

Supplement to
***ELECTRICAL INDUSTRY OF BURMA/MYANMAR* (Fourth Edition)**

Articles for January 2013

This is the ninth in a series of supplements to the fourth edition of *The Electrical Industry of Burma/Myanmar* which was published in April 2012. Approximately 350 cross-linked articles in the original cover many aspects of the industry including the development of the hydro and thermal power resources of the country, the increasing intervention of foreign and national companies in this economic sector, the production of electrical and electronic goods, government plans and regulation of the industry, the development of the national power grid and alternative and sources of electricity, among others. This supplement covers articles published in January, 2013. The fourth edition of the compendium can be accessed using the following URL:

<http://www.burmalibrary.org/docs2/ELEC-Burma-4th-edition.pdf>.

Previous supplements for April-May 2012 through to December 2012 are available at

<http://www.burmalibrary.org/docs13/Elec-Sup-April-May2012.pdf>,

<http://www.burmalibrary.org/docs13/Elec-Sup-June2012.pdf>,

<http://www.burmalibrary.org/docs13/Electricity-Sup-3July2012.pdf>

<http://www.burmalibrary.org/docs14/Elec-Sup4-August-2012.pdf>.

<http://www.burmalibrary.org/docs14/Elec-Sup5-Sept-2012-red.pdf>

<http://www.burmalibrary.org/docs14/Elec-Sup-Oct-2012-red.pdf>

<http://www.burmalibrary.org/docs14/Elec-Sup-Nov-2012-red.pdf>

<http://www.burmalibrary.org/docs14/Elec-Sup-Dec-2012-red.pdf>

Note that the titles of some of the articles included in the supplements have been altered to indicate with more precision the contents of the item or article. Summaries of some of the articles are included.

Gas-fired generators from Thailand's EGAT shipped to Myanmar

Myanmar News Agency, 30/01/13. Edited. From p. 16 of the print edition of NLM on 31/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-31.pdf>

A gas-fired generator shipped on 26 January by EGAT of Thailand is expected to arrive at the Asia World jetty on 22 February. The shipment follows an agreement signed by the Energy Ministry of Thailand on the 29th of October to supply two 120-MW gas-fired generators to Myanmar. The second generator is expected to arrive at the port of Yangon on 14 March. Both generators will be installed by the Thai STFE Company in cooperation with Myanma Electric Power Enterprise at the campus of the Ywama power plant.

Power summit launched in Yangon

Myanmar News Agency, 30/01/13. Edited and abridged. From p. 9 of the print edition of NLM on 31/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-31.pdf>

The Myanmar Power Summit organized by the Ministry of Electric Power and the Center for the Management of Technology (CMT) of Singapore got underway at the Sedona Hotel in Yangon today with an addresses by CMT Managing Director G. Seelan and Union Minister for Electric Power Khin Maung Soe. The minister said that international assistance and foreign investments in the electricity sector were necessary as the core to the economic growth of the nation. The summit would allow electrical experts from at home and abroad to get to know officials from the ministry. The delegates would be able to make decisions on investments in the sector based on first hand knowledge of the Myanmar electric sector through the presentations by engineers of the ministry. It was also expected to share ideas based on sustainable development in the sector through presentations by the World Bank, International Finance Centre, KEPCO and other organizations. The Union Minister accepted a donation of US\$3000 presented by the Center for Management Technology towards construction of two generators to be used by the Ministry in relief and rehabilitation tasks being undertaken in Rakhine State. Kanthan Shankar, Myanmar country manager of the World Bank, presented a report dealing with infrastructure needs related to sustainable development of the Myanma electricity sector

Mudajaya Group planning two power plants in Mandalay

Christian Myers, Myanmar Times, 28/01/13.

<http://mmtimes.com/index.php/business/3924-mudajaya-outlines-mdy-power-plant.html>

Malaysian firm Mudajaya Group Berhad has scheduled construction of a US\$750-million power plant in Mandalay Region, with work beginning in the second half of 2014, Malaysia's Business Times reported on January 23. The project is slated to be completed in two phases, the first of which is the building of a 500-megawatt coal-fired plant, while the second is a solar plant, which has no generation targets as yet. The Business Times reported that Mudajaya Group has set up a company with IJM Corp Bhd co-founder Datuk Koon Yew Yin, with ownership split 70 percent and 30pc respectively to fund the project. No local partners have yet been announced.

India's NHPC finds Myanmar projects unfeasible

Utpal Bhaskar, Hindustan Times, 28/01/13. Edited and abridged.

