predictability	Average Score for Predictability Indicators	3.71
	6.1 To what extent are regulatory principles (on Tariffs, licenses, customer service) set out formally and publicly?	3.75
	6.2 Does ERA follow their published methodologies and past precedence or are there frequent changes in personnel and direction?	3.79
	6.3 Is there a published timetable of regulatory events every year?	3.60
Composite Score All Content Indicators		3.88
Overall Performance	Composite Score of All Indicators	3.56

SECTION VI: IMMEDIATE WORKPLAN ISSUES

A. Work Plan of 2006

Current activities for ERA involve three major items, benchmarking, tariff methodology and market design. Presently there is a Single Buyer Market with plans to move to a bilateral contract market shortly. ERA has promulgated rules for a Spot market; further rules have been drafted and are under consideration; they will be necessary to move the market forward.

Decision makers have not reached a final decision on market design. The policies adopted by ERA in 2006 and beyond will necessarily be influenced by passage of the amended energy law. The Government's policy decisions on market design, tariffs and licensing frameworks going forward will have a critical impact on investment in the energy sector. Currently ERA has been involved in dialogue about the proposed energy law amendment.

Each year the ERA begins with a work plan for the year. Approved plans become Order 1 for the Year. The Chairman of ERA submits the Report to the Ministry. This year the plan includes a number of key measures:

1. Work Plan examples:
 - a. Review & decide upon expected license requests
 - b. Tariff proposals expected from Licensees
 - c. Number of Quarterly Reports that will need to be reviewed.
 - d. Goals they wish to reach
2. Market design examples:
 - a. Preparation for transfer from the Single Buyer Model to the Bi-Lateral Contracts Market Model (which will take place in 2008)
 - b. Market Rules were drafted in early 2006 and have undergone thorough discussion
3. Tariffs: Implement the 2-part tariff
4. Accounting standards: international accounting standards were implemented, following the development and training on a uniform system of accounts, and they trained staff on how to use the system; with much help from EPRC
5. Receivables: Debts and receivables of companies were reviewed and revised steps were implemented to reduce technical and non-technical losses; data on the success of this effort will appear in their 2006 Annual Report
6. Performance monitoring: plan to report on performance of all 58 licensees
 - a. In 2005 they issued a report and rating of 17 licensed companies
 - b. They approved a new methodology of rating the companies in 2006
 - c. They conducted a study of the emergency outage rates, SAIDI, SAIFI and CAIDI; they think the rates are too high
 - d. They want to find out why by beginning analysis of data and inquiring of licensees.
7. Their web site has been kept current in Mongolian; the English site needs updating
8. They regularly issue notices of decisions to the press, and they publish ads about upcoming meetings
9. They will soon have a fiber optic interconnection for internet

We discussed the fact that they are making progress and staff is working on the following issues:

- Amended energy law
- Market design
- Benchmarking
- Public hearings
- Dispute resolution
- Tariff rules
- Consumer protection
- Docket management
- Winter disconnection rule
- Consumer complaints

B. Current Priorities

The three Board members share a common set of current priorities. First, they intend to implement the 2-part tariff. They want to approve the final methodology to make this tariff design effective. Their second priority is market rules. ERA has developed a draft set of market rules for the current market that are in place. MoFE has postponed implementation of any further changes in market design or sector restructuring, but it is an issue that will return to ERA next year or in 2008.

There have been two recent new Ministers of FE, and they have brought new staff. The current Minister deserves to be briefed on key issues affecting restructuring and regulation so that he become supportive of the regulatory process. ERA needs to articulate their mission clearly in order to help generate and maintain support in the energy community for their work and their continued existence.

Another key issue is the independence of ERA and also the independence of the ERA Board members. ERA will want to continue to build a collegial atmosphere among the Board. With staggered terms, there will likely be new members from time to time; integrating them into the regulatory process will be an important step in ensuring that ERA functions well.

