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Sino-Russian relations

Russia and China still cannot reach agreement on the price for raising annual coal exports to 20 million tonnes. Pricing rows and high rail infrastructure costs are hindering a deal, despite encouraging statements from both sides.

■ **China offers new markets for Russia's abundant Siberian and Far East coal deposits.**

■ **Beijing can afford to play a long game to secure good prices.** *(Page 2)*

Linking up Sri Lanka

Sri Lanka is aiming to gain access to India's generating potential through a subsea link. Sri Lanka suffers from some of the highest tariffs in the world and connecting to India would aid development of a more integrated South Asian Power Grid.

■ **A 385-km, 400-kV link could be modeled on Australia's Basslink project.** *(Page 3)*

■ **Sri Lanka could gain access to the Himalayas' hydro potential as well as India's Ultra Mega Thermal Projects.** *(Page 3)*

For analysis and commentary on these and other stories, plus the latest electricity developments, see inside...

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COMMENTARY

Coal questions

Russia and China are moving closer to agreeing on prices for coal exports, with China's soaring power demand likely to remove any remaining obstacles to a potential 20 million tonne per year deal

By *Graham Lees*

- **Russia has got close to a deal with China to raise exports 20 million tonnes per year**
- **Moscow has highlighted the Kuznetz Basin and Amur as suitable sources of export coal**
- **The two countries have agreed on a green energy joint venture**

China has renewed negotiations with Russian mining companies for joint ventures to develop some of Siberia's vast untapped coal reserves.

Talks, which have been held on and off since 2009, resumed during an energy conference in St Petersburg attended by a Chinese delegation headed by President Hu Jintao.

The two countries are looking at plans to raise Russian coal exports to China to at least 20 million tonnes per year in the next five years.

"There are plans to create energy and technology complexes, to enable the comprehensive development of coal fields," Konstantin Alexeyev, the head of the Russian Energy Ministry's coal department, was quoted by Interfax news agency as saying last week.

Alexeyev identified two separate regions of the Russian Far East where the two countries could co-operate in exploration, production and infrastructure development – both within striking distance of the Chinese.

The regions are the Kuznetz Basin in south-west Siberia and the Amur region in Siberia's south-east corner.

China's biggest coal producer, state-owned Shenhua Group, is talking to Russian power giant Inter RAO UES and state-owned energy fuels producer Rostprom.

Shenhua is looking at a deal with Inter RAO UES in the Kuznetz area while negotiating with Rostprom on coal mine developments in Amur.

The Kuznetz Basin holds some of the world's biggest known coal deposits, but

production has been hampered by lack of capital and inadequate transport infrastructure.

Rising trade

China's purchases of Russian coal have been rising steadily as imports of the fossil fuel in general have climbed, including from Indonesia and Australia.

Imports of Russian coal topped 12 million tonnes in 2010, according to official figures from the National Development and Reform Commission (NDRC).

Russian Energy Minister Sergei Shmatko told the St. Petersburg conference that the aim of both sides was to increase coal exports to China to at least 20 million tonnes per year from 2015.

"The problem behind this effort by China to increase coal supply from Russia is similar to that hindering oil and gas deals between the two countries, namely money," Hong Kong-based energy industries independent analyst Jeff Mead told *AsiaElec*.

"Both sides want a deal but both sides want too much from the other. The

"No doubt it will eventually happen, because this is coal on China's doorstep compared to the extra expense of importing from Australia and even Indonesia,"

situation with a coal deal is that Chinese money would be needed to fund much of the developments, from mines to railway infrastructure."

"No doubt it will eventually happen, because this is coal on China's doorstep compared to the extra expense of importing from Australia and even Indonesia," he said.

Coal clusters

The Russians are seeking loans from China totalling US\$6 billion, some of which would need to be used to build new railway lines.

There has also been discussion about joint venture construction of coal-fired thermal power plants (TPPs) on the Russian side of the two countries' common border, with the electricity to be transmitted into China.

At the St Petersburg conference, the Russian energy ministry's Alexeyev talked about the idea of developing mine "clusters" in the Kuznetz Basin. He identified the Karakanskoye and Mencherepskoye areas.

One of the problems affecting coal shipments to China from the Kuznetz region is the difficult terrain through which a railway would have to be built.

Kuznetz borders China's wild and rugged mountainous semi-desert north-west Xinjiang region.

The Russian energy ministry told Interfax that documents had been prepared for agreements on coal ventures to be signed during the conference. ►►

COMMENTARY

Green hopes

Chinese President Hu said in St Petersburg that China was keen to “prioritise” its energy co-operation with Russia, but a comprehensive agreement of coal remained elusive, with the conference ended on June 18 without any major deals being struck.

The Chinese side has remained tightlipped since.

The Russian-Chinese meetings did, however, achieve some minor power agreements.

Inter RAO UES is to start a joint venture called the Green Energy

Corporation with China’s part-state-owned National Bio Energy Company.

The two firms said they planned to develop a variety of renewable energy projects.

In a statement, Inter RAO UES said: “Green Energy’s activities will include building power plants that run on various types of biomass to generate thermal and electric energy, as well as biogas; reconstructing coal and oil-burning power plants with low indicators of energy and resource efficiency to integrate energy-saving technologies; [and] creating plants to make briquette

fuel pellets of peat, waste wood and other types of biomass.”

Russia also plans to export 1.4 billion kWh of electricity to China this year, Deputy Prime Minister Igor Sechin said last week.

Beijing likes to play a long game, especially with the Russians, it seems. However, with China’s power demands spiralling ever upwards and domestic coal production struggling to meet demand, it is surely only a matter of time before the vast untapped energy resources of Siberia come into play. ■

India, Sri Lanka plan transmission line across Palk Strait

Sri Lanka stands to benefit the most from a subsea link to India’s power grid, although this would be dependent on India developing a new generation of thermal and hydro generating capacity

By *R Prasad*

- India has proposed a 385-km, 400-kV line across the Palk Strait, connecting Madurai and Anuradhapura
- Colombo is considering Australia’s Basslink model for the cross-border project
- A transmission line could facilitate exports from Bhutan and Nepal

India is looking to develop an electricity transmission line across the Palk Strait to promote power trading with Sri Lanka.

State-run Power Grid Corporation of India Limited (PGCIL) has proposed laying a 385-km, 400-kV transmission line across the Palk Strait, including a 50-km offshore cable, from Madurai in south-east India to Anuradhapura in north-west Sri Lanka.

“India and Sri Lanka will soon sign a [Memorandum of Understanding] MoU for the development of an offshore electricity transmission line to connect the electricity networks of the two countries,” India’s power minister Sushil Kumar Shinde said.

“The proposed connection would enable both the countries to exchange electricity to the tune of 1,000 MW for

mutual benefit,” he added.

Both the India and Sri Lankan governments have given approval in principle to the scheme. PGCIL and Ceylon Electricity Board (CEB) have been designated as nodal agencies for the development of the project.

Transmission route

The link involves 185 km of overhead line from Madurai to Rameshwaram on the Indian coast, 50 km of subsea cable from the Indian coast to Thalaimannar on the Sri Lankan west coast, and 150 km overhead line from Thalaimannar to Anuradhapura in north-west Sri Lanka.

The 1,000-MW cable will be connected to the India’s southern power grid at Madurai and the Sri Lankan power grid at Anuradhapura.

The report had indeed identified three routes across the Palk Strait as suitable for the line, but suggested the Madurai-Anuradhapura route as the most cost-effective because of shorter distance between the two countries’ coastlines.

The two other routes – Tuticorin (India)-Puttalam (Sri Lanka) and Madurai (India)-Puttalam (Sri Lanka) – involved laying 250 km of subsea cable.

The report estimated the project would cost US\$175 million and could be completed in 42 months.

The line could potentially tap into Nepal and Bhutan’s vast hydro potential, sent through India’s eastern and north-eastern power grids, which have considerable hydropower surpluses. ►►

COMMENTARY



India-Sri Lanka subsea links

Source: SARI-USAID

The eastern grid, which sources 1,400 MW from Bhutan, currently exports about 40 MW of electricity to Nepal and is preparing export 250 MW to Bangladesh under bilateral initiatives.

Another potential source of electricity is Eastern India, where over 18,000 MW of new thermal generating projects is being built. This includes 4,000 MW at Cheyyur, 4,000 MW at Krishnaptaman, 1,600 MW at Tuticorin and 1,200 MW at Palanipuram. As a result, the southern grid could have a surplus of electricity supply by 2016.

The backers of the link to Sri Lanka intend to exploit all these generating resources to supply power for export to Sri Lanka.

Basslink model

Colombo is considering a transmission mechanism similar to the Basslink transmission project in Australia.

A Sri Lankan delegation recently visited Melbourne to examine the policy, technical and institutional requirements involved in building the 360-km, 500-MW HVDC Basslink submarine link across the Australian Bass Strait.

The cable, which has a 290-km undersea section, connects grids in the states of Victoria and Tasmania.

The Basslink is designed to transmit 500 MW of energy on a continuous basis in either direction and up to 630 MW exported from Tasmania for limited periods.

The interconnector allows Tasmania to trade electricity with Australian National Electricity Market, exporting Tasmanian hydropower at times of peak prices to Victoria during summer and importing Victorian base-load during off-peak

periods during winter.

Since commercial operations began in April 2006, Basslink has achieved an average availability of 99.5%.