<http://www.hydroworld.com/news/2013/01/27/nhpc-finds-myanmar-projects-unfeasible.html>

India's state-owned power utility NHPC Ltd has termed as unfeasible two strategic hydroelectric projects in Myanmar, potentially dampening India's economic diplomacy initiative to engage the South-East Asian nation. NHPC, in a detailed project report (DPR), said Myanmar's proposed 1,200 megawatts (MW) hydroelectric project on the upper Chindwin river is financially unviable without government support. The 880-MW Shwezaye hydropower project on the lower Chindwin is technically unfeasible, it said in another report. NHPC has submitted the reports to India's Ministry of External Affairs, the Myanmar government and the Central Electricity Authority (CEA), India's apex power sector planning body. The projects are at the heart of the Indian government's attempts to counter China's influence in resource-rich Myanmar. The initial investment, which requires the building of a transmission link to India, was earlier estimated at Rs.25,000 crore. A CEA official confirmed that the reports were critical of the projects' viability. "It's true. While viability grant funding either from the Indian, or the Myanmar, government is required for making the Tamanthi project feasible, Shwezaye is not technically possible," the official said. An NHPC spokesperson in an emailed reply said the company took up additional investigation into the proposed projects in Myanmar as a consulting assignment for the Ministry of External Affairs, and that the DPRs had been submitted. India's foreign ministry has underwritten the Rs.40 crore the NHPC spent on the hydrological studies required to build the dam and power plants. Once completed, the capital-intensive Tamanthi project would help to control floods and provide water for irrigation in the region. India would receive the bulk of the power generated. "Techno-economic clearance is required from the CEA for the government to go forward with the projects. They ideally look at a per unit cost of not more than Rs.3.5 per unit from a hydropower project," said a second NHPC executive. The electricity tariff for Tamanthi works out to Rs.6.46 per unit, with the project cost estimated at Rs.17,270.69 crore. Tariff for the Shwezaye projects works out to Rs.11.06 per unit. But "since these are projects planned with a strategic intent, it is for the government to take a view", said the second NHPC executive. An analyst said India should go ahead with the projects. "These are very old projects and were planned to serve a strategic advantage as part of the larger 'Look East' policy," said C.U. Bhaskar, an analyst with the Centre for Policy Studies, a think tank in New Delhi. "While there are technical and economic constraints, it has to be seen from a holistic perspective. These projects still need to be pursued rather than be jettisoned for their commercial and economic interest."

Self-reliant supply of electricity launched in PyinOoLwin township

Myanma Alinn, 24/01/13. Edited and condensed. From p. 7 of the print edition of NLM on 25/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-25.pdf>

On 12 January, a self-reliant supply of electricity was launched in Ywathaya and Kayinsu villages in Hsinlan Village-tract of PyinOoLwin Township. Commander of the local station Brig-Gen Aung Lin Dway pressed the button to launch the supply of electricity. The facility will supply power to 410 houses in the village at a cost of K 70.9 million.

CPI: Myitsone and other Kachin hydropower projects on hold till after 2015

Mizzima News, 24/01/13. Edited and abridged.

<http://www.bnionline.net/index.php/news/mizzima/14638-myitsone-dam-project-expected-to-resume-in-2015-says-cpi-.html>

Construction at the Myitsone Dam is "100 percent stalled," according to a senior representative of China Power Investment Corporation Yunnan (CPI), the main contractor and financial backer of the controversial hydroelectric project in Kachin State. The project was suspended by Myanmar President Thein Sein in September 2011. Speaking to Mizzima on January 22, CPI's Wang Qiyue said that work had been suspended at all seven dam projects in northern Kachin State. These include the 6,000-MW Myitsone dam and power house at the confluence

of the N'Mai and Mali rivers which forms the source of the Irrawaddy, and six other major hydropower projects further upstream on the N'Mai and Mali rivers. Wang Qiyue said that all Chinese personnel and equipment from the sites have been returned to China, and only 80 or 90 security personnel remain at the Myitsone site. Asked whether CPI anticipated a restart of the project when Thein Sein's tenure expires in 2015, Wang said that CPI "expects and looks forward" to that prospect, but conceded that the company did not know what will happen in the near future. He said that CPI has been given no official indication from the Burmese government of any future policy regarding the dam. Last Monday (21/01/13), following a bilateral trade meeting with Burmese counterparts, China's Vice Commerce Minister Chen Jian noted that "several Chinese-funded projects, including a hydropower station and a copper mine, have been abruptly halted or suspended" in recent years, and he urged the respective Chinese companies to "work towards resolving difficulties," according to a report by Xinhua News Agency on 21/01/13.

