

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

Articles for March and April 2013

This is the last in a series of supplements to the fourth edition of *The Electrical Industry of Burma/Myanmar* which was published in April 2012. Since that time, eleven supplements have been issued. This issue covers articles published in March and April 2013 along with a couple of items of special interest published at the beginning of May.

The compendium itself includes approximately 350 cross-linked articles which 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. 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 2012 through to February 2013, as well as the Compendium itself are available in the Infrastructure section under "Economy" in the Main Library archive of the Online Burma Library. Check for Electrical Power: Production and Use.

<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>
<http://www.burmalibrary.org/docs15/Elec-Sup-2013-01-red.pdf>
<http://www.burmalibrary.org/docs15/Elec-Sup-2013-02-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.

Government orders DKBA to move from Hatkyi dam site

Eleven Media, 05/05/13. Edited and condensed.

<http://elevenmyanmar.com/politics/3348-tension-mounts-as-gov-t-orders-dkba-to-move-from-dam-site>

An order from the army's Southeast Command to the Democratic Karen Benevolent Army (DKBA) to move out of the Hatkyi dam project area has mounted tension in Kayin state, according to DKBA officials. The Karen forces were to withdraw by noon yesterday. "The government army sent us a telegraph asking the troops being stationed in Kyonhtaw and Meezai to move out by noon of May 4. We cannot retreat any more. We have already withdrawn from Myainggyingu. The current place in fact was designated by the government, they said. "If we move from the place again, we will be in Thailand," a DKBA official told the Eleven Media Group. The DKBA formerly known as the Democratic Karen Buddhist Association (also DKBA), emerged in December 1994 after a separation from the Karen National Union. According to the DKBA, its troops were told to withdraw because the Hatkyi dam project which is to be jointly implemented by Myanmar, China and Thailand, because its presence near the dam site will interfere with the plans to build the dam. "Their plan might be a ploy to kick us out of the region as we oppose the project," a DKBA official said. The project site lies 29 miles downstream from the confluence of the Thanlwin river and Thaungyin river. It is a joint venture of five Chinese companies, including Sinohydro Co, Thailand's EGAT and Goldwater Resources Ltd, International Group of Entrepreneurs Co Ltd (IGE) and Shwe Taung Co from Myanmar. The Thanlwin river, one of the world's longest rivers, was recognized by the UNESCO as a global heritage

landscape in 2012. No dam has been built in the river. Local people and environmentalist groups protested against the dam project as soon as its environmental impact assessments started.

Thailand's Green Earth Power to develop Myanmar's first solar plant

Kwanchai Rungfapaisarn, The Nation, 04/05/13. Edited and abridged

<http://www.nationmultimedia.com/business/Green-Earth-Power-to-develop-Myanmars-first-solar--30205371.html>

Myanmar will host the world's third-largest solar power plant within 21 months, providing the country with an extra 210 megawatts of electricity to satisfy industrial needs. Green Earth Power (Thailand), the developer of the power plant, on Thursday signed an MoU with Myanmar's Ministry of Electric Power for the country's first solar power plant. Total project value is US\$275 million (Bt8.15 billion). Paul Bernard Yang, president and chairman of GEP, said the company would sign the power purchase agreement (PPA) with the Ministry of Electric Power within the next 90 days. The solar plant is scheduled to be completed within 18 months after the PPA is signed and would have the capacity of 210MW to produce up to 350 million kilowatt-hours.

The plant will support the target set by the Myanmar government to increase electricity production from 2,500MW currently to 30,000MW by 2030, said Deputy Minister for Electric Power Aung Than Oo. He said present power production was not enough to support industrialisation in Myanmar and solar energy would be the first supplemental source of electricity. Currently, 70 per cent of electricity in Myanmar is from hydropower, 20 per cent from gas turbines, and 10 per cent from coal power plants. The country's first solar power plant will be on a 300-hectare land plot in Minbu, Magway Region in the central part of Myanmar. Yang said the MoU had been approved by the Myanmar parliament. Construction of the solar power plant was approved directly by the minister of the president's office, enabling the PPA process to begin immediately. The power from this solar farm will be connected to the country's 230-kilovolt power grid.

Yang said the company had been talking with several potential partners in Bangkok about joint-venture possibilities for the project in Myanmar. About 70 per cent of the funding for the project would be from bank loans, and the rest from equity. He said the advantage of investing in solar plants was low maintenance costs. The energy source is the sun, so there is no the hassle of sourcing raw materials and fuels. Supasit Skontanarat, GEP managing director, said the sharing of return on investment between the company and the Ministry of Electric Power was still under review by the minister of the president's office, and would not be revealed until the official PPA is finalised. Founded in 2010, GEP is set to manage business projects and development of technologies to generate electricity from solar power. The company, of which 80 per cent is owned by a holding company in Hong Kong, also aims to provide appropriate technologies and funding sources, including the contractor, in the design and installation of renewable energy with the mission to create clean energy to meet the increasing demand for power both domestically and in member countries of the Asean Economic Community.

Toshiba Opens Office in Rangoon

Irrawaddy, 30/04/13.