Trade benefits

Sri Lanka is equally interested in developing the project. A CEB official said the transmission line could solve the problems faced by the Sri Lankan power industry, which has been struggling for decades to meet rising demand and to provide efficient and cost-effective electricity services.

The island state has only 2,768 MW of installed generating capacity, of which 49% is gas-fired.

Hydropower plants (HPPs), which account for 51% of total capacity, are dependent on rainfall patterns in catchment areas.

Many independent power producers (IPPs) use expensive fuel oils as feedstock. The cost of power in the island is considered to be one of the highest in the world.

A link to India could provide significant benefits to the economies of the two countries. It would enhance power system reliability, improve security and diversity of supply, and lower consumer costs.

This interconnection could also help attract private sector investment to the power sector.

Sri Lanka is set to benefit more from the cross-border transmission line, considering its heavy dependence on imported energy resources.

A direct transmission link will enable the country to access low-cost electricity generated by India's nuclear and hydro projects.

Also, the transmission line will create an environment for Sri Lanka to access the vast untapped hydropower energy resources in Bhutan and Nepal, and foster the development of a regional South Asia Power Grid. ■

THERMAL

MHI to set up power system unit in Vienna

Japan's Mitsubishi Heavy Industries, Ltd. (MHI) said it would soon establish a new engineering and procurement subsidiary in Vienna, Austria, in a bid to win new contracts in the European power systems business.

According to MHI, MHI Engineering Vienna is to be set up as a wholly owned subsidiary of London-based Mitsubishi Power Systems Europe, Ltd. (MPSE).

The new company will be capitalised at 1 million euros (US\$1.43 million). Its activities are to cover Europe and the countries nearby.

MPSE is an MHI subsidiary established in October 2007 to oversee the MHI group's power systems business in Europe. MHI has not given a specific date of foundation for the new subsidiary in Vienna.

MHI is to establish MHI Engineering Vienna to "respond dynamically to demand for combined-cycle gas turbine

(CCGT) power generation systems, which is expected to expand over the medium and long term in the European region," MHI said in a statement.

"By staffing [with] engineers experienced and knowledgeable in the European power systems market, MHI will build up engineering, construction and procurement (EPC) know-how in the area and further enhance its order-taking and execution capabilities of new projects as well as strengthen its procurement function," the company said.

According to MHI, while the European CCGT power generation market has yet to pick up because of the sagging economy and policies focused on renewable energy, the move to introduce the CCGT power generation system is gaining momentum for the replacement of aged coal-fired thermal power plants (TPPs) and as an alternative to nuclear

power.

In countries such as Turkey and Poland, support for CCGT construction has been increasing along with their early economic recovery. The new company in Vienna "will focus on capturing these demands for CCGT systems," MHI said.

The establishment of MHI Engineering Vienna is part of MHI's "global business expansion strategy," which was stipulated in the company's 2010 Medium-Term Business Plan, the Tokyo-based company said.

"MHI has been accelerating its global business expansion and [regards] the establishment of MHI Engineering Vienna as a model case of the company's power systems business localisation in major markets. Taking this opportunity, MHI will further enhance local engineering sources and intends to expand the power generation system business," the company said. ■

BHEL faces cut-price challenge

Indian state-run heavy equipment manufacturing major Bharat Heavy Electricals Ltd (BHEL) is implementing a strategic plan to take on rising competition from emerging players, both domestic and foreign, that threaten its monopoly position in the Indian market.

A particular focus is on edging out the low-cost Chinese firms that have won several contracts from Indian power producers.

"We are preparing the organisation for the future. Our strategic plan will be detailed for the next five years. It will provide long-term direction to the company," said B P Rao, BHEL chairman and managing director.

BHEL's focus is to remain in the power business, even as the company

looks to streamline areas that range from nuclear and renewable energy, overseas contracts and strategic joint ventures.

The firm will also look to address issues of delays in implementation of projects and insufficient equipment manufacturing capacity in the wake of rising demand.

One critical component will be pricing.

"The significance of competitive pricing is something that cannot be overlooked at present in the Indian equipment market"

According to Rao, the large size of BHEL affords scaling down of costs that can allow the company to quote low rates.

"The significance of competitive pricing is something that cannot be overlooked at present in the Indian equipment market," said Rao.

BHEL faces stiff competition from Chinese power generation equipment-makers such as Sepco, Shanghai Electric Group, Dongfang Electric Corp. and Harbin Power Equipment.

Domestic players include JVs such as L&T-Mitsubishi, Toshiba-JSW, Ansaldo-Gammon India, Alstom-Bharat Forge, BGR-Hitachi and Thermax-Babcock and Wilcox. ►►

THERMAL

BHEL's record in the recent past has been good. The company announced a 40% rise in net profit to over 60 billion rupees (US\$1.32 billion) in 2010-11. In 2009-10, BHEL profit stood a little over 43 billion rupees (US\$943 million).

BHEL clocked revenues of nearly 435 billion rupees (US\$9.54 billion) in 2010-11, a 27% jump on the previous year. The company is on track to meet targeted revenues of US\$10 billion by 2012.

The firm secured record orders valued at over 605 billion rupees (US\$13.27 billion) in 2010-11, taking the total value of its present order book to over 1.6 trillion rupees (US\$35 billion).

Contracts have been signed with NTPC, Bajaj Hindustan, Jaiprakash Power and Raichur Power.

India's socialist past meant that state-owned firms controlled the "commanding heights" of the economy at

one time.

However, with market reforms, BHEL needs to change to take on competition from nimble private Indian and foreign entities.

BHEL, like others state-owned majors such as ONGC or SBI, has been looking to transform under the new paradigms. The way ahead will not be easy. ■

NUCLEAR

Japanese want end of nuclear power

Almost three-quarters of Japanese voters want nuclear power gradually phased out, although reactors currently closed for inspection should be reopened if they pass government safety tests, a newspaper poll found last week.

51% of respondents to the Asahi newspaper poll agree that offline reactors should be reopened if they pass safety checks. Another 35%, however, oppose their restart, with this figure higher in regions hosting reactors.

Meanwhile, 65% said they were willing to accept higher electricity tariffs to promote renewable energy sources, while 19% said they were not.

The Japanese public is much more pragmatic about nuclear power than many other nations following the Fukushima-Daiichi nuclear disaster, even though they are obviously the most affected.

In Italy for example, a mid-June

referendum on whether nuclear power should be revived found 95% in opposition.

Japan is heavily dependent on nuclear power, however, with atomic energy accounting for around 30% of the country's power needs before the earthquake and tsunami in March.

Japan's trade ministry has warned that all of Japan's 54 nuclear reactors could be shut down by next April if local authorities tell utilities they no longer want them.

The ministry itself, however, continues to view nuclear power as a key plank of Japan's energy policy.

"What is important is finding a balance [between taking steps such as Italy's move towards banning nuclear energy] and current power supply constraints," trade minister Banri Kaieda was quoted by Reuters as saying last week.

Since then the crisis has escalated,

though, with "hotspots" of radiation found further than expected from the Fukushima plant.

On Jun 16, the government asked pregnant women to move away from areas – some of them well outside the existing 20-kilometre evacuation zone around Fukushima – where residents could be exposed to more than 20 millisieverts per year of radiation.

Data gathered from certain parts of Minami Soma City, around 20 km from Fukushima, and Date City, about 50 km from the plant, are currently being assessed and evacuation may be recommended on a household by household basis, chief cabinet secretary Yukio Edano said.

As of early June, ground radiation in Date City had reached nearly 24 millisieverts per year. ■

Brief TEPCO stock rally ends

Tokyo Electric Power Co (TEPCO) shares had another rollercoaster week, buoyed briefly by the government's sign-off on a rescue package but swiftly dragged down again after its credit rating

was slashed.

On June 16, TEPCO shares declined 2.7% to 320 yen (US\$3.99), ending a two-day bull run during which they leaped 65% as investors covered short

sales of the stock and after Japan's cabinet agreed to provide state aid for TEPCO to help it pay claims related to the nuclear meltdown at its Fukushima No.1 nuclear power plant (NPP). ►►

NUCLEAR

The stock had rallied 32% on June 15 and 25% on June 14 as the Tokyo stock exchange raised the collateral requirement for short sales of TEPCO to around 50% from 30%.

This made it more expensive for investors to “short” the stock.

Moody’s Investors Service, however, believes that state aid for the damages – which could exceed US\$130 billion – “may not completely protect creditors from losses,” it said in a June 19 statement.

On the same day, it cut TEPCO’s credit rating to a level just four steps from junk status. The new long-term debt

rating of B1 could be cut further, according to Moody’s. Standard & Poor’s had already slashed TEPCO’s rating by five levels on May 30.

“Since our last rating action in May, the company has disclosed that three of the nuclear reactors show containment damage and have experienced core meltdowns, or problems much worse than previously known,” Moody’s said.

“The magnitude of likely damages, including compensation liability, has risen to a level that is beyond Tepco’s ability to finance without government support,” it said.

As of June 21, TEPCO was down

again, losing 2.9% to 305 yen (US\$3.80), becoming the Nikkei’s biggest daily loser.

Credit default swaps insuring against a debt default by TEPCO jumped another 20 basis points this weekend to 895 basis points, according to Citigroup prices.

The contracts have gained 742.7 basis points since March 11, according to data provider CMA, but are down from their all-time high of 1,000 basis points on June 7.