NGO Burma Rivers Network (BRN) sent an open letter to China's Ambassador to Burma on January 3, urging him to stop pushing for the restart of the Myitsone Dam project. BRN also accused CPI of secretly commissioning its own Environmental Impact Assessment (EIA) on the Myitsone Dam and ignoring the original joint-Chinese-Burmese EIA "which stated very clearly that the Myitsone Dam should be canceled and that the majority of local people were against the project." CPI Yunnan's senior representative Wang acknowledged that a second EIA had been started, but said that CPI was bound to conduct the assessment under the instructions of the Burmese government. He said that the EIA had since been suspended due to the security conditions caused by the armed conflict in Kachin state.

New gas turbine installed at Ahlon power station

New Light of Myanmar, 23/01/13. Edited. From p. 7 of the print edition of NLM on 24/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-24.pdf>

Under the plan to meet the demand for electricity in Yangon by the summer, a 40-MW gas turbine manufactured by the General Electric Company of the U.S. arrived at Ahlon power station on 18 January. It was put on its foundation with the help of 200-ton capacity crane on the 22nd January. The gas turbine is 80 tons in weight. Responsible persons of Yangon City Electricity Supply Board, Myanma Electric Power Enterprise and Toyo Thai Public Co., Ltd supervised the installation of gas turbine at the power station.

Installation of new gas-fired generators underway, more expected

New Light of Myanmar, 22/01/13. Edited. From p. 2 of the print edition of NLM on 23/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-23.pdf>

Arrangements have been made to increase the generating capacity in the Hlawga, Ywama Ahlon and Thakayta power stations by an additional 200 megawatts by the summer of 2013. A total 26 gas-fired generators are to be installed at the Hlawga plant. Of these, eight with a generating capacity of one MW each arrived at the station on 17 January and installation works are in progress. A single gas turbine and accessories arrived at the Ahlon power station on 18 January and it is presently being set up on its foundation. Four 3.3 MW gas turbines for Thakayta power station were installed on 19 January. In order to speed up the installation of other generators which are expected to arrive during the last week of February, work on foundations and switch yards are currently being carried out by staff of the Ministry of Electric Power. It is expected that all the new generators will be operational not later than 31 March. [A photo of some of the generators accompanies the article.]

Electricity now available in Taung-O, Tataing villages in Yesagyo township

New Light of Myanmar, 21/01/13. Edited and abridged. From p. 2 of the print edition of NLM on 22/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-22.pdf>

Taung-O and Tataing are the latest villages in Yesagyo township in Mandalay Region to be electrified. Thanks to the united efforts and collective contributions of the villagers in cooperation with the township electrical engineer and staff, the setting up of concrete lamp posts and the installation of power lines, meter boxes and a transformer that started in August 2012 was completed on the 17th of January. Power is now available to 110 houses in Taung-O and 80 houses in Tataing. Electric power is now available on a self-reliant basis in 33 villages in Yesagyo township.

Japanese assistance for rice-husk-fired generator project

Khin Myo Thwe, Mizzima, 19/01/13.

<http://www.mizzima.com/business/8757-rice-husks-to-create-electric-power-in-japanese-scheme.html>

Japan has given US \$1.5 million towards the research of converting rice husk gas into electricity in a deal signed last week. Chairman Tin Win of the Myanmar Rice Millers' Association said that Japan Biofuel Co., Myanmar Biotech

Co., and the Tokyo Electric Power Company will work together on the project. Japan's New Energy and Industrial Technology Development Organization (NEDO) will contribute over \$1 million, while Biofuel Co. will contribute \$450,000. San Pya Rice Mill in the Daydaye Township and Doe Le Tha Mar (Our Farmers) Rice Mill in Nyaungdon Township will start a trial run for the project. The rice husk gas will be used in the production of high-standard rice and rice products in Rangoon, Pegu and Naypyitaw. The extra electric power will be distributed to nearby villages. The project will be carried out with the support of the Economy, Trade and Industry Ministry of Japan. The Myanmar Rice and Paddy Traders Association and the Myanmar Rice Millers' Association will also cooperate in the project.

Imported gas-fired generators arrive at Port of Yangon

Myanmar News Agency, 18/01/13. Edited and corrected. From p. 16 of the print edition of NLM on 19/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-19.pdf>

The first shipment of gas-fired generators that will be installed at the Hlawga, Ywama and Thaketa power plants arrived on the 17th and 18th of January. They will add about 200 megawatts to the power supply available for distribution in Yangon [this summer]. Eight 1-megawatt gas generators and turbines imported by the Ministry of Electric Power arrived at the Asia World jetty yesterday. The SFGM 560- and 1025-KV, Guascor NG brand generators were imported from Spain. They will be installed at the Hlawga power plant. A set of 3.35-MW generators imported from Australia will arrive at Htidan Jetty today. They will be installed at the Thakayta power plant. Two 40-MW gas turbines and a 40-MW gas turbine X generator from the USA arrived at Sule Jetty today. They will be installed at Ahlon power plant. Other generators are expected to arrive in Yangon by the last week of February. Plans call for all the imported generators to be operational by the end of March.