On a recent visit to the western provinces one ERA observer noted that the Energy Law is not being implemented as quickly outside Ulaanbaatar. Usually the Governor of the Aimags serves as head of the Regulatory Board. The prices are being kept at the 1987 level in some areas, and the licensees are not getting the tariffs/revenues they need.

The aimag boards also may need looking at. It will probably be necessary to bring regulation of the aimags under the jurisdiction of ERA. Duplication of resources and expertise is wasteful, especially given the small size of Mongolia. Consolidation makes economic and practical sense.

⚙ 18. Over time, regulation of generation, transmission and distribution in the aimags should come under the jurisdiction of ERA. One national regulatory authority is sufficient for Mongolia; duplication of resources and personnel is wasteful. ERA must have sufficient budget to accomplish this.

C. Commentary


The current work plan and annual reporting system of ERA is remarkably transparent. It clearly follows international best practices for annual work plan development and

implementation. For example, the tariff and licensing functions are well described and targets have been realized.

The work plan has been implemented so as to carry out the work required by law. Where regulations had not been developed, ERA concentrated in developing and promulgating new regulations, notably for customer service. Interviews with SPC officials indicate that the work plan has been well executed as far as ownership considerations are viewed.

Short Term Strategy to 2008

- **The goal is for EPRC to provide groundwork and framework by 2008 to accomplish the Long Term Vision.**
- Build consensus among energy sector stakeholders/Master Plan
- Highly focused actions in the energy sector
 - Regulation
 - Modern tariff system
 - Market design
 - Corporate governance
 - Benchmarking/Performance Measurement
 - Energy Law revision
 - Improve investment climate



Short term strategy through 2008 as designed by EPRC. The short term strategy is focused on laying the groundwork and framework by 2008 to accomplish the long term vision for 2015 and beyond, namely supporting sustainable institutions capable of driving the investment that is needed for the energy sector.

ERA has accomplished as much as they have, in part, because they have good planning in place. For the short term, there are acceptable planning practices in place. For the longer term, they are ready to engage in more rigorous, integrated planning for themselves.

⚙ **19. One obstacle to their ability to influence change in the power sector relates more to outsiders than to ERA itself. With future planning efforts, they will need to gain more support from others in the power sector to realize a fully sustainable, viable power sector.**

⚙ **20. The Ministry of Fuel and Energy should support efforts to create a fully independent regulatory process for the power sector in Mongolia.**

SECTION VII: LONGER TERM WORKPLAN ISSUES

It is anticipated that changes in the Mongolian Energy Law will have a large impact on the energy sector (which is why an amended law appears to be needed). Short term impacts have been discussed above. Also above we talked about the huge investment needs facing Mongolia.

One key question relating to longer term issues is how closely ERA follows the law, be it the current law this year or a new law in subsequent years. How well is ERA organized to address critical issues such as increased investment capacity and affordable tariffs with reliable service to customers. Can ERA lead others in the energy sector through the reforms and restructuring anticipated in the next few years?

In part, it will be the responsibility of ERA to ensure that the desired changes come about and the needed expansion takes place in a way that equitably and sustainably balances the needs of investors against the desire of consumers to have prices kept as low as possible.

Common practice suggests that an ERA work plan, especially a long term work plan, be developed collaboratively with the key participants in the energy sector, including the SPC, MoFE and MoF, plus the regulated companies. All the same, while these participants ought to provide input, they should not be the final arbiters of an ERA work plan. This should be the product of ERA.

If the long term goal is to provide for a sustainable energy sector capable of attracting investment to expand capacity for economic growth, then the Workplan of ERA needs to reflect that. So far ERA has built a framework for regulation that is admirable. However, the current framework will not be sufficiently robust to carry them or Mongolia to where they need to be in one decade from now.

