



EPRC MONTHLY NEWSLETTER

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Energy Regulatory Authority begins implementation of two-part tariff system for electricity purchases from generating companies

Culminating two years of detailed analyses and preparations, the Energy Regulatory Authority (ERA) announced the implementation of a two-part tariff for purchases of electricity from generating companies, effective 1 May. The two-part tariff governs payments to generating companies for electricity delivered to the electricity transmission system for further distribution to retail consumers.



A two-part tariff has many advantages over the previous one-part tariff including:

- Enabling economic dispatch leading to reduced pollution and lower electricity bills for consumers
- Fostering continued improvement in generator efficiency, leading to further reductions in pollution and electricity bills for consumers
- Promotion of improved reliability leading to fewer power interruptions to consumers.

Economic Dispatch

Economic dispatch refers to the practice of operating a coordinated system so that the lowest-cost generators are used as much as possible to meet customer demand, with more expensive generators brought into production as loads increase.¹ More specifically, economic dispatch is the operation of

¹ This section is based on excerpts from *The Value of Economic Dispatch*, A report to Congress Pursuant to Section 1234 of the Energy Policy Act of 2005, prepared by United States Department of Energy, November 7, 2005 (see website: <http://www.oe.energy.gov/DocumentsandMedia/value.pdf> .

generation facilities to produce energy at the lowest cost to serve consumers reliably, recognizing any operational limits of generation and transmission facilities.

Economic dispatch benefits electricity customers in a number of ways. By seeking the lowest cost of energy production consistent with electricity demand, economic dispatch reduces total electricity costs. To minimize costs, economic dispatch typically increases the use of the more efficient generation units, which can lead to better fuel utilization, lower fuel usage, and reduced air emissions that would result from using less-efficient generation. Retail customers benefit from reduced pollution and lower electricity bills when the savings are passed through in retail tariffs.

Two-part generation purchase tariff

A well-designed two-part tariff will enable the National Dispatch Center (NDC) to dispatch generating stations on the basis of lowest cost (i.e., on the basis of economic merit order) while providing generating companies with the opportunity to recover their full revenue requirement.

Further, a two-part tariff provides incentive to generating companies to improve operating performance and production efficiency while ensuring a fairer allocation of risk between the generating companies and consumers. It rewards generating companies who are able to improve performance through increased revenues and penalizes generating companies whose performance deteriorates through reduced revenues.

A two-part tariff recognizes that a generator provides two services: energy and reliability, that is, the ability to deliver energy when called upon. Energy relates to the provision of a useful commodity (i.e., electrical energy), while reliability relates to the provision of uninterrupted service; i.e., the generator is able to provide energy when dispatched by the NDC. The two-part tariff therefore has two components:

- 1) An energy charge for recovery of the generator's energy production costs
- 2) A capacity charge for recovery of the generator's fixed costs; i.e., all costs that are not recovered in the energy charge.

A generator's energy production costs include all costs that vary with changes in energy production, specifically, primary fuel costs (coal in Mongolia) and the component of operation and maintenance costs that vary with production; i.e., lubricating oils, coal waste disposal, etc. Under a two-part tariff, the NDC is free to dispatch on the basis of economic merit order without concern about the generator's revenue requirement because a generator is indifferent to its level of dispatch – if it is dispatched more than forecast, its costs increase proportionally with the increase in its revenues. Likewise, if dispatched less than forecast, the generator's costs decrease proportionally with the decrease in its revenues.

Improved efficiency and performance is encouraged in a two-part tariff through the use of benchmarks rather than simply passing all

costs through directly to consumers. Benchmarks are established on the basis of historical performance (perhaps averaged over the past three years), and performance of similar generating units, both internal and external to Mongolia. In this way, a generating company can increase profits if it exceeds the benchmarks. Conversely, if a generating company falls short of the benchmarks, it will absorb the revenue loss rather than consumers. This is consistent with a competitive market where the best performers generally have higher profit margins.

The two-part tariff is being implemented on a trial basis in order to provide NDC and the generating companies experience with dispatch, metering and billing under the two-part tariff. Once confidence and experience are gained, further improvements to the tariff design will be made to ensure its full benefits are realized, including economic dispatch and promotion of improved efficiency and reliability performance by the generating companies.

The project has been assisting the ERA with design and implementation of the two-part generation purchase tariff and will continue to provide assistance with improvements in the future.

Workshop on Joomla! Mongolian Edition held

Twenty-nine webmasters from government agencies participated in a one-day, hands-on workshop on the Joomla!Mongolia Edition Content Management System (CMS) held on 20 May at the Information Technology Park.

The project developed and launched a beta version of the Joomla!International Edition CMS in June 2007. With the Information and Communications Technology Authority (ICTA), the project also launched a localized version (full Mongolian language support) of Joomla!International Edition: Joomla!Mongolia Edition CMS at the same time. After six months of intensive publicly-supported testing and debugging, the project assisted the ICTA with the official release of a stable version of Joomla!Mongolia 1.0 in December 2007, under its original GPL license for general public availability. Joomla!Mongolia Edition 1.1 was released in March 2008 to incorporate security fixes of Joomla! 1.0.15.



The International and Mongolian editions of Joomla! were developed to address English proficiency and budgetary constraints of GoM agencies running public information websites. Originally developed for the Mongolian Tax Authority (MTA) website, the Joomla!Mongolia Edition content management system (CMS) has found wide applicability in GoM websites and other websites. Currently, some 1,360 Mongolian websites use Joomla!Mongolia Edition.