Union V-P addresses new energy management committee

Myanmar News Agency, 18/01/13. Edited and abridged. From p. 1 of the print edition of NLM for 19/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-19.pdf>

The first meeting of the newly appointed National Energy Management Committee held at the hall of President's Office Ministry in Nay Pyi Taw on 18/01/13 was highlighted with an address by Union Vice-President U Nyan Tun. In his speech, he said the purpose of the committee was to manage the linkages between the energy and electricity sectors in a systematic manner. The government was seeking every possible way to ensure energy security. Priority was to be given to increase the amount of energy and electric power available especially in rural areas and to ensure overall economic growth. Energy efficiency and conservation were crucial for energy security, he said. A policy review was called for and changes in macro-economic policy, the national development plan and the long-term vision plan for the country submitted to United Nation's Millenium Development Goals forum. The guiding principles should include such factors as the development of energy technology and resources, the training of qualified human resources for the energy program, cooperation with the private sector, civil societies and social organizations, the use of clean fuels and the participation of citizens at every level of the energy enterprises including the matter of ownership. Regarding policy measures and their implementation, it was necessary to create conditions that could guarantee extraction of energy at relatively low costs. A legal framework that could promote the people's life and meet the government's goal was needed. The National Energy Management Committee needed to draft the necessary laws and rules through the formation of a working committee for sustainable development and effective utilization of all energy resources. He urged the experts present to give suggestions

Pylon of MRTV-3 repaired in Kamayut township in Yangon

Myanma Alinn, 17/01/13. Edited. From p. 7 of the print edition of NLM on 18/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-18.pdf>

At 1.30 pm on 18 December 2012, an ice tanker truck hit the post of the 66-KV Sinmalaik MRTV-3 pylon on Bayintnaung Road in Ward 4 of Kamayut township. During the incident, the concrete base of the post was crushed and iron rods in the post bent over. The Kamayut Township Electrical Engineer and workers of the Yangon City Electricity Supply Board repaired the post and rebuilt the concrete footing. The repair work was completed on 28 December 2012. Fortunately the supply of electricity was not interrupted as a result of the accident.

Eight streets in Pyinmana illuminated with lamp-posts

Myanma Alinn, 17/01/13. Summary. On p. 7 of the print edition of NLM on 18/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-18.pdf>

A total of 120 sodium lamps, 65 fluorescence and 30 bulbs were installed along Bogyoke, Bo Tauk Htein, Bo Tayar, Maung Khin, Sibinyon, Tabaung Pagoda, Yangon-Mandalay Highway and Bo Letya streets in downtown Pyinmana supplied at a cost of with K 23.3 million by the Nay Pyi Taw Development Committee. More to be installed.

New transformers operational in two townships of Mandalay city

Kyemon, 17/01/13. Edited and amplified. From p. 2 of the print edition of NLM on 18/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-18.pdf>

The installation of two 1000-KVA generators was completed at the Mandalay Region Electrical Engineer's Office in Haymarzala ward in Chanayethazan township, on the first of January. Likewise, one 1000 KVA generator was installed near the Taikta sub-power station on 66th street in Aungmyaythazan township and test runs were made early in the month. Previously, one-hour blackouts were frequent in some wards at night. It is expected that electricity consumption in the summer may be as high as 2060 megawatts and this will definitely exceed the available supply of 1551 megawatts. As a result arrangements are being made to reduce the supply of electricity in industrial zones and to cut off electricity supply to state-owned industries and river water pumping projects from 5 to 11 pm and small towns in daytime and to supply electricity to major towns through [additional locally installed diesel] generators.

Urban areas of Shwegu now receiving electricity on 24-hour basis

Kyemon, 16/01/13. Edited and revised. From p. 2 of the print edition of NLM on 17/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-17.pdf>

A plan to supply 24-hour electricity to the urban wards of Shwegu in Kachin State from the township sub-power station was started on 5 January following the installation of the main transformer. Previously the urban area received on a rotation basis but now now they are getting it around the clock.

Over 1200 homes in Thabyekon village to be electrified by the end of May

Kyemon, 16/01/13. Edited and revised. From p. 2 of the print edition of NLM on 17/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-17.pdf>

Arrangements are being made for the availability of electricity on a self-reliant basis in the village Thabyekon in the Nay Pyi Taw area. The village consists of 1242 houses and has a total population of 3818. Officials of Pobbathiri Township Electric Power Enterprise have carried out the installation of the pylons, power lines and lamp posts. The installation of service lines from the lamp posts to the houses is currently in progress and is set for completion by the end of May.