TEPCO shares are now down more than 90% from their value before the March 11 earthquake, tsunami and subsequent nuclear disaster. ■

Kazakhstan, China in new nuclear deals

During Chinese President Hu Jintao’s visit to Kazakhstan on June 12-15, officials of the two countries signed new agreements on co-operation in civilian nuclear technology.

Kazakh President Nursultan Nazarbayev said the agreements included “joint fuel production and construction of nuclear power plants (NPPs).”

Last December, Kazakhstan received certification for its uranium dioxide fuel pellets for sale to China. State nuclear power company Kazatomprom and the China National Nuclear Corporation (CNNC) signed new agreements “on strategic nuclear co-operation” in Astana on June 13.

Nazarbayev said the signing of the new deal meant “this year, supplies of fuel pellets will start from Kazakhstan to China.”

For now, the fuel pellets are produced at the Ulba Metallurgical Plant, a 60-year-old facility in the northeastern Kazakh city of Ust-Kamenogorsk.

Kazatomprom has a deal with France’s Areva to make the pellets for use in Areva reactors in China. Kazatomprom and Areva are constructing a fuel assembly plant in Kazakhstan scheduled to be operational in 2015.

Chinese President Hu, making his third visit to Kazakhstan since December 2009, spoke of further “expanding co-operation in the field of nuclear energy,” a process well under way in recent years. During Kazakhstani President Nazarbayev’s visit to China in February, Kazatomprom and the China Guangdong

Nuclear Power Company (CGNPC) signed an agreement for Kazakhstan to export some 55,000 tonnes of uranium to China.

No timetables or costs were given, but at the time Nazarbayev said the deal was worth “tens of billions of dollars,” and would supply China with up to 40% of the uranium it needed.

CNPC and Kazatomprom signed their first strategic co-operation agreement in 2006 and by the end of 2007 had inked agreements for uranium supplies and fuel production as well as joint mining projects (at Kazakhstan’s Irkol and Sembizbai sites) and Kazakhstani participation in the construction of NPPs in China.

The nuclear agreements were only part of a number of deals representatives of the two countries signed as their leaders pledged to boost bilateral trade from the 2010 figure of US\$20 billion to US\$40 billion by 2015. ■

Nazarbayev said the deal was worth “tens of billions of dollars,” and would supply China with up to 40% of the uranium it needed

NUCLEAR

Westinghouse signs nuclear deal with Bulgaria

US-based Westinghouse Electric Co., a subsidiary of Japan's Toshiba Corp., has signed a Memorandum of Understanding (MoU) on nuclear co-operation with Bulgarian Energy Holding (BEH).

Under the MoU, which was signed in Sofia last week, Westinghouse and BEH are to discuss co-operation on a range of nuclear energy projects at the Kozlodui nuclear power plant (NPP) site, Westinghouse said.

These projects include supporting the extension of the NPP's two operating reactors' working lives, developing instrumentation and control technology and decommissioning and dismantling the four non-operational units, Westinghouse said.

The scope of the agreement also covers more general considerations of various stages of the nuclear fuel cycle and any proposed new build in the region, Westinghouse said.

Bulgaria has an established nuclear programme dating back 35 years and

nuclear energy accounts for one-third of the nation's electricity generation.

The country has maintained its nuclear promotion policy despite the ongoing nuclear crisis in Japan.

The Fukushima No.1 NPP in Fukushima Prefecture, about 220 km north-east of Tokyo, was ravaged by the devastating earthquake and tsunami that hit the northeastern part of Japan on March 11. It has suffered fires and explosions, leaking radiation.

"Westinghouse actively participated in the modernisation project of Kozlodui Units 5 & 6, and we are pleased to strengthen our relationship with such an important member of the international nuclear community," Anders Jackson, Westinghouse president for the Europe, Middle East and Africa Region, said in a statement.

Toshiba is one of Japan's three NPP makers, along with Mitsubishi Heavy Industries, Ltd. (MHI) and Hitachi, Ltd.

Toshiba purchased Westinghouse from

British Nuclear Fuels Plc (BNFL) for about US\$5.4 billion in 2006.

Toshiba is also a manufacturer of some of the six reactors at the Fukushima No.1 NPP, operated by Tokyo Electric Power Co. (TEPCO), Japan's biggest electric utility.

Toshiba president Norio Sasaki said at a press conference last month that the company's nuclear power business target would be delayed, possibly by two to three years, owing to growing global caution about NPPs.

Thus far, Toshiba is aiming to achieve 1 trillion yen (US\$12.20 billion) in annual sales from its nuclear power business in the 2015 fiscal year by securing orders for 39 reactors around the world by that fiscal year.

The Tokyo-based company's annual sales from the nuclear power business totalled about 570 billion yen (US\$6.95 billion) in fiscal 2009, which ended in March 2010. ■

HYDRO

Thais lead US\$880 million investment in Laos HPP

A consortium of firms from Thailand and South Korea is to invest US\$880 million in a hydropower plant (HPP) in Laos.

The plant, to be built in the Mekong River Basin in south-west Laos, will have 390 MW of generating capacity and is to be completed in 2018.

Most of the electricity will be exported to the Electricity Generating Authority of Thailand.

The development consortium includes

Ratchaburi Electricity with 25%, SK Engineering and Construction of Korea with 26% and Korea Western Power, holding 25%.

The remaining 24% will be held by the Lao Holding State Enterprise.

The Xe-Pian Xe-Namnoy HPP dam will be Ratchaburi's fourth power plant investment in Laos, which is playing an increasing role in providing electricity for Thailand.

Ratchaburi is involved in two dams at

Nam Ngum and a lignite-fired thermal power plant (TPP) at Hongsa.

The Thai firm said last week it was allocating US\$66 million as its share of development costs for the new hydro dam.

"The Xe-Pian Xe-Namnoy project marks a significant milestone in the company's investment expansion in Laos," Ratchaburi chief executive Noppol Milinthanggoon said in last week. ►►

HYDRO



A timetable for the development has not yet been given.

The Lao government is considering proposals from foreign groups to build another 30 HPPs in the country by 2020, according to the US-based environmental NGO International Rivers.

Hydro development in Laos is facing a lot of criticism from environment NGOs and neighbouring governments.

Thai-financed plans for a major 1,280-MW HPP on the Mekong River in Xayaburi in Laos have been put on hold following strong protests by Cambodia and Vietnam, which said it would disrupt the river and fish stocks downstream.

A final decision on the Xayaburi hydro project, also mainly to supply Thailand, is expected to be made at a ministerial-level meeting of the Mekong River Commission, which groups Thailand, Laos, Vietnam and Cambodia, in October.

International Rivers NGO says a number of dams in Laos have damaged the ecology and fisheries, and displaced thousands of families without proper compensation, breaking international promises via the World Bank, which has co-financed some projects. ■

RENEWABLES

Chinese target European solar market

Three Chinese solar equipment manufacturers seeking to expand into Europe are being backed with development loans of up to US\$10 billion from two state-linked banks.

The firms are TBEA SunOasis, based in China's remote far north-west Xinjiang region, and Goldpoly New Energy and China Technology Development Group (CTDG), both headquartered in Hong Kong but with production factories in Fujian Province.

News of the huge loans was made in a statement by CTDG, which is listed on

the New York Nasdaq exchange.

It follows an announcement also last week that the three solar firms had entered into a "strategic co-operation" agreement with the specific aim of targeting European markets.

The three firms said the impetus for a move on Europe had come primarily from Germany's plans to abandon nuclear power by 2022, and was linked to Chinese government aims of promoting a major growth in domestic renewable energy.

The development loans are to be

provided by state-owned China Development Bank (CDB) and the China Merchants Bank, which is 18% owned by the state.

CDB has a record of giving loans to other Chinese solar power component makers, including Trina Solar, Yingli Green Energy and Suntech Power.

The new three-firm co-operation pact will "improve efficiency and bring comprehensive solutions to solar park construction in Europe," said the statement. ►►

RENEWABLES

The partnership is to “invest jointly in and construct small-size solar plants, building momentum to develop large-scale solar plants later on.”

No timeframe for the developments has yet been given.

China’s chief state energy planner, the National Energy Administration (NEA), has announced plans for the country to develop 10,000 MW of solar generating capacity within the new Five-Year Plan up to the end of 2015.

The price of solar power in China will likely drop by 20% over the next five years “as the country prepares to start large-scale application of the green energy source,” the NEA was quoted by the China Daily newspaper as saying. ■

Japan’s CO2 emissions to soar by 13.8% by 2020: report

Japan’s annual energy-related carbon dioxide (CO2) emissions are to surge by 13.8% by the 2020 fiscal year, compared to 1990 levels, if all nuclear power plants (NPPs) are pulled offline, an influential non-profit research institute has warned.

In a report on its revised medium-term economic forecasts last week, Tokyo-based Japan Centre for Economic Research (JCER) cited the anticipated shift from nuclear power generation to thermal power generation.

Unlike thermal power plants (TPPs), which burn such fossil fuels as oil and coal and make significant contributions to global warming, NPPs produce little, if any, CO2.

The Japanese government has set an ambitious target of slashing emissions of CO2 and other greenhouse gases (GHGs) by 25% by 2020 from their 1990 level.

JCER’s warning comes amid strong concerns within the government and industries about the growing possibility of Japan’s nuclear power generation dropping to zero by the summer of next

year.