<http://www.irrawaddy.org/archives/33329>

Japan's Toshiba Corp said on Monday that its Singapore-based subsidiary, Toshiba Asia Pacific Pte Ltd, has established a branch office in Rangoon and will start operation in May, according to a report by Business Wire. The company said the Rangoon office will investigate the market for power generation and distribution and other areas, including consumer products. Toshiba has promoted its home appliance business in Burma through distributors in Singapore since the 1980s, and supplied also hydroelectric equipment for the Sedawgyi hydroelectric power plant in 1985.

Kutkai illuminated with electricity

Myanma Alinn, 29/04/13. Edited and condensed. From p. 7 of the print of NLM on 30/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-30.pdf>

Under the supervision of Muse District Electrical Engineer Kyaw Kyaw Lwin and Township Electrical Engineer U Um Sha Mahn, a 315/KVA transformer was installed in Kutkai on 23 April. At the same time, a 1.5 mile-long, 400 volt

power line and a 0.5 mile-long, 11/KV power line were strung to supply electricity to all the wards of the town round the clock.

Transformer donated to Pazunmyaung Village in Nyaunglebin township.

Kyemon, 28/04/13. Edited. From p. 9 of the print edition of NLM on 29/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-29.pdf>

In honour of the 80th birthday of the presiding sayadaw of the Panngweyon monastery and monastic school in Shwegyin, Sad-dhammajo Sumanabhivamsa, a transformer was donated to Pazunmyaung Village in Nyaunglebin Township. The donation was made by disciples of the Sayadaw, Major Kyaw Moe (Rtd) and wife Daw Phyu Phyu Myint and U Win Aung and wife Daw San San Oo on 28 April. The transformer will make it possible for the village to get electricity from the grid.

Electricity supply restored in storm-struck Sagaing

Kyemon, 27/04/13. Edited and condensed From p. 2 of the print edition of NLM on 28/04/13

<http://www.burmalibrary.org/docs15/NLM-2013-04-28-op.pdf>

When Sagaing was hit by a sudden vicious squall of rain at about 8.30 pm on 22 April, the high winds and heavy rain uprooted trees, destroyed lamp posts and cut down power and telephone lines in some wards of the city. After the clearing of debris and re-installation works were completed, electricity supply was resumed in Sagaing about 4 pm on 23 April. A total of 29 lamp posts were damaged and power lines were cut down during the storm. Electrical staff made an all-out effort to restore the electricity supply in disaster-hit wards, according to a spokesperson of the township electrical department.

Losses resulting from transformer fires exceed K 23.5 million

Myanma Alinn, 23/04/13. Edited and condensed. From p. 2 of the print edition of NLM on 24/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-24.pdf>

Rainwater that flooded underground electric cables caused an outbreak of fire in transformers in Dagon township at 7 pm on 18 April. Fire engines from Kyauktada Township Fire Station were able to extinguish the fire by 7.35 pm. but the fire which started in the 6.6 KV underground cable at the officer quarters of Public Works at the corner of Zizawa Street and Samon Street engulfed the 6.6 KV power line of Township Electricity Supply Board at the corner of U Wisara Road and Ziwaka Road, the 6.6 KV transformer of Yangon City Electricity Supply Board in the compound of Lower Myanmar Medical Research Dept at No 5 on Ziwaka Road in Phayagyi Ward and the 6.6 KV transformer of YESB at Nawarat Sub-Power Station on U Wisara Road. Losses from the fires amounted to over K 27.5 million. Due to untimely rains in some townships of Yangon Region, there were electric shocks in power lines from lamp-posts and housings.

Indonesian firm to study ways to improve energy efficiency

Myanmar News Agency, 23/04/13. Edited and abridged. From p. 16 of the print edition of NLM on 24/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-24.pdf>

Myanmar's Union Minister for Commerce U Win Myint and Minister for Trade Gita Irawan of Indonesia were present at the signing of various MoUs in Nay Pyi Taw on 23 April. Among the agreements signed was one authorizing a feasibility study for the improvement of the energy efficiency in power delivery and a loss reduction pilot programme in Yangon between the Ministry of Electric Power and PT. PLN of Indonesia.

Electric Power Minister inspects Yeywa Hydropower Plant

Myanmar News Agency 21/04/13. Article is on p. 1 of the print edition of NLM on 22/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-22.pdf>

Electrical service from Tapein-1 power plant restored in Bhamo district

Myanma Alin, 21/04/13. Edited. From p. 16 of the print edition of NLM on 22/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-22.pdf>

Twenty-four hour electricity with full voltage has been restored to townships in the Bhamo District of Kachin State by from the Tarpein-1 hydropower plant near the border with China. Resumption of the service came a result of the truce signed between the Myanmar military and the Kachin Independence Army (KIA). Bhamo District Deputy Commissioner U Tayzar Aung, President of the Datang (Yunnan) United Hydropower Developing Company of China and Myanmar Resident Representative Mr. Wang Zheng Lin, Deputy Chief Engineer U Saw Win Maung, Superintending Engineer U Ohn Zaw and party inspected power lines, transformers and electrical equipment being installed at 66/11 KV sub-power station in Hante Ward in Bhamo on 18 April to supply electricity from Tarpein-1 hydropower plant. Electrical service to Bhamo, Momauk and Mansi was connected at 5.05 pm. Arrangements are being made to supply power to Shwegu in the near future. Works are being carried out to supply power to Myothit and Momauk Sub-Townships. One 66/11 KV 40 MVA transformer and ACSR (795) MCM arrived there. Local people welcomed the efforts to restore supply of 24 hour electricity in the region.