Mandalay member addresses Union parliament on electricity issues

Myanmar News Agency, 15/01/13. Edited and abridged. From p.16 of the print edition of NLM on 16/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-16.pdf>

Eighteen representatives discussed issues relating to a draft of the fifth five-year short-term plan (from FY 2011-2012 to FY 2015-2016) at the session of the Pyidaungsu Hluttaw on 15 January. During the previous fourth five year short-term plan, there was an average annual growth rate of 14.1% in generating electricity, a key to industrial development of the country. During the period of the fourth plan, exploration and production of sources of electricity like hydropower and natural gas were carried out. U Myo Myint of Mandalay Region Constituency No. 6 said that natural gas-fired power station projects, coal-fired power station projects, national power grid projects and sub-power station project should be included in the plan.

Haka power sub-station project completed

Myanmar News Agency, 14/01/12. Edited. From p. 7 of the print edition of NLM on 15/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-15.pdf>

An extension to the 11/0.4-KV, 100-KVA Myothit sub-power station in Haka including a 1320-foot-long 11-KV line and a 5280-foot-long, 400-volt power line that was started on 09/09/12 was completed on 06/12/12. The local people are now enjoying the supply of electricity at full capacity.

Japanese ODA to fund Myanmar's infrastructure

Aye Thidar Kyaw, Myanmar Times, 14/01/13. Edited and abridged.

<http://mmtimes.com/index.php/business/3756-japanese-oda-to-fund-nation-s-infrastructure.html>

The Japanese government will lend official development assistance (ODA) to Myanmar, implement a plan to cancel national debt and help complete the Thilawa special economic zone, Japanese officials announced in Yangon last week. On January 3, Japan's former prime minister and recently appointed finance minister, Taro Aso, met with President Thein Sein and senior government officials in Nay Pyi Taw to discuss bilateral economic relations. According to Reuters, Mr Aso reaffirmed an earlier promise to waive part of Myanmar's US\$5.74 billion debt to Japan. He said that the Japanese government would absolve about \$3.36 billion of the debt in two phases throughout 2013, while a consortium of private Japanese banks led by Mitsubishi UFJ Financial Group would issue a loan for the remaining \$2.24 billion. The Japanese government plans to loan the country \$56.1 million this year in ODA and plans to allocate \$22.4 million to infrastructure projects throughout the seven states and regions, Mr Takahara said. He said that \$11.2 million will be allocated to the rehabilitation of existing power plants and \$22.4 million to the completion of the Thilawa SEZ outside of Yangon. Although a Memorandum of Cooperation between Japan and Myanmar on the construction of the Thilawa SEZ had been postponed last year, Mr Takahara said it was signed last month. The MoC will pave the way for building joint-ventures between the countries' private consortiums, he said. "But the lack of proper infrastructure is an obstacle for new investment," said. Mr Takahara said the completion of the Thilawa SEZ will continue towards solving this obstacle, as the project aims to reduce electricity cuts and provide Yangon with an international-standard industrial park.

Malaysian Firm Plans Coal-Fueled Power Plant for Mandalay

William Boot, Irrawaddy, 12/01/13. Abridged.

<http://www.irrawaddy.org/archives/23865>

A Malaysian construction firm is drawing up plans to build two electricity generating plants in the Mandalay area. One of them would be coal fueled. Kuala Lumpur-based Mudajaya Group Holdings told the Malaysian Stock Exchange this week it had signed a memo of understanding with Burmese state authorities to draw up development plans. Mudajaya said it would be partnered by the Malaysian philanthropist Koon Yew Yin. "Country risk in Myanmar is the key risk, we believe. This is especially so with regards to the government's willingness to honor its contracts,"

Pantanaw gets new pylons for its distribution network

Kyemon, 10/01/13. Edited and abridged. From p. 2 of the print edition of NLM on 11/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-11.pdf>

The Pantanaw Township Electric Power Enterprise replaced 16 wooden lamp posts carrying 400-volt lines with concrete posts along Kannar street and weather-beaten iron and wooden frames of 11-KV pylons with concrete and steel pylons on 7 January.

Thailand's SPCG to operate solar farms in Myanmar

Bangkok Post, 11/01/2013. Edited and abridged.