According to the JCER report, if all Japanese NPPs are put offline, the nation’s annual energy-related CO2 emissions will rise from an estimated 1.072 billion tonnes in the 2010 fiscal year, which ended on March 31, 2011, to 1.201 billion tonnes in the 2015 fiscal year and 1.205 billion tonnes in the 2020 fiscal year.

The estimated 2010, 2015 and 2020 emission volumes are up 1.2%, 13.4% and 13.8% respectively from 1.059 billion tonnes in 1990.

Last week, the Institute of Energy Economics, Japan (IEE Japan), which is affiliated with the Ministry of Economy, Trade and Industry (METI), also made shorter-term forecasts in a report.

IEE Japan warned that Japan’s energy-related CO2 emissions could rise sharply in the 2011 and 2012 fiscal year, making it even more difficult to achieve the nation’s GHG emission reduction target under the Kyoto protocol, which is to expire in 2012.

At present, Japan has 54 nuclear reactors, but only 19 of them are in operation.

Four NPPs, including Tokyo Electric Power Co.’s (TEPCO) Fukushima No.1 NPP at the centre of the ongoing nuclear crisis, immediately shut down in the wake of the devastating March 11 earthquake and tsunami.

Operations at Chubu Electric Power Co.’s Hamaoka NPP were also suspended completely in May for safety reasons at the government’s request.

Electric power firms have also been unable to resume operations at nuclear reactors that were put offline for mandatory periodic inspections, which are required every 13 months, because of strong safety concerns among the local communities hosting the facilities.

As the 19 reactors now in operation also begin to be put offline one after the other this summer for mandatory periodic inspections, Japan’s nuclear generation could drop to zero by the summer of next year. ■

Japan eyes new carbon project bidding round

The Japanese government-affiliated New Energy and Industrial Technology Development Organisation (NEDO) said it was aiming to launch soon a new bidding round for carbon project proposals under a bilateral offset

mechanism.

It will be the second such round to be implemented during the 2011 fiscal year, which started on April 1. The first round was implemented between March 31 and May 9, attracting more than 100 project

proposals from private companies.

In the second round, NEDO intends to accept project proposals from domestic private companies for about one month, beginning in early July, NEDO said, without giving a specific starting date. ►►

RENEWABLES

Soon after launching the second round, NEDO plans to hold briefing sessions for domestic private companies that are interested in submitting project proposals, NEDO said.

After screening, some projects will be chosen and subsidised.

NEDO has unveiled the plan to launch the new round of solicitations for bilateral offset mechanism project proposals even before it announces the results of its screening process for fiscal 2011's first round.

Projects selected in the first round are expected to be revealed later this month.

Japan has been pushing for the bilateral offset mechanism as part of efforts to achieve its ambitious target of slashing greenhouse gas (GHG)

emissions by 25% by 2020 from their 1990 level.

The new carbon credit mechanism will be different from the existing clean development mechanism (CDM) under the Kyoto protocol. The current CDM requires applicant companies to go through a lengthy screening process controlled by the United Nations.

Under the new carbon credit mechanism envisaged by Japan, such a UN process will be bypassed, as all necessary arrangements are made under bilateral pacts between governments concerned alone.

NEDO is affiliated with the Ministry of Economy, Trade and Industry (METI).

METI began to solicit pilot bilateral offset mechanism project proposals from

domestic private companies in fiscal 2010.

METI directly accepted and screened project proposals in the 2010 fiscal year, but it will implement most of the pilot project selection process through NEDO in the 2011 fiscal year and beyond.

METI has earmarked 5.2 billion yen (US\$65.0 million) in its 2011 budget for the promotion of pilot bilateral offset mechanism projects.

The figure represents a 6.3-fold increase from 830 million yen (US\$10.4 million) in the ministry's 2010 budget.

Through NEDO, the Japanese government has also been purchasing carbon credits, utilising the so-called Kyoto mechanisms, since the 2006 fiscal year. ■

Phoenix Solar agrees 15.9-MW Thailand deal

Germany project developer Phoenix Solar has agreed to deliver two solar power plants in Thailand with a combined capacity of 15.9 MW.

The contract with local company Solarta will see Phoenix Solar plan the 9.7-MW Sai Yai and 6.2-MW Sai Thong solar parks, as well as providing the photovoltaic modules, inverters and cables.

Phoenix Solar is to supervise construction work, which will be carried out by Process Engineering Services (PESCO), a Thai firm.

According to Phoenix Solar, work began on the plants earlier this month, with connection expected by the end of the year to a grid operated by Provisional Energy Authority, a local utility. Sai Yai and Sai Thong will together supply around 10,000 Thai households with electricity, Phoenix Solar claims.

The German firm will supply 67,000 modules from Schott Solar for the project, along with inverters from SMA

Solar.

"We are very pleased about this strategically important project in Thailand," said Andreas Haenel, chief executive of Phoenix Solar.

"In our project development business, we want to concentrate harder on the regions of Asia, the Middle East and the US. After our first megawatt project in Saudi Arabia, both Thai projects are an important milestone on this path," he added.

Solarta is a recently established joint venture between two Thai companies, Yanhee Solar Power and private power generator Ratchaburi Electricity Generating Holding, and is pursuing solar projects in three Thai provinces; Phra Nakhon Si Ayutthaya, Suphan Buri and Nakhon Pathom.

Yanhee Solar is itself a relatively new player. Set up as a subsidiary of Yanhee International Hospital, a private provider of plastic surgery, the company first became involved in large-scale solar

generation in 2010.

Supot Sumritvanitcha, chief executive of Yanhee Solar, said: "We chose Phoenix Solar and PESCO because of their outstanding reputation. They are convincing both in the quality of the product and the quality of construction and stand for timely completion. That leads to the optimal combination of German engineering and German technology with local building and management know-how."

Speaking about his company's partnership with Ratchaburi last week, Supot told The Nation: "I have a lot of land banks for the development of solar farms, but I don't have enough money for the investment. Luckily, I met Khun Noppol Milinthanggoon, CEO of Ratchaburi Electricity Generating Holding, who is interested in investing in the renewable energy business. We have since become partners, and Ratch now holds a 49% stake in Yanhee Solar Power." ■

NEWS IN BRIEF

POLICY

Japanese utility rates to rise

Major utilities and gas companies are expected to raise their standard household rates for August as fuel costs continue to climb. Rates will likely rise for the sixth straight month at Tokyo Electric Power Co., or TEPCO, and Kansai Electric Power Co. Chubu Electric Power Co., Tokyo Gas Co. and two other gas providers are seen hiking rates for the fifth month in a row. Rates for August reflect costs for such fuel as crude oil and liquefied natural gas during the March-May period. TEPCO will likely increase its rate by about 100 yen from July to around 6,680 yen. Kansai Electric and Chubu Electric are seen tacking on about 50 yen and 70 yen, respectively. Tokyo Gas and Osaka Gas Co. are expected to boost their rates by about 50 yen, with Toho Gas Co.'s hike coming to roughly 60 yen.

NIKKEI REPORT, June 21, 2011

Power bills surge in Delhi

DERC is working out past dues owed to power companies that will be recovered from the consumer. This will be in addition to a new higher tariff that will be shortly announced by the regulator. The regulatory body has started the process to dispose of past dues claimed by discoms BSES Rajdhani, BSES Yamuna and NDPL.

TNN, June 14, 2011

Philippines utilities prepare for open access

Manila Electric Company (Meralco) is seeking a license to operate as a local retail electricity supplier (RES) while SN Aboitiz Power (SNAP) has received its RES license from the Energy Regulatory Commission (ERC). Meralco said it has filed a manifestation with the ERC last Friday stating that it will put up a local

RES, which will be operational at the start Open Access and Retail Competition (OARC). The utility said this comes after the ERC declared 'December 26, 2011 as the open access date to mark the commencement of the competitive retail electricity market in Luzon and Visayas.' For its part, SNAP said its license will allow it to compete in the contestable market upon the implementation of OARC. The RES licence is issued to an entity authorized by the ERC to sell, broker, market or aggregate electricity to the contestable market, in which end-users will have a choice of a supplier of electricity.

MB.COM.PH, June 20, 2011

GRID

Bids for Indian grid contracts

Many private players have bid for the Rs13 billion contract, the first after the government in January made it mandatory that future inter-state transmission system schemes would be built by private sector entities. Twenty-eight companies, including Reliance Power, Sterlite Energy, Larsen & Toubro, GMR Energy, Lanco Infratech and JSW Energy, have bid for the project, said a senior official in Rural Electrification Corporation.

FE, June 15, 2011

PGCIL faces competition

Power Grid Corporation of India will be competing for a domestic contract with Indian and foreign rivals for the first time since its inception. Power Grid has the monopoly over electricity transmission in the country. The company owns and operates about 45% of interstate transmission systems. The government has decided that future inter-state transmission system schemes would be built by private sector entities.

ET, June 15, 2011

German funds for Pakistan

Germany has provided over 200 million euros for the construction of various small and medium size hydro projects and installation and rehabilitation of transmission lines in Khyber-Pakhtunkhawa (K-P) during 2009-10. "We will provide another euro 48.5 million for the development of alternative energy and energy efficiency during 2011-12," said the Federal Ministry of Economic Co-operation and Development, Germany, in a statement.