Installation of additional gas-fired power plants on schedule at Hlawga and Ywama

Myanmar News Agency, 18/04/13. Edited and condensed. From p. 1 of the print edition of NLM on 19/04/13

<http://www.burmalibrary.org/docs15/NLM-2013-04-19.pdf>

Union Minister for Electric Power Khin Maung Soe inspected the 50-MW gas power plant project being built in the compound of the Hlawga gas power plant on 18/04/13. The project started last September and is about 70pc complete. One of the 26-MW generators made in Spain by the Dresser-Rand Company will undergo a test-run starting on the 15th of May. At the Ywama station, the Union minister also visited the 240-MW Mitsubishi Gas Turbine that was donated by Thailand. The Ywama project is a temporary solution to address power shortages in the city. German-made 50-MW Caterpillar (CG 260-16) turbines that have been under installation at Ywama since last September will be put into service as of the 1st of July. The Union minister inspected arrival of machines at 120-MW power plant project being built by Toyo Thai Co, installation of gas turbines, construction of the switchyard and control room in the compound of the Ahlon power plant. The turbines made by the GE Company of Hungary will start running soon.

Indian and Thai companies sign MoUs for power plants

Myanmar News Agency, 16/04/13. Summary. From p.9 of the print edition of NLM on 17/04/13

<http://www.burmalibrary.org/docs15/NLM-2013-04-17-red.pdf>

Representatives of the Ministry of Electric Power signed an MoU for the construction of a coal-fired thermal power plant with the Tata Power of India in Nay Pyi Taw on 11 April. The plant will be located in Ngayokkaung in Ayeyawady Region and is expected to generate between 540 and 600 megawatts. A second MoU covering a feasibility study for a combined cycle power plant at Kanbawk in Taninthayi Region was signed with representatives of Dawei Power and Utility Co Ltd of Thailand. The combined cycle power plant at Kanbawk would generate about 500 megawatts. **Compiler's Note:** Ngayokkaung is located on the Bay of Bengal about 45 km southwest of Patheingyi in Ayeyawady Region. Probably, the coal would be shipped by sea to the power plant there. Kanbawk is the land terminal for the undersea pipeline from the off-shore Yadana natural gas field. Presumably the power plant to be constructed there would use gas from the Yadana field and supply electricity for the construction phase of the proposed Dawei deep-sea port and industrial complex about 40 km to the southwest.

New Delhi asks Manipur to supply electricity to Mandalay

Nagaland Post, 12/04/13.

http://epao.net/epSubPageExtractor.asp?src=news_section.News_Links.News_Links_2013.New_Delhi_asks_Manipur_to_supply_electricity_to_Myanmar_20130413

New Delhi has asked Manipur government to supply electricity to the neighbouring country Myanmar despite the shortage being faced by the state. Manipur chief secretary has received an instruction from the Centre regarding the matter asking the state government to take steps immediately on the power supply on the same basis as power is being supplied to Bangladesh by the Centre, a highly reliable source in the Manipur secretariat said Friday. The

instruction asked the state government to construct a 400 KV/500 KV transmission line up to Mandalay in Myanmar and to invite all northeastern states to join hands in setting up the necessary electricity generating plants. The source said that investment to Myanmar was 'a must' to avail cheap and environment friendly electricity. As the neighbouring country has a huge potential of power generation.

Ahlon power plant damaged by outbreak of fire

New Light of Myanmar, 10/04/13. Edited and condensed. From p. 7 of the print edition of NLM on 11/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-11.pdf>

A fire broke out on the second floor of the Recycle Power Plant in the compound of Ahlon Power Station on Strand Road in Ayeyawady Ward of Ahlon township at 11.40 pm on 4 April. The fire started from a leak of hydraulic oil. Fire fighters controlled the outbreak with the use of 24 fire engines from stations around Yangon, The fire was totally extinguished within about twenty-five minutes.

NEDA to fund upgrading of transmission lines in north of Yangon

Transmission and Distribution World, 10/04/13. Edited.