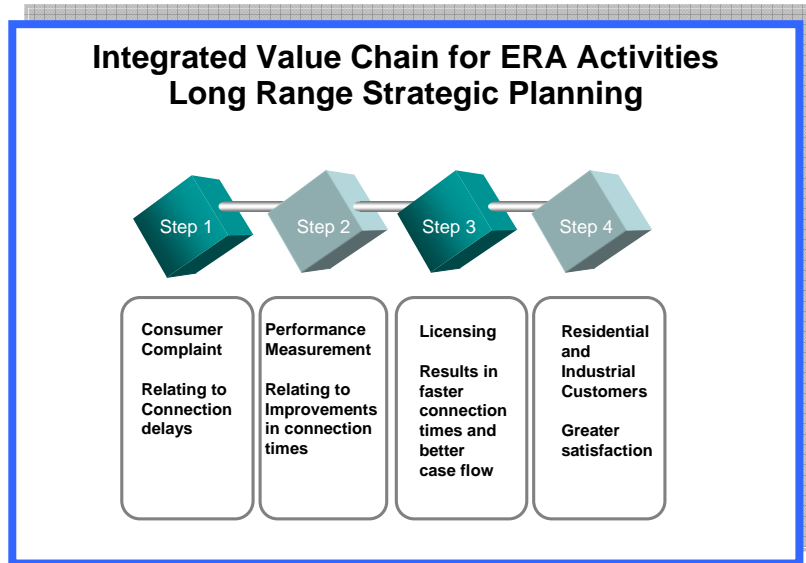
A good Strategic Plan will establish goals and objectives for the authority and its staff to pursue during the next four to five years and beyond. The focus of the authority in its decision making process has necessarily been on short-term issues during the first five years, not the longer range strategic planning and goal-setting capability that is critical to meet the challenges of Mongolia's energy sector. By developing a long range strategic plan, ERA will demonstrate transparently its intentions for the energy market in Mongolia over the next five years.

✿ 21. A Workplan for ERA, which is based on responsibilities assigned by the amended law, should be started as soon as an amended law is enacted.

ERA should focus long term planning on efficient pricing schemes and development of an integrated benchmarking and reporting system that enables the regulated companies to measure and deliver higher performance for consumers and industry. There are currently a number of critical activities taking place at ERA that can be integrated together to make them better able to promote performance improvements at regulated companies.

Once the benchmarking program is fully implemented, and the data collected in the benchmarking reporting scheme is analyzed, it will be possible to determine the root cause of identified performance problems. The companies are in position to estimate the cost of addressing performance failures or shortfalls and to achieve specific performance targets. Thereafter the companies together with ERA can determine appropriate expenditures to meet appropriate performance targets.

A graphic description of this value chain is shown below. This is one example of a value chain. Step 1 is measurement of customer complaints, as is now being done at ERA. Step 2 is establishment of a benchmarking system that is integrated into all the activities at the licensed companies, as is now being developed. The behavior change needs to be based on reliable data. Root cause analysis needs to be done to see what behavior can be changed at what cost. Realistic targets need to be set. Step 3 involves incorporating the new performance standards into the operating licenses of regulated companies and into transparent performance agreements. Then, as part of the benchmarking system developed in Step 2, the new behavior needs to be measured and the results reported. When properly done, this results in improved customer service and greater customer satisfaction, which is Step 4.



Strategic planning based on value chain analysis such as that shown above is a practice that ERA is ready for. Most of the pieces are there now, as they have undertaken many of the requirements needed for the work described above. If we take this one step further, to, say, Step 5, then we are looking at a set of integrated activities at ERA which ensure that all of their efforts are targeted toward accomplishing several specific goals. Step 5 will include several "value chains. Step 5 will focus on integrated planning for ERA combined with feedback from performance measurement, tariff changes and customer satisfaction levels.

For example, if we look at the diagram above, it is clear that several different activities are involved, such as customer service, licensing and tariffs. These functions are now performed by different departments at ERA, as they properly should be. However, there are significant linkages between these functions, and ERA will benefit from tying them together more tightly.