PO, June 14, 2011

THERMAL

Chinese generators post interim losses

The China Electricity Council (CEC) said on Monday the nation's leading five power producers reported 12.16 billion yuan of losses in their thermal power plants in the January-May period. In spite of electricity price hikes in parts of the country ordered by the National Development and Reform Commission (NDRC) in April, the figure was still 7.86 billion yuan more than the same period last year, said the CEC in a statement, attributing the reason to surging coal prices. Due to dominating shares of their thermal power businesses, the five magnates reported a combined of 5.57 billion yuan of losses in all businesses in the first five months, 3.87 billion yuan more from a year earlier. The CEC warned that the difficult performances in the sector posed "great risks" to ensure power supplies during the country's traditional power consumption peak season in the summer. Earlier in May, the NDRC, China's top economic planner, ordered to raise prices for electricity used for industrial, commercial and agricultural purposes across the country's 15 provinces and municipalities by 16.7 yuan per 1,000 kilowatt-hours (kwh), to address the country's power shortages.

XINHUA, June 20, 2011

NEWS IN BRIEF

Marsden power station set for India

The Marsden B power station at Marsden Pt is expected to be dismantled and shipped to India by the end of the year. Mighty River Power sold the 250-MW oil-fired power station for US\$20.4 million back in 2009 to United Telecoms of Bangalore, India's third most populous city after Mumbai and Delhi. The new owners are likely to rebuild Marsden B and run it as an oil or coal-fired station.

NA, June 14, 2011

Lower gas for Lanco plant

Capacity utilisation at construction and energy firm Lanco Infratech's Andhra Pradesh plant has fallen to 75-80% from 90% earlier on lower gas availability, a top official said. The firm plans to buy liquefied natural gas (LNG) to bridge the gas supply deficit, MD G Venkatesh Babu said. Reliance Industries is pumping about 50 mscmd from its KG D6 block off India's east coast far off the planned peak capacity of 80 mscmd.

REUTERS, June 15, 2011

Konark Group eyes equity

Konark Group plans to raise US\$30-US\$35 million through private equity placement in its power projects business, Director Shonit Dalmia told ET. The Mumbai-headquartered group's listed company Konark Synthetics has set up a subsidiary, Konark Infratech, for foray into power sector. It plans to invest Rs10 billion to set up 155 MW of solar and wind capacity by 2015.

ET, June 15, 2011

Indonesia govt recharges PLN with more funds

In a bid to keep electricity prices down, lawmakers have agreed to raise subsidies

for Perusahaan Listrik Negara to as much as Rp 55 trillion (\$6.4 billion) and allowed the state power utility to boost next year's sales margin. The House of Representatives' energy and budget commissions approved a 7 percent sales margin, the premium PLN charges the government to compensate it for selling power at lower rates - up from the 3 percent proposed by the Finance Ministry. The new move would require state subsidies between Rp 45 trillion and Rp 55 trillion, higher than the Rp 30 trillion suggested by the ministry. "We decided to give [a higher] sales margin so PLN can have the opportunity to invest more in power generation," House Commission VII chairman and Indonesian Democratic Party of Struggle (PDI-P) lawmaker Effendi Simbolon said. "I'd prefer it if PLN spent the money to build more power plants."

JAKARTA GLOBE, June 15, 2011

Indonesia's PLN asks for 61.4% hike in power subsidies

Indonesia's state utility Perusahaan Listrik Negara (PLN) is asking for a sharp hike in power subsidies this year to offset the rising price of fuel used in power generation, its president director said. PLN has submitted a proposed hike of 61.4 percent, or Rp 25.1 trillion (\$2.94 billion), from the Rp 40.7 trillion set aside for power subsidies in the state budget. "Most of the excess operational costs are because of the increase in the price of fuels," PLN chief Dahlan Iskan said during a hearing with House of Representatives Commission VII, which oversees energy issues. The price of diesel, oil, coal and natural gas have risen steadily around the world, forcing the government to increase its allocations for fuel subsidies. Dahlan said the price of crude in Indonesia had risen to US\$95 per barrel compared with a state budget forecast of US\$80 per barrel. The company estimates the high prices will increase PLN's operational costs this

year to Rp 169.46 trillion from an original forecast of Rp 141.55 trillion.

JAKARTA GLOBE, June 14, 2011

PLN buys electricity from Malaysia

Indonesia's state electricity company, PT PLN, said that the company will buy 1 megawatt of electricity from SESCO in Malaysia. Bambang Budiarto, the West Kalimantan Region PLN general-manager, said that the imported electricity will meet demands at the Entikong border, Sanggau Regency, in Kalimantan.

"The purchase agreement is ready and this month we plan to establish a connection," said Bambang. According to Bambang, all preparations have been done to connect the SESCO power lines to the PLN transformer at Entikong. At the moment, this type of buying electricity from SESCO has been implemented in Sajingan, Sambas Regency, and in Badau, Kapuas Hulu Regency. The purchase has been undertaken because the distance to the Malaysian power lines are shorter than those to the PLN and the infrastructure needed by the PLN to meet local demands in these areas could be too expensive.

ANTARA, June 20, 2011

Shortfall in gas forces PLN to look overseas

Indonesia's state utility Perusahaan Listrik Negara plans to import gas in a bid to secure fuel for its power plants, which would make it the first time that Indonesia has had to purchase gas from abroad for electricity generation. State utility Perusahaan Listrik Negara plans to import gas in a bid to secure fuel for its power plants, which would make it the first time that Indonesia has had to purchase gas from abroad for electricity generation. Earlier generations of Production Sharing Contracts didn't include Domestic Market Obligations in relation to natural gas production. ▶▶

NEWS IN BRIEF

Given the need to supply current natural gas/LNG sales contract volumes, there clearly is a shortage of natural gas supply available to meet PLN's requirements, and hence the need for PLN to source any additional gas supplies from abroad at this time. The government subsidy for electricity is already a significant financial burden, so I can't see any incentive for the authorities to accept increased electricity input costs involving gas fired electricity production utilizing foreign sourced natural gas if there are viable alternative supplies of domestically produced natural gas available.

JAKARTA GLOBE, June 17, 2011

PEPCO dissolution date likely to be extended

The dissolution date of Pakistan Electric Power Company (PEPCO) is likely to be extended in a Ministry of Water and Power meeting scheduled to be held in Islamabad on June 15th, it is learnt. The government had earlier announced June 30 as the closing down date of the power management company, the PEPCO.

NATION, June 14, 2011

PEPCO adds more power in Pakistan

Pakistan Electric Power Company (PEPCO) and WAPDA will add 2020 MW and 381 MW to the main power system respectively, while GenCos (Generation Companies) will regain their lost capacity of 637 MW in next three years. PEPCO Director General Ejaz Rafique Qureshi told APP here Sunday that all the power sector components including PEPCO, Wapda and GenCos are focused on enhancement of electricity generation.

APP, June 13, 2011

COAL

GVK raises debt for Hancock

GVK Power is raising US\$1.2 billion as

debt to part fund its acquisition of Hancock mines in Australia, according to two people familiar with the development. The Hyderabad-based GVK Power has roped in ICICI Bank for syndicating the US\$1.2-billion loan and is likely to close the final transaction, estimated to cost about US\$3.4 billion, in a couple of months, said one of the persons involved in the negotiations.

ET, June 16, 2011

Grindrod Coal terminals expand

Shipping and logistics group Grindrod plans to expand its Mozambican and South African coal terminals to meet fast-growing demand for export capacity. Alan Olivier CEO of Grindrod said any expansion would be subject to the availability of rail capacity linking mines in South Africa with ports. He said Grindrod had recently expanded capacity at the Matola coal terminal. SA increasing coal exports are to India and China.

REUTERS, June 14, 2011

Coal easiest solution

Coal-based power is the easiest solution to India's power needs, that's the word coming in from the CEO of the Essar Group, Prashant Ruia. Ruia said, "Bear in mind that putting up a nuclear plant takes seven-eight years, so it is a long gestation projection, whereas India's demand for power is now. There is a huge deficit for power in the country. So, it is going to be one of the solutions, and coal is going to be a big part of the solution."

MC, June 13, 2011

Extra coal from CIL

Coal India has assured the government that it will make efforts to increase coal availability to the users by 28 million tonnes in the current financial year to tide over the shortages. Coal Minister Sriprakash Jaiswal gave this assurance on behalf of the Maharatna PSU to the Group of Ministers (GoM), which met last week to take stock of the problems

affecting the coal production
PTI, June 14, 2011

BCCL to start underground coal mining

Bharat Coking Coal Limited (BCCL), a subsidiary of Coal India Limited, is all set to start underground coal mining. The company has already finalised tenders for four important mines through global bidding. According to company chairman-cum-managing director TK Lahiri, the four mines are Muraidih, Block II, Kapuria and Moonidih XV.

TNN, June 13, 2011

Mongolian coal exports to reach 35 million tonnes this year

Mongolia's coal exports are expected to reach 25 million tonnes by the end of the year and 35 million tonnes by the end of 2012, said a government official on Tuesday. Bid results developing Mongolia's Tavan Tolgoi mine will be released by July 1, A. Erdenepurev, an official at Mongolian's Ministry of Mineral Resources and Energy told an industry conference. The government had said in April it would select more than one winner, possibly three to four bidders, to develop Tavan Tolgoi.