<http://tdworld.com/overhead-transmission/yangon-electricity-supply-board-upgrade-transmission-lines-myanmar>

The Yangon Electricity Supply Board is expected to receive a one-billion-baht soft loan to upgrade transmission lines in the former Myanmar capital to serve sharply rising electricity demand, according to the Neighbouring Countries Economic Development Agency. NEDA has hired the Provincial Electricity Authority (PEA) [of Thailand] to conduct a study of the scheme. The Bangkok Post reported that Bangkok-based NEDA coordinates initiatives aimed at upgrading neighboring countries' infrastructure, partly to pave the way for Thai companies to participate in those projects. Last month, NEDA signed a memorandum of understanding for PEA to study the details of upgrading transmission lines in Yangon's North Okkalapa and North Dagon townships. Covering 70 square km, this area is packed with people and factories. However, Myanmar's power transmission system is more than 30 years old, resulting in 30% energy loss through inefficiency as well as frequent energy blackouts nationwide, said Acksiri Buranasiri, president and chief executive of NEDA. For the study, NEDA will provide 12.3 million baht to the PEA, which has 50 years' experience developing Thailand's power distribution system. The study is expected to be finished within six months, after which Neda expects to provide the 1-billion-baht soft loan to Myanmar by year-end, the Bangkok Post reported. The upgraded system should be operating next year, Buranasiri said.

Indonesian firm plans Myanmar power plant

Aung Shin, Myanmar Times, 08/04/13. Edited and abridged.

<http://www.mmmtimes.com/index.php/business/6432-indonesian-firm-plans-myanmar-power-plant.html>

Indonesian state-owned Bukit Asam mining company plans to invest in Myanmar's electricity generation sector, a company official said on April 3. Mr Oktavianus Tarigan, the company's strategic planning manager, told The Myanmar Times that the company intended to build a coal-fired power plant in Myanmar. "We sent a letter to the Myanmar government three weeks ago stating our desire to build a coal-fired power plant," he said. "We would like to form a joint venture with the government, and are also seeking a local partner that is suitable for our company," he said. Bukit Asam will invest US\$80 million in the proposed coal-fired power station, the state-run Myanma Ahlin newspaper reported in a March 26 article that referred to a Jakarta Globe newspaper story. However, Mr Tarigan said key facts in the Jakarta Globe story were incorrect. "We are still waiting for a reply from the Myanmar government. We haven't decided how much to invest yet but we hope the government will permit our project. "I have visited Myanmar three times and met government ministers and officials, and I feel the government welcomes our proposed investment," he said. Bukit Asam plans to build a coal-fired power plant capable of generating 100 to 200 megawatts (MW) at a cost of about \$400 million if it is given permission, he added.

Model village in Pantanaw township connected to grid

Myanmar News Agency, 08/04/13. Edited. From p. 16 of the print edition of NLM on 09/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-09.pdf>

A ceremony to launch the supply of electricity on a self-reliant basis was held in Chaunggale-Theingon model village in Pantanaw Township of Ayeyawady Region on 6 April morning. Union Minister at the President's Office U Thein Nyunt launched the supply of electricity and inspected installation of power lines. The service is being provided through the installation of 160 KVA transformer and a 1.43 mile-long 0.4 KV power line.

Myanmar, Norway to cooperate in hydropower generation

Myanmar News Agency, 04/04/13. Edited and condensed. From p.1 of the print edition NLM on 05/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-05.pdf>

President Thein Sein received Norway's Minister of Trade and Industry Trond Giske and party today. Their discussions focused on political, economic, social reform process of Myanmar, environmental conservation, establishment of labour-intensive factories and workshops, mutual cooperation in information technology and communication sectors by establishing factories and workshops, investment and establishment of SME factories and workshops to manufacture value-added products based on natural products and co-operation of Norwegian companies in generating hydropower.

April power cuts 'not bad', says MOGE official

Soe Sandar Oo, Myanmar Times, 03/04/13. From the Myanmar Times edition of 22/04/13.

<http://www.mmtimes.com/index.php/business/6476-april-power-cuts-not-bad-says-moge-official.html>

Natural gas supply from the Yadana oil and gas project used for domestic electricity generation will not be greatly disrupted, a Myanmar Oil and Gas Enterprise official said on April 3. However, exports to Thailand and supplies for compressed natural gas filling stations will be cut back by the scheduled maintenance, which will finish on April 13, the official said. "The onshore natural gas used by factories owned by Ministry of Energy stopped operating from April 5 to 13, which means 24 million cubic feet of gas a day can be provided to the Ministry of Electric Power, and a further 1 million cubic feet to MOGE," he said. He added that the maintenance was planned to be completed sometime between November and March but the government asked to delay the work until examinations finished. "If we cannot finish the maintenance now then monsoon will arrive. The weather at sea is dangerously unpredictable during monsoon and maintenance cannot be completed then," he said, adding that the work could not be delayed until after monsoon. A spokesperson for the Yangon Electricity Supply Board said the power station in Ahlone township mostly relies on natural gas to generate electricity, so the nine-day maintenance period is creating a temporary power shortage when demand is high because of the hot weather. "We are generating about 330 megawatts of electricity less than usual so there will be some shortages but it's not too bad," he said. "After maintenance is finished it will go back to normal." Industrial zones were warned in late March that they would not be supplied with any electricity during the maintenance period, he added. An announcement on the Ministry of Energy's website said the Yadana project, which has been running for 15 years, has already yielded about 51 percent of its expected total production. The gradual depletion of the gas reserves under the seafloor are creating a depression where the platform is anchored, and the maintenance aims to solve the problem, the announcement said. The Ministry of Energy and MOGE are partners in the Yadana project, which is operated by France's Total. The project sits between blocks M5 and M6, which are south of Ayeyarwady Region. When the project started flowing in 1998, it produced about 900 million cubic feet of gas a day.