<http://www.bangkokpost.com/business/economics/330280/spcg-to-give-myanmar-solar-power>

SPCG, a solar farm developer, plans to operate small renewable solar farms to serve demand for electricity in Myanmar's rural communities. Chairwoman Wandee Khunchornyakong said the solar farms and energy plants would have a capacity of less than 2 megawatts. The project will operate without connection to the main electricity grid and serve rural communities. Each plant will cost 7-14 million baht. "Electricity supply in Myanmar is falling short of demand that has grown rapidly. The country's capacity of electricity production is only 2,500 MW for a population of 55 million, compared with 32,000 MW to serve Thailand," Ms Wandee said. Myanmar lacks small solar plants to serve rural communities. Investors from large economies such as China, India and Japan are keen to develop big projects. SPCG saw an opportunity to develop small plants to provide power in the short term. "Most Myanmar people use diesel oil generators to generate electricity for households. The cost of an oil generator is twice that of a solar farm. The market has a huge potential to grow," Ms Wandee said. SPCG is expected to develop a mixture of renewable energy projects, such as solar farms with mini-hydropower plants, to take advantage of Myanmar's vast water resources. Wind power is also a possibility. SPCG has eyed two potential locations, with the first project likely to be in Mandalay or Yangon. Ms Wandee said the company has secured prospective partners in Myanmar already, with a plan to set up a joint-venture company in the second half of this year. Construction will start in 2014. SPCG is Asia's largest solar farm developer. In the fourth quarter of last year, it founded a joint-venture company with a Japanese partner and a Saudi Arabian business to bid for a solar plant construction project in Saudi Arabia. The result is expected soon. The company expects revenue growth of more than 50%, or above

1.5 billion baht, this year as it will be able to book revenue from construction of 28 plants, compared with revenue from nine plants booked last year.

Feasibility study for combined cycle power plant in Mawlamyaing

Myanmar News Agency, 10/01/13. Abridged. From p.9 of the print edition of NLM for 11/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-11.pdf>

The Electric Power Department of the Ministry of Electricity and the Myanmar Lighting Manufacturing Co Ltd signed an MoU on a feasibility study related to a combined cycle power plant project in Malamyang on January 9. The project is aimed at increasing the amount of power available for users in Mon and Kayin states.

Formation of National Energy and Energy Management Committees announced

New Light of Myanmar, 10/01/13. Summary. Full version on pp 10 & 11 of the print edition.

<http://www.burmalibrary.org/docs14/NLM2013-01-10.pdf>

This article lists the personnel named to new cabinet-level and ministry-level energy management committees by the President of the Union. It also lists the duties assigned to each committee. The basic responsibility of the high-level committee is to formulate national policy and regulations based on the energy requirements of the State, including the generation, transmission and distribution of electricity, among other matters. The working-level committee will be more concerned with coordination and links with the private sector in developing plans for the energy sector and industrial expansion. The article occupies a page and a half in the print edition of NLM.

Turning on Burma's Lights

David Fullbrook, Asia Sentinel, 10/01/13. Abridged.

http://asiasentinel.com/index.php?option=com_content&task=view&id=5093&Itemid=32

Factory owners in Rangoon have begun the year with daily power cuts which may worsen as the dry season drags on. Supply can only meet half of anticipated demand, according to the Ministry of Electric Power. The national connection rate is 26 percent for a population estimated at about 60 million by the Asian Development Bank (ADB). In the countryside, home to 40 million people, only 16 percent are connected to the power grid. The shortage of power is probably the biggest single impediment to development. It is also an incredible opportunity which should be the envy of countries which have marched ahead of Burma. The lack of infrastructure leaves the door open to developing an electricity system which leverages advances in community power production using clean energy resources such as sunlight, farm wastes, biomass and geothermal. The distributed power approach is gaining ground fast in developed and developing countries. Upfront costs can be high and subsidies are often provided, but then prices for carbon power are also shaped by subsidies, too. In India, Gram Power, Mera Gao Power and Omnigrd Micropower are developing village microgrids. Initially a few solar panels or biomass digesters are set up as a village power plant. Because the systems are modular, more power sources can be added as demand grows from basic needs to developing livelihoods, using machinery to increase production and add value. Microgrids also power mobile phone base stations which formerly relied on diesel generators. Simpa Networks takes a different approach, turning homes into power plants in India. Simpa sells solar home systems on flexible installment plans. In Bangladesh, aid donors led by the World Bank have provided financing of US \$370 million for Grameen Shakti to apply the approach at scale. Over a million solar home systems have been installed. A thousand more are added each day. The economics of these models look favorable for Burma. Electricity from Gram Power in India, for example, costs \$1.37 a month, whereas previously households were spending \$3.66 on kerosene. In Burma, the European Union Energy Initiative (EUEI) and Mercy Corps, in separate field studies, found solar lanterns and solar home systems, sold in markets for \$10 to \$300. The return on that investment can work out to savings of 80 percent over 10 years, given mean monthly spending of about \$10 on candles and batteries. Upfront cost is beyond the reach of many in Burma, where one of every four people lives below the poverty line and mean annual GDP per capita is \$859, according to the ADB. Therefore, one limit on opportunity in Burma will be the availability of finance to provide systems on credit at a price no more than what would otherwise be spent on candles and batteries. While that is unlikely to be straightforward, experience in Bangladesh and India shows household or village power systems can be financed. Distributed power produced from clean energy resources also provides several collateral benefits. One, the damage and costs of environmental, social, health and security externalities arising from centralized large hydro or carbon power systems can be reduced. Two, generating and buying power locally may mean less money leaks out of the local economy. Three, a reduction in vulnerability to the supply risks associated with carbon energy plus the impacts of global decarbonisation measures.