REUTERS, June 20, 2011

Energy Earth eyes further Indonesian coal purchases

Energy Earth is eyeing further stakes in coal mines after announcing the planned Bt1.2 billion acquisition of Indonesia's PT Tri Tunggal Pitriati (TTP) yesterday. The additional holdings, also possibly in Indonesia, would enable the company to build up its reserves over at least the next three to five years. Energy Earth, which is listed on the Stock Exchange of Thailand, will become the Kingdom's third listed coal miner following the purchase of TTP, after Banpu and Lanna Resources. ►►

NEWS IN BRIEF

It has until now only distributed coal. TTP's mines are situated in the south of Kalimantan, the second-largest province in Indonesia. "This move is a major change for our business. We have been in talks since 2007. Owning a mine could hedge against risks in coal prices, besides those in rawmaterial sourcing. Through TTP, we will also need to continue our search for more coal mines. We will find more for both supply and customers," said Energy Earth managing director Khajohnpong Khamdee.

THE NATION, June 21, 2011

Colakoglu to invest in Thar

Turkey-based Colakoglu Investment has signed an agreement with the state government of Sindh, Pakistan to generate 600 MW of electricity from coal deposits found in the Thar Desert, through an investment of US\$1 billion. The company will conduct exploration work on a block of the Thar coalfield. Sindh chief minister Syed Qaim Ali Shah said the province has also allotted eight blocks of Thar coalfield to different companies.

FF, June 13, 2011

Detained ship released

The Supreme Court of Canada has released the coal-loaded ship for Pakistan against a guarantee of 1 billion rupees. The ship, carrying coal for Pakistan Steel Mills (PSM), was detained about one month ago, said a well-informed source on Friday. "The ship, MV Thorasace, resumed sailing for Pakistan at around three o'clock in the afternoon on Friday as per Pakistan Standard Time," the source said.

THE NEWS, June 14, 2011

NUCLEAR

TEPCO asks for more loans

Tokyo Electric Power Co., the operator of the stricken Fukushima Daiichi

nuclear power plant, has asked its creditor banks to let it keep borrowing money at low interest rates, officials with the utility known as TEPCO said Tuesday. Large banks including TEPCO's main lender Sumitomo Mitsui Banking Corp. are expected to oblige the company to help it stabilize electricity supply as it is struggling to tackle the power shortage caused by the crippling of the Fukushima plant, sources close to the matter said.

KYODO NEWS, June 21, 2011, 2011

Nuclear power could attract more mining in Australia

More mining companies would be encouraged to set up developments within South Australia and on the Eyre Peninsula if they could use nuclear power, the Whyalla News reported quoting South Australian Chamber of Mines and Energy chief executive Jason Kuchel. He said he believed the use of nuclear power would be an encouraging factor for mining companies intending to set up within the region. Kuchel said the use of this technology would create investment in remote regions. Kuchel said miners who would appreciate the use of nuclear power would be those who had additional power requirements. "Those who might consider it on the Eyre Peninsula might be those where it's just not about connecting to the existing grid, but the fact that the grid wouldn't be able to cope with its additional power requirements," he said.

WHYALLA NEWS, June 21, 2011

BHP still committed to Yeelirrie

BHP Billiton said deferral of a key review at the Yeelirrie uranium project had not derailed its commitment to the project, Reuters reported. BHP Billiton last month postponed indefinitely an environmental review and management programme for the project until it was deemed to meet internal standards, fueling concerns BHP Billiton was losing

interest amid uncertainty over future uranium demand. "BHP Billiton remains committed to developing the Yeelirrie deposit and is continuing to progress the project with a focus on developments in technologies to improve the project's environmental and economic outcomes," the company said in a statement emailed to Reuters. The deposit in Western Australia state is the country's second-biggest uranium deposit after Rio Tinto's mothballed Jabiluka lode in the Northern Territory. BHP wants to mine 90,000 tonnes of uranium from Yeelirrie over a span of 30 years but has yet to break any ground

REUTERS, June 19, 2011

Punj Lloyd wins NPCIL contract

Engineering and construction major Punj Lloyd has bagged a contract worth Rs6.78 billion from Nuclear Power Corp of India (NPCIL) for critical nuclear piping work at four pressurised heavy water reactors. Of the four reactors, two are located at the Kakrapara atomic power project near Surat in Gujarat and the other two are at Rajasthan atomic power project near Kota. The contract is scheduled to be completed in four years, Punj Lloyd said.

MC; June 13, 2011

HYDRO

China Yangtze Power signs EuroSibEnergopro agreement

China Yangtze Power Co, the country's largest listed hydropower corporation and operator of the massive Three Gorges Dam in Southwest China, has inked an agreement with EuroSibEnergopro, the largest privately-owned power company in Russia, to build power plants in eastern Siberia, sources reported. The project's first phase includes a heat-engine plant in Lenskaya with installed capacity of 1.2 gigawatts and a hydro-plant with capacity between 0.6 GW and 1.5 GW. ▶▶

NEWS IN BRIEF

The two companies will also build a Trans-Sibirskaya hydropower plant with installed capacity between 0.4 GW and 0.9 GW. In November 2010, Moscow-based EuroSibEnergohad planned an initial public offering on the Hong Kong Stock Exchange. However, it shelved the plans by the end of the month. EuroSibEnergohad sells energy to northern China. EuroSibEnergohad, the vertically integrated power producer, provides 9% of Russia's energy.

**CHINA KNOWLEDGE PRESS,
June 21, 2011**

Nepalese Maoists oppose export-orientated hydro

Nepal's Maoists have decided not to allow any hydropower project that intends to export the generated power, a decision that immediately impacts Indian group GMR as well as nearly a dozen more potential Indian investors. The announcement was made by Dharmendra Bastola, Maoist politburo member as well as chief of the Seti-Mahakali Bureau, the region where GMR's office and site camp for developing the 900MW Upper Karnali hydropower project was burnt down last month. The Maoist leader said the central committee of his party decided at a meeting nearly two months ago that the licence given to GMR to conduct a survey - which is likely to be followed by a power generation licence - should be scrapped and a fresh contract should be renegotiated. A consortium of GMR Energy Limited, GMR Infrastructure Limited and Italian-Thai Development Project received the licence in 2008 to developing the Upper Karnali, in which Nepal Electricity Authority gets 27 percent free equity and Nepal 12 percent free power. As per the understanding, the power generated would be sold to India. However, in a move that ups the ante, the Maoists are now seeking to have the country's best hydropower projects developed domestically with Nepal

holding over 51 percent share to ensure the "sovereign right of Nepalis to their natural resources." The Maoists are saying the Upper Karnali contract is against Nepal's national interests. According to Bastola, it is the cheapest hydropower project in Nepal and can generate 4100 MW. "It will cost about NRS 2 to produce per unit of power while we are currently buying power from India at NRS 10.72 per unit," he said. "We need NRS 300 billion to generate 4100 MW, which can be easily raised through army funds, the Employees' Provident Fund or the annual remittance sent by Nepalis each year." The Maoists say that while almost 60 percent homes in Nepal haven't seen electricity, it is an act of "selling out" to export power.

**INDO-ASIAN NEWS SERVICE,
June 20, 2011**

TNB unit secures Pak contract

TNB Repair and Maintenance Sdn Bhd (TNB Remaco) has secured an operation and maintenance contract from Pakistan's Laraib Energy Ltd's 84MW New Bong Escape Hydroelectric Power Complex on the Jehlum River in Azad Jammu and Kashmir. Under the US\$14.8million contract, TNB Remaco, a unit of Tenaga Nasional Bhd will provide services for 5 years.

BERNAMA, June 14, 2011

Hydro Power Free Lanka starts two hydropower projects

Hydro Power Free Lanka PLC (HPFL), a subsidiary of Free Lanka Capital Holdings is constructing two more hydropower projects, which will supply around 2 MW to the national grid on completion. The company owned two projects are located at Thebuwana at Kuruwita and at Stellenberg at Gampola. The company has obtained BOI and other relevant approvals for these

projects.

PGW, June 13, 2011

RENEWABLES

Australia shows popular support for renewables

A clear majority of Australians want the nation to move towards 100 per cent renewable energy, a major survey suggests, The Sydney Morning Herald reported, citing AAP. Renewable energy campaigners spent three months door-knocking and meeting locals at shopping centres to clock up 14,000 face-to-face responses. They found that 86 per cent want Australia to be powered entirely by renewable energy somewhere down the track, and 91 per cent want the government to drive the movement. More than two-thirds said the government wasn't doing enough, although 75 per cent were happy about it putting a price on carbon.

**THE SYDNEY MORNING
HERALD, June 15, 2011**

BHP Billiton faces strikes in Australia

BHP Billiton Ltd.'s (BHP) coking coal mines in Australia face further rolling strikes in a move that could buoy prices of the raw steelmaking commodity if the mining giant's production is cut. Three labor unions representing more than 3,000 workers have given notice that they intend to stage strikes during the night shifts Friday, Saturday and Sunday at six mines in Queensland state. The mines are jointly owned by BHP and Mitsubishi Corp. (8058.TO). The company has been locked in negotiations with the unions over a new employment agreement for workers, and the sides have been divided over union demands for equal pay for contract workers and employees, and a say in recruitment, among other things.

DOW JONES, June 21, 2011

NEWS IN BRIEF

Carbon tax not the culprit - AER

Rising power prices have nothing to do with the carbon tax and everything to do with “gold plating” - overinvestment in infrastructure - the Australian Energy Regulator has said, the Sydney Morning Herald reported. AER chairman, Andrew Reeves, told a Melbourne conference his hands were often tied when it came to approving electricity price increases. He was only allowed to knock back those that did not “reasonably reflect” the cost of planned investment. “There is a clear incentive for the business to submit proposals that are either at or beyond the upper end of the range of reasonable estimates,” he said. Asked by the Herald how much higher power prices were now than if the regulator had been able to make decisions using its own cost and pricing formulas, Reeves pointed to forecasts showing electricity distribution revenues in NSW and Queensland would roughly double over the next four years because of approvals the regulator had given, sometimes reluctantly.