Waterfall in Leiktho attracts interest of Japanese survey team.

Kyemon, 03/04/13. Edited and revised. From p. 2 of the print edition of NLM on 04/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-04.pdf>

Japanese experts were recently in the Leiktho area of Thanundaunggyi township east of Toungoo where they looked into the feasibility of harnessing a waterfall there to generate electricity. Locals in Yado are already generating power on a small-scale where the water falls down the face of a steep cliff. The Japanese were looking into economic prospects for the region.

Electric power output to be affected by Yadana maintenance

Myanmar News Agency, 02/04/13. Edited. From p. 1 of the print edition of NLM on 03/04/13.

<http://www.burmalibrary.org/docs15/NLM-2013-04-03.pdf>

General maintenance of the offshore platform of the Yadana offshore natural gas rig will be carried out from the 5th to the 13th of April. During maintenance operations, the supply of gas to the gas-fired power plants of Myanma Electric Power Enterprise will be reduced to 165 million cubic feet. As a result, power generation at the Hlawgar, Ywama, Ahlon and Thakayta plants in the Yangon Region and the Thaton, Mawlamyine, Shwetaung and Myanaung gas power plants will decrease to about 330 megawatts. This represents a reduction of about 20pc in the total power demand of the country. Power distribution to state-owned and privately-owned factories, industrial zones, heavy industries and production will be halted. However the Electric Power ministry will increase the amount of gas from inland natural gas fields and increase the production of hydropower plants. During the maintenance period, the public is urged to use power efficiently.

Short circuit fire destroys six houses in Mandalay

Kyemon, 30/03/13. Edited. From p. 2 of the print edition of NLM on 31/03/13.

<http://www.burmalibrary.org/docs15/NLM-2013-03-31.pdf>

Seven houses were burnt to the ground as a result of a fire that started in a house in sector 292 in Nannaungmyin ward of Mahaangmye township in Mandalay on the 28th of March. The fire was sparked by an overload in a wall socket used for TV, DVD player and refrigerator. It caused a short circuit, setting fire to the bamboo wall. The fire swept through the whole house of Daw Myint Myint Mar and spread to other houses, reducing them to ashes. Loss of property in the fire amounted to K 3,058,700. The house owner was charged with reckless use of electricity.

Indonesia's PLN to assist in reducing transmission losses in Myanmar

Xinhua, 27/03/13. Edited and condensed.

<http://www.globaltimes.cn/content/771091.shtml#.UVnUwjdlBvE>

Indonesia's state-owned electricity firm PT Perusahaan Listrik Negara (PLN) plans to help Myanmar reduce the losses incurred in the transmission of electricity power, a top official of the firm said. PLN President Nur Pamudji said that the assistance would be in the form of technical consultation. Myanmar loses up to 26 percent of the electrical power it produces, while Indonesia has reduced its losses to about 9.2 percent. Up to 10 technicians will be sent to Myanmar to assess the problem being faced and to observe management of the sector. Pamudji said they would aim for losses of less than 20 percent in Myanmar.

Myanmar's first solar-powered groundwaterpumping put into service

Tin Hlaing, Kyemon, 26/03/13. Edited and abridged. From p. 16 of the print edition of NLM on 31/03/13.

<http://www.burmalibrary.org/docs15/NLM-2013-03-31.pdf>

Myanmar's first solar-powered under-ground water pumping system has been introduced in Taung-dwingyi Township, Magway Region, that lies in the dry zone. Tapping underground water started on 18 December 2012 with the use of a borehole drilling machine of Water Resources Utilization Department under Yanpal creek in Kokokwa village of the township. Works to tap groundwater from 80 feet below the surface with the use of a 10-inch diameter pipe were completed on 21 December 2012. Using facilities of the Irrigation Department a tube-well was then sunk and 39 solar panels were installed. Twenty 200-volt batteries were hooked into the solar panels and these were connected to the water pumps. The groundwater was conveyed to Kyi-yoe-kyi lake situated about 2000 feet from the tubewell by means of a three-inch water pipeline starting on 10 March. The tubewell can produce 6000 gallons of clean groundwater per hour. The solar power operated pumping system will supply water to the lake in summer, thereby contributing towards greening of the region and adequate supply of drinking water for local people and their cattle. A photo of the solar panels and pumping station accompanies the article.

Hydropower official clarifies Thanlwin dam projects

Soe Sandar Oo, Myanmar Times, 25/03/13. Edited and condensed.