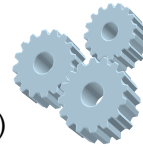
Now, if we look at the diagram below, it is clear that these once different activities are really working toward one integrated set of activities. Thus, if ERA were to incorporate the functional linkages from different activities at ERA into one strategic effort, then there would likely be more prepared to deliver measurable, positive results, and more assurance that the work of ERA is ultimately sustainable to face the large challenges ahead.

Functional Linkages ERA Strategic Planning

- Linked together: licenses, tariffs, contracts,
- performance targets and customer service

Effective regulation
requires consistency in:

- licensing (to operate facilities)
- contracting (to buy & sell “product”)
- performance (to improve efficiency/lower costs)
- tariff setting (to recover costs)



⚙️ **22. ERA should undertake a comprehensive strategic long range planning effort that integrates their various licensing, tariff and customer service activities, once the new Energy Law has been enacted.**

⚙️ **23. A Regulatory Affairs Department should be established within the licensed companies. While there is clearly a team of people in place who are working on regulatory issues, the capacity of regulated companies will need expansion, and there will need to be more focus on cooperation with regulatory initiatives and the ERA.**

SECTION VIII: TRAINING AND CAPACITY BUILDING

Training

The Chairman pays careful attention to capacity building for the ERA staff. Lots of staff have had training opportunities both domestically and internationally. There are 2 staffers with doctorates, 13 with masters degrees, 3 Mongolian consulting engineers, 3 engineers and 3 accountants who are CPAs. There are also support personnel. They have an Annual Training Plan.

One staff member commented that he has some concerns about the capacity of the staff as they are all specialists in one specific area, such as heat, transmission or licenses, for example. He says that when one person is out sick, there is no one else on the staff who can perform his job. Thus he wants more cross-fertilization among the staff to strengthen the work quality. Their scope of work has risen dramatically in 5 years. For example, there are now 58 licensees, up from 18 recently. He says more training will be needed to meet this challenge of expanding work load.

We discussed training with a variety of participants. Current plans are the result of a training scheme developed jointly by ERA and EPRC. This is a useful, well thought out document reflecting care and consideration to training and capacity requirements.

ERA also wants support regarding what the capacity needs are, what areas need augmentation. The Chairman says it is a priority to upgrade the skills of the officers of ERA. For example, there recently was training for the staff on the culture of communications. ERA is working to upgrade the English skills of staff as the language barrier is a problem for some. Recently ERA have sent two people to the Management Academy of Mongolia. They have sent two people to international training such as IP3 and ERRA. They have sent four people to PURC. ERA also provides training for lawyers and economists. They develop in-house training which EPRC can assist with, in the form of workshops, presentations and OJT.

The Chairman wants international exposure for the staff. This is critically important, as he must be able to provide the vision and ideas to bring about change. He wants to develop a training plan that will go beyond 2006 and 2007, and we heartily agree. He would also like to see a discussion of training accomplishments and needs going forward. There is a continued need for good training to ensure a stable, professional staff for ERA.

Others agreed with this point and reemphasized that the key issue is continued support from USAID.

✪ 24. There should be a long term training plan, based on exploration of all local and international training opportunities, and reflecting the new responsibilities likely to be assigned in the amended Energy Law.

ERA will be adding broadband internet access to their facility in the near future. This will enable staff to familiarize themselves with international literature relating to energy regulation quickly and frequently.

✪ 25. Training plans should consider the many opportunities for distance learning courses once the broadband capacity has been updated, such as the program initiated very recently by ERRA. There are numerous good online courses and more being developed all the time; these often are of the very highest quality.

SECTION IX: RECOMMENDATIONS

We made very positive findings relating to the performance of ERA. We discovered broad support for the work ERA has accomplished. Furthermore, when measured against international best practices, using internationally recognized methodology, we found ERA to score very well on content issues and well on governance issues.