So what does the growing global trend for distributed power mean for Burma? First, it demonstrates that a few distributed power pilots plus dozens of local commercial initiatives in Burma are onto something. Second, electricity could expand further and faster than it has in other countries which developed earlier, conferring considerable economic, environmental and social advantages. Third, government policy and aid donors have a model to follow and adapt. Finally, commercial or social investors should be able to reduce their risks because they can learn from experiences elsewhere.

Whether Burma grasps the opportunity or continues with existing plans to continue to develop centralized power only remains to be seen. However, there are reasons to think distributed power could take off. One, distributed electricity matches the government's goals for power self-sufficiency, renewability and diversity. Two, preliminary assessments by the EUEI and United Nations Development Program during 2012 suggest aid donors are evaluating options for assisting distributed power in Burma. Three, the ADB and Norway are providing technical assistance for an electricity bill which would among other things provide a legal basis for distributed power generation. Finally, investment and banking reforms will in due course make doing business a little easier.

YESB to supply additional 500 MW of electricity by summer

Kyemon, 08/01/13. Edited and abridged. From p.2 of print edition of NLM for 09/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-09.pdf>

The Yangon City Electricity Supply Board has made arrangements for the supply of an additional 500 megawatts of electricity for the summer of 2013 from projects being implemented by the Ministry of Electricity. Based on calculations from the consumption during the summer of 2012, it is estimated that demand for electricity will be 2060 megawatts during the upcoming summer. As only 1551 megawatts is available from the national electricity grid, the increased demand will be met by generating an additional 350 megawatts at the Hlawga, Ywana Thakayta, Ahlon and Thaukyaykhat-2 plants. Electricity supplied to industrial zones will be reduced and supply will cut off at state-owned industries and river water pumping projects from 5 pm to 11 pm. Small towns with only a few industries will be cut off during the daytime and one megawatt generators will be provided to some larger towns. Upon completion of projects presently under implementation it is expected that electricity supply will exceed the demand by 2015.

Power rationing in Yangon reduces demand by 200 megawatts

Htoo Aung, Myanmar Times, 07/01/13.

<http://mmtimes.com/index.php/national-news/yangon/3691-govt-begins-power-rationing-in-yangon.html>

Yangon Electricity Supply Board last week began rationing power to small and medium factories in residential areas, an official said. Board chairman U Aung Khaing said the cuts came into effect on January 1, with power rationed from 4pm to 11pm, reducing demand by 200 megawatts. "Firstly we will reduce the supply of electricity to SMEs in residential areas and after that to factories owned by the government and last to industrial zones. We do not have enough electricity from hydropower plants between January and June," he said. "There will be more cuts in February because consumption increases at the same time as production from hydropower dams decreases. It is a great problem for us every year," he said.

About 72 percent of electricity to Yangon, which has about 900,000 installed electricity meters, comes from hydropower, while the rest is sourced from natural gas. But other regions have already been suffering from electricity rationing since December 2012, U Aung Khaing said. Even with an electrification rate of less than one-quarter – ministry figures show just 22pc of households had an electricity connection in 2011 – U Aung Khaing said electricity supply met only three-quarters of demand, which is about 2060 megawatts. "The current supply is just 75pc of the amount needed for the whole country," he said.

U Khin Maung Zaw, director of the Department of Electric Power, said the ministry will supply Mandalay, Pyay, Magwe and Bago with a 1-megawatt generator each in March to help them cope when demand peaks in the hot season, which runs from March through May. Meanwhile, gas turbines are being imported from Spain, Germany, Austria, Singapore and Malaysia to help meet demand during summer. The government has indicated it will in future try to increase electricity generation from natural gas, which is not subject to seasonal variations, to ensure enough power is available during the hot season. In December, United States firm General Electric said it had been selected to supply natural gas turbines to a 100-megawatt plant in Ahlone township, which is expected to come online by the second quarter of this year.