Mongolian websites using Joomla! Mongolian Edition CMS

As of the end of May, websites using Joomla!Mongolia Edition comprised:

- Forty-eight active websites from GoM agencies and ministries
- Eight of these were deployed with project support
- A total of 1,360 websites, including the above.

The MTA and the Open Government websites were redesigned using Joomla!Mongolia Edition.

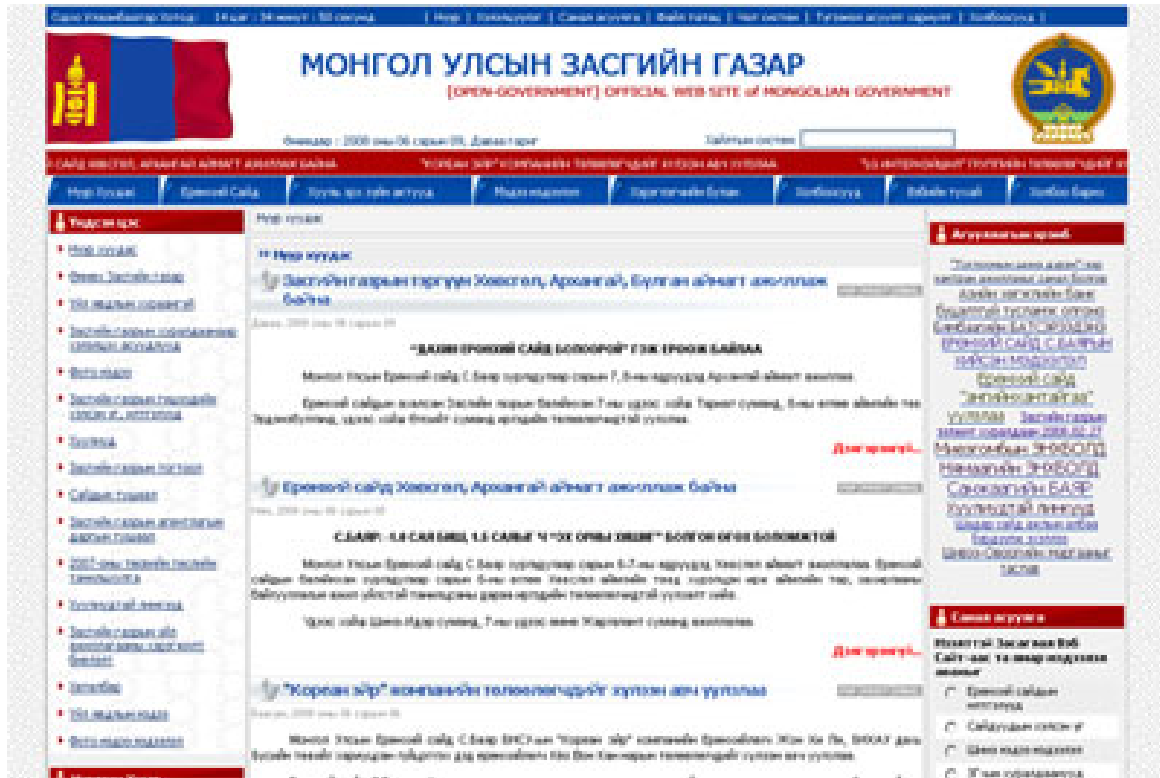
Similarly, the Ministry of Foreign Affairs was also redesigned with the tools provided in the Joomla!Mongolia Edition.

Websites using Joomla! International Edition CMS

Websites using Joomla!International Edition comprised:

- A total of 6,550 websites
- Twelve different language “localizations” or conversions as follows:

- Mongolia (Official website – www.joomla.gov.mn)
- Thailand (www.joomlacorner.com)
- Vietnam (www.joomlavietnam.org)
- Bosnia (www.bhoomla.com)
- Czech Republic (www.joomlaportal.cz)
- Slovakia (www.joomla.sk)
- Hungary (www.joomla.org.hu)
- Poland (www.joomla.pl)
- France (www.joomlafrance.org)
- Germany (www.joomla.de)
- South Africa (www.joomla.org.za)
- Spain (www.joomlaspanish.org)



Odyssey’s Mongolia Guide and Companion to highlight new tourist circuits

From 27 May through 3 June, Carl Robinson, the managing editor and writer of the 600-page *Mongolia Guide and Companion* Odyssey book, and an EPRC team traveled to Uvurkhangaï, Bayankhongor, and Umnugobi aimags to explore natural and man-made attractions that have not been extensively highlighted in other guide books on Mongolia before.

During the trip, the team found new routes that connect the Tsagaan Aguu (i.e. White Caves) where early humans lived and Bichigt Khad, an incredible conglomeration of petroglyphs dating back to the Bronze age in Bayankhongor aimag to Khermen Tsav in Umnugobi aimag that holds deposits of dinosaur fossils.

Only a few tour operators who come from the region have marketed this tourism circuit. Popularization of this new route that stretches for 2,600 km and encompasses the Tuv, Uvurkhangaï, Bayankhongor, and Umnugobi aimags will help highlight the Bayankhongor aimag and decrease the pressure from tourist traffic to Bayanzag, otherwise known as the “Flaming Cliffs” that Roy Chapman Andrews helped put on the map in 1923.



The new edition of the *Mongolia Guide and Companion* is currently scheduled for publication in 2009 and project partnering with Odyssey is part of on-going efforts to promote new tourist circuits in Mongolia.

This Newsletter is a monthly electronic publication of EPRC project activities. Comments, suggestions, and requests for inclusion or deletion from our mailing list can be forwarded to: Editor, EPRC Newsletter, by e-mail fbertoli@eprc-chemonics.biz or fax: (976-11) 32 78 25.