We observed that performance of other participants in the power sector was not viewed as highly. There are a number of steps that can be taken to improve the regulatory process by participants outside of ERA. The first set of recommendations here relate to new energy legislation and other players in the energy sector. The second set of recommendations are internal to ERA.

Recommendations relating to new energy legislation and energy sector participants outside ERA:

- ✧ 1. Many respondents emphasized that the key issue is continued support from USAID for reforms of the energy sector.
- ✧ 2. Current efforts to ensure sustainability for changes in the power sector need to be strengthened by enactment of an amended Energy Law.
- ✧ 3. Current efforts to ensure sustainability for changes in the power sector are vitally important to the ability of Mongolia to attract urgently needed investment to the energy sector. There should be continued effort to ensure a sustainable, independent regulatory authority.
- ✧ 4. If it appears that proposed new energy legislation will not move the power sector forward, then efforts to pass that legislation ought to be stopped.
- ✧ 5. ERA will need to track the amended energy law closely to ensure that they have sufficient financial and human resources to carry out the law and those organizations that approve the ERA budget (if any) must also recognize this need.
- ✧ 10. ERA will want to consider principles of corporate governance as a regulatory instrument in the coming months. Stakeholders, including SPC and ERA should consider establishing a Working Group on Corporate Governance.
- ✧ 14. EPRC will want to ensure that there is no language in any proposed new legislation that diminishes their authority over the critical area of licensed company performance improvement.
- ✧ 15. Two key issues ERA is dealing with include: rate design (two-part tariffs) and cross subsidization. They will be involved in changes to market design. These key issues should continue to be the primary focus of ERA tariff activities.
- ✧ 16. There will need to be more policy dialogue, probably hosted by ERA, to promote further restructuring in the power sector. ERA is to be commended for the work they have done to date on this subject, especially surrounding development of the electricity market. Further work needs to be done.
- ✧ 18. Over time, regulation of generation, transmission and distribution in the aimags should come under the jurisdiction of ERA. One national regulatory authority is sufficient for Mongolia; duplication of resources and personnel is wasteful.
- ✧ 19. One obstacle to their ability to influence change in the power sector relates more to outsiders than to ERA itself. With future planning efforts, they will need to gain more support from others in the power sector to realize a fully sustainable, viable power sector.

⊗ 20. The Ministry of Fuel and Energy should support efforts to create a fully independent regulatory process for the power sector in Mongolia.

⊗ 23. A Regulatory Affairs Department should be established within the licensed companies. While there is clearly a team of people in place who are working on regulatory issues, the capacity of regulated companies will need expansion, and there will need to be more focus on cooperation with regulatory initiatives and the ERA.

Recommendations relating to ERA performance

⊗ 6. There are more opportunities to use the ERA website than are currently being taken advantage of, especially in English. The English language version of the website should be updated more regularly to reflect the many recent accomplishments of ERA.

⊗ 7. ERA should continue their efforts to benchmark performance of regulated, licensed companies, including the development of performance agreements with licensees.

⊗ 8. ERA should designate one person from the ERA staff as the person responsible for media relations.

⊗ 9. ERA should develop an action plan for responses to customer complaints that are raised at public hearings.

⊗ 11. ERA is required by law to set tariffs. This is one of the most critical functions of any independent regulatory authority. Any effort to change national legislation diminishing ERA's role as the tariff setting authority ought to be stopped.

⊗ 12. ERA should prepare a Customer Service Manual. The Manual should include guidance on appropriate responses to customer complaints raised at public hearings, recognizing the duty of regulated companies to meet the needs of their customers.

⊗ 13. Public hearings are an important element in the promotion of public participation and the building of consensus for reform of the energy sector; ERA should continue outreach efforts to the residential consumers.

⊗ 14. ERA should integrate the benchmarking reports with the license monitoring activities in such a way as to provide a uniform set of data usable across the ERA for licenses, tariffs and benchmarking activities.