However, a May 2012 report prepared by the Ash Centre for Democratic Governance and Innovation at Harvard University warned that to catch up with current demand and cope with increased electrification “a massive increase in electricity generation and transmission is needed very quickly”. “Growth rates doubling electricity output every four to five years are probably needed for a decade,” said the report, titled “Electricity in Myanmar: The Missing Prerequisite for Development”.

Power blackout continues in Kachin State

New Light of Myanmar, 05/01/13. Edited and abridged. From page 8 of the print edition of NLM on 06/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-06.pdf>

Despite the completion of repairs to the power grid and to the Tarpein and Chipwenge power plants in Kachin State, normal operations have not been resumed due to ongoing security concerns, according to Mohnyin Township Pyithu Hluttaw Representative U Kyaw Soe Lay meeting with villagers in Nanma in central Kachin State. The small-scale hydropower plant at Galaingchaung built in the 1990s is currently supplying electricity to Mohnyin, Hopin and Nanma for an hour once every two days.

Feasibility study for gas and thermal power plant project in Thakayta

Myanmar News Agency, 04/01/13. Edited and revised. From p.7 of the print edition of NLM on 05/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-05.pdf>

The Ministry of Electric Power and the Union Resources & Engineering Co Ltd signed an MoU for a feasibility study regarding the setting up of natural gas and thermal power plants in Thakayta township in Yangon on 2 January. Present for the signing were Union government ministers and personnel of the Union Resources and Engineering Co of the PRC and the Myanmar Resources and Engineering Co. Speaking on the occasion Minister for Electric Power Khin Maung Soe drew attention to the need for greater private investment, both domestic and foreign, in order to increase the supply of power to the public. Currently, there are two coal power plant projects under feasibility study and MoUs have been signed for three gas-fired power plant projects as well as a combined cycle plant project. In addition, MoAs have been signed for two gas-fired, combined-cycle power plants to be financed with the participation of local and foreign private investors as joint ventures.

KIA attacks cause power outage in Myitkyina

Myanmar News Agency, 01/01/13. Edited. From p.9 of the print edition of NLM on 02/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-02.pdf>

An attack by a unit of the Kachin Independence Army (KIA) on the 66-KV line between Mali hydropower plant in Waingmaw township and Myitkyina on 24 December, cut off the supply of electricity to the state capital of Myitkyina. The KIA also used artillery to attack three vehicles carrying a maintenance crew that went to repair the damage on 29 December near Maliyan. As a result the vehicles and equipment to carry out the repairs were damaged and the crew had to withdraw to Myitkyina. Power supply has still not been restored.

Solar panels light up Payataung Village in Ottarathiri township

Myanmar News Agency, 01/01/13. Edited and abridged. From p.8 of the print edition of NLM on 02/01/13.

<http://www.burmalibrary.org/docs14/NLM2013-01-02.pdf>

Payataung in Ottarathiri Township in the Nay Pyi Taw council area held a ceremony to launch distribution of electricity with the use of solar panels on 31/12/12. A total of 11 solar panels (250Watt/220Watt) and 22 batteries (250Ah/100Ah12V) will generate electricity for 282 houses, 76 lamp-posts, five monasteries, the village administrator's office and library. Over K 39 million was spent on the installation of the system. Electricity will be supplied from 6 pm to 10 pm and 4 am to 5.30 am daily.

Rangoon starts power cuts to industries

Nang Sai Nom, Irrawaddy, 03/01/13. Edited and abridged.

<http://www.irrawaddy.org/archives/22998>

Authorities in Burma's commercial capital Rangoon have begun cutting power supply to the city's industrial zones for seven hours per day, a zone manager said. The outages are set to worsen and affect residents during the coming dry season, when Rangoon's chronic electricity shortages become particularly pressing. Myat Thin Aung, chairman of Hlaing Thar Yar Industrial Zone, said on Wednesday that his zone had been informed that daily power cuts would commence on Jan 1. Yangon Electricity Supply Board (YESB) publicly announced the outages this week, he said,

adding that the industries were warned that “electricity will be cut for seven hours from 4 pm to 11 pm.” YESB Chairman Aung Khaing had announced “that power cuts to industries were being implemented in order to be able to provide power to the public in the dry season,” according to the zone chairman.

Rangoon business would suffer under the cuts, Myat Thin Aung said, but he added that as factories were given due notice they could prepare their diesel generators ahead of the outages. Cold-storage industries, bakery businesses and plastics factories would be most affected by the planned outages, he said. Up until now power supply in Rangoon had been good, according to the zone official. “We have been provided with 24 hours of electricity this rainy season. It is better than before. In the past, you would never know whether the power would be supplied or cut,” he said. He warned nonetheless, that providing continuous power would be instrumental in attracting foreign business investment in Burma’s industrial zones.