<http://mmtimes.com/index.php/business/5712-china-thailand-invest-in-hydropower.html>

China and Thailand are interested in investing in hydropower projects along the Thanlwin River, said a senior official from the Ministry of Electric Power's Department of Hydropower Implementation on March 20. "They are worried about future electricity demand. Due to increasing populations and development, the present production rate cannot meet the consumption rate of electricity in these countries," he said. Six hydropower projects scheduled to be implemented along the Thanlwin include the 1400-MW Kunlong dam in northern Shan state, the 1000-MW Naungpha, the 200-MW Manthaung and the 7110 MW Mongton [Tasang] projects in central Shan State, the 4000-MW Ywathit project in Kayah state and the 1360-MW Hatgyi project in Kayin state. "These projects are just at the research stage. But some people think we are starting construction already and they want to protest against the projects for the sake of environment," he said. Chinese companies Hanergy Holding Group Ltd, Hydrochina Corporation, China Three Gorges Corporation (CTGC), China Datang Overseas Investment Co, Ltd (CDOI) and Sinohydro Corporation have each signed MoUs with local companies. Thailand's EGAT International (EGATI) is interested in a B.O.T. agreement with a local company and has already signed an MoU with local companies and investors. "If we have no plan management to uncover the public for SIA and EIA, we will not continue the projects. This is a new era and everything will go on very openly and we will listen to what the people say," the hydropower official said. There have been rumours that excess water from the dams would flow to Thailand, causing activists from the country to demand the projects be cancelled. The Deputy Minister of the Ministry of Electric Power, U Myint Zaw, told a sectional meeting of the Pyithu Hluttaw that these rumours are not true.

MHI ships 13 diesel engine gensets to Myanmar as emergency aid grant

Gas to Power Journal, 25/03/13. Edited and abridged.

<http://gastopowerjournal.com/projectsafinance/item/1568>

Japan's Mitsubishi Heavy Industries, Ltd. (MHI) has confirmed shipment of 13 sets of power generation systems operated by diesel engine to the Yangon City Electricity Supply Board (YESB). The generators are provided as part of an emergency grant from the Japanese government in response to Myanmar's current power crisis. The delivery of emergency power supply is Japan's first large-scale aid to Myanmar since the establishment of a civil administration in the country in 2011. Mitsubishi Corp said it cooperated with the Bank of Tokyo-Mitsubishi UFJ in implementing the grant. All 13 units, with a combined power generation capacity of about 13,000 kilowatts (kW), will be installed at the Thakayta thermal power plant Yangon. Yangon has been hit by severe energy shortages due to the aging of existing power generation facilities and limited power supply capacity from hydraulic power generation during the dry season. The use of MHI's emergency power generation systems is on the rise in the Japanese government's overseas aid provisions.

Gas generators for Ywama power plant arrive in Yangon

Myanmar News Agency, 23/03/13. Edited. From p. 2 of the print edition of NLM on 24/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-24.pdf>

Arrangements are being made for the installation of thirteen gas-fueled generators in the compound of the Ywama power station. The generators which were sent from Germany arrived at Asia World jetty on 17 March. They will supply up to 50 megawatts of power to the national power grid.

Japan to fund rehabilitation of Beluchaung No. 2 hydropower plant

New Light of Myanmar, 22/03/13. Edited and abridged. From p. 16 of the print edition of NLM on 23/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-23.pdf>

Japanese Ambassador Mikio Numata and Myanmar's Deputy Minister for National Planning and Economic Development Daw Khin San Yi yesterday attended a signing ceremony for notes related to 11 projects on 21 March. The grants to be funded by Japan include US\$ 70.2 million designated for the rehabilitation of Beluchaung No. 2 hydropower plant.

Overbilled electricity subscribers can file complaints

Myanmar News Agency, 20/03/13. Edited. From p.16 of the print edition of NLM on 21/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-21.pdf>

Overbilled electricity users should lodge complaints at their respective township electrical engineer's office, Deputy Electric Power Minister Aung Than Oo said at the Amyotha Hluttaw session today. He was replying to a question from U Khin Maung Yi of Ayeyawady Region Constituency 6 on whether the electricity bill of kiosks should be charged at the ordinary rate. The use of electricity at these small shops is defined as the use for economic purpose, the lawmaker said. The use of electricity by stores, game centres, beauty parlours and copier shops will continue to be defined as commercial use, the deputy minister insisted. He stressed the need to apply for business meters for commercial use. "The policy laid down from on high might be correct. But staff bridging the government and people are still charging 75 Kyats per unit," commented U Steven Tha Beik of Chin State Constituency 4..

Four power grids, more plants needed in Rakhine

Myanmar News Agency, 19/03/13. Edited. From p.16 of the print edition of NLM on 20/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-20.pdf>

Deputy Electric Power Minister Aung Than Oo told representatives in the Pyithu Hluttaw that four additional power grids and more power plants are needed to supply electricity to Rakhine State. He was replying to a question raised by U Ye Tun of Thandwe constituency. The power grids and power plants are scheduled for completion by December, 2014, he said.

Work resumes on a 7000-MW hydropower dam on the Salween

KP, Shan Herald, 19/03/13. Edited, revised and condensed.

http://www.english.panglong.org/index.php?option=com_content&view=article&id=5314:relocations-of-over-100-villages-in-the-area-of-mongton-hydroelectric-power-project-begun&catid=87:human-rights&Itemid=285

Shan Saphawa, a Shan environmental organization, reports that construction work has restarted on a controversial hydropower dam on the Salween River, previously known as the Tasang project. Work on the project at the original site near Tasang was suspended in late 2011. The new site is located about 16km farther up the Salween. "At the new site, there are 400 people recruited for the construction of the dam which is now known as the Mongton Hydroelectric Power Project. Green houses and halls have been built for the construction workers. The relocation of communities that would be affected by the dam has also been started. Some small villages patrolled by the Burma Army have already begun to relocate," said Sai Kher Seng of the Shan Saphawa organization. **(Compiler's note:** A map showing the new location of the dam is available on the S.H.A.N. website.)