**THE SYDNEY MORNING
HERALD, June 21, 2011**

Solar power plants to run 100,000 Australian homes

Two giant new solar power plants slated for Moree in western NSW and Chinchilla in Queensland will mark the first time solar power in Australia is deployed on a scale large and reliable enough to rival coal as a source of “baseload” energy, The Sydney Morning Herald reported. Neither plant is close to being the world’s biggest, with much more powerful solar power stations in the US and Spain already under construction, but enough power to run more than 100,000 households will be generated without the use of fossil fuels. The NSW government agreed to chip in US\$120 million and the federal government US\$306 million towards the Moree project, which will cost an estimated US\$923 million to build.

Building from scratch means the project, which will generate up to 150 megawatts of electricity, will be much more expensive than coal, even with no fuel costs. The private consortium building the plant is led by BP Solar, Fotowatio and Pacific Hydro. It is not clear yet whether the state or federal governments can expect a return on their investments. The state government said the Moree solar farm was expected to contribute around US\$210 million to the NSW economy, much of it flowing through the Moree district, and would lead to at least 300 new construction jobs.

**THE SYDNEY MORNING
HERALD, June 20, 2011**

Comtec Solar Systems Group completes bond sale

Chinese Comtec Solar Systems Group said Sunday it had completed the sale of some HKD 780 million (USD 100m/EUR 70m) in 2016 convertible bonds and 95 million warrants to private investor TPG Capital. Proceeds from the unsecured bond issue will be used for capacity expansion projects. The bonds bear zero coupon and are convertible into Comtec stock at an initial conversion price of HKD 3.90 apiece. If not converted, the bonds will be repurchased at face value upon maturity. The monocrystalline wafer maker estimates that proceeds upon full exercise of the share purchase warrants will reach HKD 390 million.

ADPNEWS, June 20, 2011

China WindPower Group to spin off manufacturing operations

China WindPower Group Ltd said today it had received the green light from the Hong Kong stock exchange to spin off and list its wind power tower tube manufacturing operations. Via the move, the company seeks to focus on its core activities and to more efficiently allocate financial resources. China WindPower’s core operations include the development

of wind farm projects and the provision of engineering and construction, operations and maintenance and other services to wind power facilities. At present two wholly-owned units of the company are in charge of its wind power tower tube business. The company plans to reorganise it so that its subsidiary Tianhe New Energy Equipment Ltd becomes the holding company. As part of the plan, Tianhe is to gradually expand its business to include solar power equipment manufacturing. The spin-off and listing are pending the go-ahead from China WindPower and Tianhe’s boards.

ADPNEWS, June 20, 2011

Vestas seals Chinese deal

Vestas, one of the world’s largest wind turbine manufacturers, has signed a large contract with the China Datang Corporation Renewable Power Co., Ltd., Vestas said in a press release issued on Monday in Beijing. The contract consists of the delivery, installation and commissioning of 58 V60-model 850-kilowatt wind turbines. The turbines will be installed on the Dayuanshan wind farm, which is located in Wuchuan County in north China’s Inner Mongolia Autonomous Region, according to the press release. The contract also includes a two-year service and maintenance agreement, as well as other business-related services provided by Vestas, the press release said. The turbines are scheduled to be delivered in the third quarter of 2011, according to the press release. Located in the middle of Inner Mongolia, Wuchuan County is surrounded by rugged mountains. The county is perched at an elevation of 1,800 to 2,000 metres above sea level. These conditions make it difficult to reach the county at times. However, industry officials say that the lightweight design of Vesta’s V60-model wind turbine will make it a suitable choice for use in the region.

XINHUA, June 2011

NEWS IN BRIEF

Suzlon bags order

Suzlon Energy - one of the largest wind turbine manufacturers, on Tuesday bagged an order to supply 15 wind turbines (of 2.1 MW each) to a Canada-based wind power project, being developed by Sprott Power Corporation, a company engaged into renewable energy projects. "This is our first order of the new S9X turbines in North America," Andris Cukurs, CEO of Suzlon Wind said.

MC, June 14, 2011

Moser Baer in America

Moser Baer Solar Limited (MBSL) has signed an agreement with Munro Solar for the distribution of its solar photovoltaic modules in the United States. "The agreement would help in increasing the company's presence in the US," the company said in a statement. Munro Distributing Company Inc has its presence in 11 locations across four states in the East and West coasts.

ET, June 15, 2011

India on track for solar

India is on track to produce 700 MW of solar power at a cost of US\$2.2 billion by December, ahead of an initial target for an ambitious plan of 20 GW by 2022. Such has been the interest that the government has been flooded with investment pledges for the first batch of projects. India's 20 GW solar plan is likely to attract overall investment of about US\$70 billion, the government has estimated.

REUTERS, June 15, 2011

Dam on Brahmaputra

India today downplayed apprehensions that a dam being constructed by China on river Brahmaputra will affect the country, saying the project is not a cause for "immediate alarm." "It is a fact that China is constructing a dam at Zangmu. We have ascertained that this is a run of the river hydro-electric project which

does not store water and will not adversely impact downstream areas in India," External Affairs Minister S M Krishna said.

PTI, June 14, 2011

Finland offers RE help

Jammu and Kashmir could benefit from the Finnish expertise in utilising biomass potential for energy generation to supplement production of hydroelectric energy and shrink the gap between its availability and demand, its envoy to India said Sunday. Amabassador Terhi Hakala assured Chief Minister Omar Abdullah Sunday that her country would extend help and expertise for the socio-economic development of the state.

MG, June 14, 2011

MMTC to invest in RE

India's largest international trading company is looking at diversifying, and top on its agenda is to invest in the renewable energy space. Encouraged by its successful 15 MW pilot project in Karnataka, the company is now looking to invest a total of Rs3.5 billion for renewable energy sector. Of this, Rs2-2.4 billion will go into setting up 40 new wind energy generators, HS Mann, CMD of the company said.

CNBC, June 14, 2011

Marubeni to join geothermal power project in Indonesia

Japanese trading house Marubeni Corp. said Friday it will take part in a joint project to construct a geothermal power plant in Indonesia at a time when demand for renewable energy is growing. Marubeni reached a joint venture agreement Monday with locally based PT Supreme Energy and GDF Suez S.A., a major French energy firm, to take a 35 percent stake in the venture firm that will run the project with the aim of starting the operation of the plant in 2016, it said. In the project, costing between US\$700 million to US\$800 million, the venture plans to build a plant with a capacity of

220,000 kilowatts in the Rantau Dedap area in southern Sumatra. It is also set to execute a long-term power purchase agreement with the state-owned electricity company PT PLN. Marubeni has also been engaged in a geothermal plant project in Costa Rica.

KYODO, June 18, 2011

Philippines Energy Development Corp. signs US\$175 million loan deal

Energy Development Corp., the largest geothermal energy producer in the Philippines by sales, said Tuesday it has signed a six-year, US\$175 million loan deal with a syndicate of banks. The power-generation firm said it will use the loan to refinance an existing US\$175 million debt due in June 2014. ANZ Banking Group, Bank of Tokyo-Mitsubishi UFJ Ltd., Chinatrust Commercial Bank, ING Bank N.V. Manila branch, Maybank Group, Mizuho Corporate Bank Ltd. and Standard Chartered Bank are arranging the loan.

DOW JONES, June 21, 2011

South Korea consortium keen on Vietnamese solar energy

Hanwha Group President Kim Seung youn expressed interest in solar energy in Vietnam, especially Ho Chi Minh City, during his meeting with the city's Party Secretary Le Thanh Hai. Kim said Vietnam is an attractive market and HCM City in the position of the nation's largest economic and industrial hub would be ideal for investment, especially in solar energy. In return, the executive of the leading industrial consortium from the Republic of Korea was assured of best available conditions for foreign investors, including those from the RoK, to make profits in the city.