⊗ 16. We urge ERA to administer an Assessment similar to the one used here, for the regulators and key staff, on an annual basis, to provide them with insight into areas of strength and weakness.

⊗ 21. A Workplan for ERA, which is based on responsibilities assigned by the amended law, should be started as soon as an amended law is enacted.

⊗ 22. ERA should undertake a comprehensive long range strategic planning effort that integrates their various licensing, tariff and customer service activities, once the new Energy Law has been enacted.

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⊗ 25. Training plans should consider the many opportunities for distance learning courses once the broadband capacity has been updated, such as the program initiated very recently by ERA. There are numerous good online courses and more being developed all the time; these often are of the very highest quality.

SECTION X: CONCLUSION

ERA has achieved a very high level of competency in its short history. They have developed a full set of rules; they have issued tariff orders and licenses and they are addressing a broad range of customer complaints. The Assessment showed that ERA has outperformed other participants in the energy sector in Mongolia on six key measures of effectiveness. ERA scored well or very well on all of the measures tested.

The conclusion to be drawn is that significant results have been achieved by ERA in a short time, less than five years. Those indicators that described the work of ERA for which it was responsible according to law, namely the content indicators such as accountability, ERA scored very high.

Nevertheless, there are significant opportunities for enhancement of the energy sector through a strengthened and more advanced regulatory system. A key next step will be to link the many activities of ERA together into an integrated process that pushes the regulated companies to deliver more efficient, higher quality, more reliable and affordable energy to Mongolian consumers and industry.

If, as stated, the goal of the energy sector in Mongolia is to provide sustainable and reliable heat and energy to Mongolia and meet future energy needs to enable expanded employment and economic growth, then the continued viability of ERA is critical. The in-process amendment of the Energy Law MUST ensure that such is the case.

There is a close link between private investment in infrastructure and transparent regulation of infrastructure industries, as we demonstrated in this report. Investors will be more willing to risk their capital if regulation is transparent, their risks are measurable and outcomes are predictable as a result.

Policy initiatives in the Government of Mongolia that would diminish the independence of ERA in setting tariffs, market rules and license performance, will diminish the opportunities to attract foreign private capital to the energy sector of Mongolia. Policies that fail to advance the transparency, independence and legitimacy of the regulatory process will contribute to the failure of Mongolia to attract the capital required by the energy sector. This would mean that the much needed investment, totaling billions of US dollars, is much less likely to be forthcoming.

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2. Autonomy		
	Are the members of ERA appointed by the Prime Minister and only dismissed by Law?	
	Does ERA have independent financing over which it has sole control?	
	Can ERA issue decisions on tariffs or licenses without effective intervention from the Ministries or Parliament?	
3. Public Participation		
	Does ERA formally involve regulated firms, other industry firms, consumers and others on major decisions?	
	Are consultation responses made public (either in full or in a summary of responses)?	
	Does ERA offer opportunities for public hearings on key issues such as tariffs and licenses?	

PERFORMANCE ASSESSMENT MATRIX

Please score each indicator as follows 5=excellent, 4=very good, 3=good, 2=fair, 1=poor and 0=failure		
Inside Indicators: Content		
4. Accountability		
	To whom is ERA accountable (government, parliament, courts?)	
	Does ERA file reports with elected officials regarding performance of the regulatory body?	
	Is there a facility for judicial review under primary law?	
	Is there a formal mechanism for regulated firms to challenge regulatory decisions?	
5. Transparency		
	Are major regulatory documents (eg licenses) in the public domain?	
	Does ERA publish major decisions (or advice)?	
	Is the evidence that ERA uses to make their decisions available for examination free of charge by interested parties or the public?	
6. Predictability		
	To what extent are regulatory principles (on Tariffs, licenses, customer service) set out formally and publicly?	
	Does ERA follow their published methodologies and past precedence or are there frequent changes in personnel and direction?	
	Is there a published timetable of regulatory events every year?	