Solar power may offer alternative solutions to rural Myanmar

Soe Sandar Oo, Myanmar Times, 18/03/13.

<http://mmtimes.com/index.php/business/5178-solar-power-offers-alternative-solutions.html>

Solar power can provide electricity for the whole country by 2031, said U Thoung Win, chairman of the Renewable Energy Association Myanmar on March 11. "Solar power takes only one day to install in a house in a province. For a whole village, it takes about a month. We are now trying to install power systems that operate on the megawatt level instead of the kilowatt level," he said. As Myanmar's electricity deficit worsens, the country is in need of alternative energy, U Thoung Win said. Industrial zones in Pakokku, Myingyan, Mandalay and Taunggyi will easily benefit from solar power, he said, because the areas are constantly exposed to sun and heat. Foreign investors are showing a keen interest in solar power, U Thoung Win said. More than 40 companies, mostly from China, are now importing solar panels. One drawback to solar power is the high cost. However, the price of solar panels is decreasing. While a 100-watt capable solar panel cost K500,000 three years ago, the same solar panel – about three feet long – costs K150,000. Another drawback is quality control, U Thoung Win said. "Large companies in China export solar panels to European countries that have gone through the quality control process. However, with Myanmar, most of the solar panels that are coming through the border trade at Shweli have been rejected by the factories or did not pass quality control. "We need to be careful with that because it can cause major technical issues during installation," he said. Solar energy requires a wide space of land, as a one megawatt solar panel needs two acres of space. The most suitable locations for solar power are Bago, Magway and Sagaing regions, he

said. Currently, only 26 percent of the whole country has access to electricity. Among that 26pc, only 4pc in rural areas have access to electricity. Only 3000 villages out of 68,000 have light.

2,000 Karens gather on the Salween to call for a halt to dam plans

Karen Rivers Watch, 15/03/13. Edited and condensed.

<http://www.burmariversnetwork.org/actions/press-releases/23-press-releases/879-2000-karens-gather-on-the-salween-to-call-for-a-halt-to-dam-plans.html>

About 2,000 internally displaced people and villagers from the Wei Gyi area gathered on March 14 at Ei Htu Hta Internally Displaced Persons (IDP) camp on the Salween riverbank to mark the International Day of Action for Rivers and Against Dams in an event organized by Karen Rivers Watch (KRW) and its local member Salween Eyes (SEE). Six dams are being planned on the Salween River in Burma, including the Hat Gyi Dam in Karen State. With an installed capacity of 1,360 megawatts, the Hat Gyi project will cost US\$2.6 billion, according to the US-based International Rivers. Thai NGO TERRA has said that 60 MW of power from the dam will be for Myanmar, while the rest will be sold to Thailand. The event, organized to raise local concerns about current and future impacts, was joined by environmental activists from other areas. Paul Sein Twa, director of the Karen Environmental and Social Action Network (KESAN) said that local people do not want any dams on the Salween River, especially in Karen State, without the free, prior and informed consent of impacted communities. He urged the government and the Karen National Union to broaden the decision making process so that it would be more transparent, inclusive and democratic. Also speaking at the ceremony, Naw Phyo Phyo of the Karen Women's Organization called on Naypyitaw and foreign investors to desist from implementing any development project, including dams, during this fragile ceasefire period, as genuine peace was not yet guaranteed. "Current development projects will only benefit a few people— mainly governments and investors—but local people like us will face huge challenges, including permanent loss of our lands, displacement, hunger and severe flooding. This will have many negative impacts on our environment and our livelihoods," she said. In solidarity with local communities in China, Burma/Myanmar and Thailand who are calling for the free flow of the Salween River, a bamboo raft bearing a large banner: "Save Our Salween, No Dam" was floated down the river during the rally

Assistance explained to villagers displaced by Upper Paunglaung power project

Myanma Alinn, 13/03/13. Edited. From p. 7 of the print edition of NLM on 14/03/13

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-14.pdf>

A meeting to clarify the situation with regard to the Upper Paunglaung Hydropower project in Pinlaung township was held at the hall of the Hydropower Implementation Department near Konchaing Village in the third week of February. Shan State Minister for Electric and Industry Sai Tun Yin and Kayan National Race Minister Laurence made presentations. Departmental officials explained progress in building the hydropower plant. Ward and village administrators and village elders from 10 villages of Thabyegon Village-tract and 12 villages from Hteinbin Village-tract reported on difficulties in the resettlement in the wetland areas of the station. Departmental officials outlined the measures taken by the department to co-operate with the local people. The hydropower project which is located 26 miles east of Pyinmana, will generate 32 million kilowatt hours of electricity per year. The department is carrying out the resettlement of 9,374 people from 2,246 households in Hteinbin and Thabyegon village-tracts. Assistance provided includes reclamation of housing plots, provisions in the fields of health, religion, education and administration, construction of better buildings for the villagers, construction materials for locals to build their houses as they like, provision of agricultural and horticultural farms, construction of inter-village roads and road-related buildings, installation of power lines to the new villages for the supply of electricity from the new Upper Paunglaung plant and installation of electric meters in the homes.