VNECONOMY NEWS, June 19, 2011

TENDERS & CONTRACTS

PROJECT		China Power Feasibility
Project Sector	Power	
Location	Asia, China, Guangdong Area	
Project Holder/Operator	Guangzhou Electric Power Corporation /NDRC - National Development and Reform Commission	
Scope of work	FS - Feasibility Study Contracts	
Current/Past Phase	The project had been on a planning phase	
Contract Value Estimate	Over US\$180 million	
Start up Timing	From 2010 - 2011	
Development Stage	Potential Project	
Brief	The project is associated with the development and construction of Guangzhou coal-fired thermal power factory	
Future & Potential Sales Prospects	PreFEED - Preliminary Design and Engineering Contracts FEED - Front End Engineering Design Contracts EPC - Engineering, Procurement & Construction Contracts EPCC - Engineering, Procurement, Construction and Commissioning Contracts EPCM - Engineering, Procurement, Construction & Management Contracts EPIC - Engineering, Procurement, Installation & Commissioning Contracts	

PROJECT		Australia Power Feasibility
Project Sector	Power	
Location	Asia, Australia, Western Australia Area	
Project Holder/Operator	BP	
Scope of work	FS - Feasibility Study Contracts	
Current/Past Phase	The project had been on a planning phase	
Contract Value Estimate	Over US\$1.4 billion	
Start up Timing	From 2014 - 2015	
Development Stage	Potential Project	
Brief	The project is associated with the development and construction of Kwinana coal fired power factory and CO2 carbon capture facilities	
Future & Potential Sales Prospects	PreFEED - Preliminary Design and Engineering Contracts FEED - Front End Engineering Design Contracts EPC - Engineering, Procurement & Construction Contracts EPCC - Engineering, Procurement, Construction and Commissioning Contracts EPCM - Engineering, Procurement, Construction & Management Contracts EPIC - Engineering, Procurement, Installation & Commissioning Contracts	

PROJECT		China Power Feasibility
Project Sector	Power	
Location	Asia, China, Guangdong Area	
Project Holder/Operator	Guangdong Investment Limited Company	
Scope of work	FS - Feasibility Study Contracts	
Current/Past Phase	Planning consent had been applied	
Contract Value Estimate	Over US\$335 million	
Start up Timing	From 2010 - 2011	
Development Stage	Potential Project	
Brief	The project is associated with the development and construction of Zhongshan coal-fired thermal power factory	
Future & Potential Sales Prospects	PreFEED - Preliminary Design and Engineering Contracts FEED - Front End Engineering Design Contracts EPC - Engineering, Procurement & Construction Contracts EPCC - Engineering, Procurement, Construction and Commissioning Contracts EPCM - Engineering, Procurement, Construction & Management Contracts EPIC - Engineering, Procurement, Installation & Commissioning Contracts	

TENDERS & CONTRACTS

PROJECT	India Power Feasibility
Project Sector	Power
Location	Asia, India, Karnataka Area
Project Holder/Operator	Nagarjuna Group/Lanco Group
Scope of work	FS - Feasibility Study Contracts
Current/Past Phase	Planning consent had been applied
Contract Value Estimate	Over US\$965 million
Start up Timing	From 2010 - 2011
Development Stage	Operational Project
Brief	The project is associated with the development and construction of Udupi thermal power complex
Future & Potential Sales Prospects	PreFEED - Preliminary Design and Engineering Contracts FEED - Front End Engineering Design Contracts EPC - Engineering, Procurement & Construction Contracts EPCC - Engineering, Procurement, Construction and Commissioning Contracts EPCM - Engineering, Procurement, Construction & Management Contracts EPIC - Engineering, Procurement, Installation & Commissioning Contracts

PROJECT	Indonesia Power Development
Project Sector	Power
Location	Asia, Indonesia, Sumatra Area
Project Holder/Operator	PT Tenaga Listrik Sibolga
Scope of work	EPC - Engineering, Procurement & Construction Contracts
Current/Past Phase	Job contracts had been won
Contract Value Estimate	Over US\$210 million
Start up Timing	From 2010 - 2011
Development Stage	Operational Project
Brief	The project is associated with the development and construction of Sibolga coal fired power unit
Future & Potential Sales Prospects	LSTK - Lump Sum Turnkey Contracts MC - Multi Contracts IPP - Independent Power Project Contracts O&M - Operations and Maintenance Contracts TC - Term Contracts

PROJECT	Vietnam Power Construction
Project Sector	Power
Location	Asia, Vietnam, Quang Ninh Area
Project Holder/Operator	Vinacoal - Vietnam National Coal -Minerals Industries Group /AES Corporation
Scope of work	BOT - Build Operate Transfer Contracts
Current/Past Phase	Job contracts had been won
Contract Value Estimate	Over US \$990 million
Start up Timing	From 2010
Development Stage	Operational Project
Brief	The project is associated with the development and construction of Mong Duong power unit
Future & Potential Sales Prospects	LSTK - Lump Sum Turnkey Contracts MC - Multi Contracts IPP - Independent Power Project Contracts O&M - Operations and Maintenance Contracts TC - Term Contracts

TENDERS & CONTRACTS

PROJECT	China Power Construction
Project Sector	Power
Location	Asia, China, Nei Mongol Autonomous Region
Project Holder/Operator	Guohua Electric Power Co Ltd/China Huaneng Group/Deyuan Investment Co.
Scope of work	EPC - Engineering, Procurement & Construction Contracts
Current/Past Phase	Job contracts had been won
Contract Value Estimate	Over US\$2.3 billion
Start up Timing	From 2010
Development Stage	Operational Project
Brief	The project is associated with the development and construction fo Hulunbeier Power Plant
Future & Potential Sales Prospects	LSTK - Lump Sum Turnkey Contracts MC - Multi Contracts IPP - Independent Power Project Contracts O&M - Operations and Maintenance Contracts TC - Term Contracts

PROJECT	India Power Project
Project Sector	Power
Location	Asia, India, Uttar Pradesh Area
Project Holder/Operator	Reliance Power Ltd
Scope of work	EPC - Engineering, Procurement & Construction Contracts
Current/Past Phase	Job contracts had been won
Contract Value Estimate	Over US\$1.2 billion
Start up Timing	From 2010 - 2011
Development Stage	Operational Project
Brief	The project is associated with the Shahjahanpur development and construction of Rosa power facilities
Future & Potential Sales Prospects	LSTK - Lump Sum Turnkey Contracts MC - Multi Contracts IPP - Independent Power Project Contracts O&M - Operations and Maintenance Contracts TC - Term Contracts

PROJECT	Indonesia Power Development
Project Sector	Power
Location	Asia, Indonesia, Sumatra Area
Project Holder/Operator	PT Tenaga Listrik Amurang
Scope of work	EPC - Engineering, Procurement & Construction Contracts
Current/Past Phase	Job contracts had been won
Contract Value Estimate	Over US\$110 million
Start up Timing	From 2010 - 2011
Development Stage	Operational Project
Brief	The project is associated with the development and construction of Amurang coal fired power unit
Future & Potential Sales Prospects	LSTK - Lump Sum Turnkey Contracts MC - Multi Contracts IPP - Independent Power Project Contracts O&M - Operations and Maintenance Contracts TC - Term Contracts

TENDERS & CONTRACTS

PROJECT		China Power Feasibility
Project Sector	Power	
Location	Asia, China, Henan Area	
Project Holder/Operator	Huaneng Power International	
Scope of work	FS - Feasibility Study Contracts	
Current/Past Phase	Planning consent had been applied	
Contract Value Estimate	Over US\$580 million	
Start up Timing	From 2010 - 2011	
Development Stage	Operational Project	
Brief	The project is associated with the phase 2 Huaneng expansion of Qinbei power complex	
Future & Potential Sales Prospects	PreFEED - Preliminary Design and Engineering Contracts FEED - Front End Engineering Design Contracts EPC - Engineering, Procurement & Construction Contracts EPCC - Engineering, Procurement, Construction and Commissioning Contracts EPCM - Engineering, Procurement, Construction & Management Contracts EPIC - Engineering, Procurement, Installation & Commissioning Contracts	

PROJECT		India Power Project
Project Sector	Power	
Location	Asia, India, Jharkhand Area	
Project Holder/Operator	Damodar Valley Corporation	
Scope of work	EPC - Engineering, Procurement & Construction Contracts	
Current/Past Phase	Job contracts had been won	
Contract Value Estimate	Over US\$400 million	
Start up Timing	From 2010 - 2011	
Development Stage	Operational Project	
Brief	The project is associated with the development and construction of Bokaro 'A' power complex	
Future & Potential Sales Prospects	LSTK - Lump Sum Turnkey Contracts MC - Multi Contracts IPP - Independent Power Project Contracts O&M - Operations and Maintenance Contracts TC - Term Contracts	

PROJECT		Indonesia Power Feasibility
Project Sector	Power	
Location	Asia, Indonesia, Sumatera Selatan Area	
Project Holder/Operator	PT Tambang Batubara Bukit Asam	
Scope of work	FS - Feasibility Study Contracts	
Current/Past Phase	Job contracts had been won	
Contract Value Estimate	Over US\$780 million	
Start up Timing	From 2010 - 2011	
Development Stage	Operational Project	
Brief	The project is associated with the development of Peranap coal fired power complex	
Future & Potential Sales Prospects	PreFEED - Preliminary Design and Engineering Contracts FEED - Front End Engineering Design Contracts EPC - Engineering, Procurement & Construction Contracts EPCC - Engineering, Procurement, Construction and Commissioning Contracts EPCM - Engineering, Procurement, Construction & Management Contracts EPIC - Engineering, Procurement, Installation & Commissioning Contracts	

NEWSBASE INFORMATION

HEADLINES FROM A SELECTION OF NEWSBASE MONITORS THIS WEEK

Oil and Gas Sector

AsianOil

Petronas has awarded Subsea 7 the contract for installation work at the Kumang project offshore Malaysia.

ChinaOil

China became the world's top energy consumer in 2010, according to BP's latest global energy review.

EurOil

Total has discovered gas at the Norvarg prospect in Norwegian production licence PL535 in the Barents Sea.

FSU OGM

Russia is set to import 2 bcm of gas from Azerbaijan this year, double the 2010 amount.

GLNG

Hess LNG has abandoned its Cove LNG import venture as US shale gas production surges.

Power Sector

Energo

Serbia has announced plans to build the US\$722 million Bistrica II HPP.

GCEM

Following Austria's decision to ban the commercial use of CCS, it could soon be forbidden in several German states.

REM

China is planning a US\$100 million initiative to build solar power projects in 40 African countries.

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