Deputy Electricity Minister: No plans to purchase power for foreign countries

Myanmar News Agency, 13/03/13. Edited. From p. 9 of the print edition of NLM on 14/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-14.pdf>

The Ministry of Electric Power has no plans to buy electric power from foreign countries to supply sufficient electricity to the people as it would require the injection of a huge investment to build the power grids and sub-power stations to link with the grids of foreign countries, said Deputy Minister for Electric Power Aung Than Oo during today's session of the Pyithu Hluttaw. He was answering a question raised by U Phyo Min Thein of Hlegu constituency.

The deputy minister also said that local authorities in border areas have bought power from Thailand to supply power to Mawtaung Village in Myeik District, Taninthayi Region, to Myawady and Phayathonsu in Myawady District, Kayin State and to Tachilek in Shan State (East). The ministry has allowed local and foreign investors to buy power from neighbouring countries and sell to local people when they asked permission from the ministry through the remaining regional governments, he added.

Nampok village connected to the grid on a self-reliant basis

Myanma Alinn, 11/03/13. Edited. From p. 2 of the print edition of NLM on 12/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-12.pdf>

The erection of lamp-posts for the supply of electricity took place in Nampok Village of Mohnyin Township on a self-reliant basis on 5 March. "We have erected 120 lamp-posts within 10 days. It cost over K 100 million. It is projected to install two transformers We have coordinated with departments concerned to, install power line," said village administrator U Chit Aung and village power supply committee member U Myint Aung. Mohnyin Power Station will supply electricity to the village by connecting it to 66-KV power line.

Electricity supplied to Shwepan village in Bago township on self-reliant basis.

Myanmar Alinn, 10/03/13. Edited and condensed. From p. 8 of the print edition of NLM on 11/03/13.

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-11.pdf>

A ceremony to launch the supply of electricity was held in Shwepan Village of Kamanat Village-tract in Bago Township on 5 March morning. Bago Region funded K 14.4 million for the installation and the local people K 15.4 million.

Ayadaw Township supplying solar panels to provide electricity to rural villages

Myanma Alinn, 09/03/13. Edited and condensed. From p. 7 of the print edition of NLM on 10/03/13

<http://www.burmalibrary.org/docsMA2013/NLM2013-03-10.pdf>

A plan is being implemented to install solar panels at each of the villages of Ayadaw, Kani and Myinmu Townships in Monywa District. The first village to benefit from the plan is Phokkon in Ayadaw township. Township Administrator Sein Htay and departmental officials handed 320 sets of solar panel, over 12-volt battery, three five-watt bulbs and an inverter for each house of Phokkon, as well as 23 lamp-posts, to village administrator U Maung Soe on 15 February evening. Solar panel and related equipment for each house are worth over K 70,000.

Govt Takes Flack for Lack of Transparency on Salween Dam Plans

Nyein Nyein, The Irrawaddy, 01/03/13. Edited and abridged.

<http://www.irrawaddy.org/archives/28153>

The fate of the Salween River in eastern Burma remains unclear, despite the government's release of information about dams planned for the river in response to questions raised in Parliament earlier this week. The Salween, Burma's second largest river, is slated to see construction of six hydro-power dams in the coming years, although when exactly they will be built, and what has happened to plans for a seventh dam that was shelved in 2007, is still unknown. On 27/02/13, the deputy minister for electric power, Myint Zaw, told the Lower House of Parliament that six dams would be built in partnership with foreign investors. "All he said was that six dams would be built on the Salween to generate electricity," said Khin Maung Yi, a Lower House MP from the opposition National Democratic Force party who represents a constituency in Rangoon. "I asked him about the Tasang Dam, but he didn't answer," he added. The Tasang Dam, a proposed 7,110 megawatt project in southern Shan State was put on hold in 2007 for unspecified reasons. The project attracted widespread criticism because of concerns about its social and environmental impact. One reason for the government's reticence on the issue of the dam may be the fact that opposition to projects initiated under the former military junta has grown since the current quasi-civilian government assumed power two years ago. "As the previous projects were agreed upon for the private benefit of military-backed cronies, it seems the government doesn't want to say too much about them," said Win Myo Thu, chairman of the environmental NGO Economically Progressive Ecosystem Development (EcoDev). "If they don't come clean, however, it will only complicate matters. What we really need in our government is someone who has the courage

to really talk about these issues,” he added. Despite this criticism, however, the government has released information about the other six dams, including the foreign investment partners—mostly Chinese and Thai companies—and how much each would generate. All are located in predominantly ethnic areas in Shan, Karenni and Karen states. It was unclear where most of the generated electricity would go, but around 85 percent of the power that was supposed to be produced by the Thai-backed Tasang dam was slated for export to Thailand.