

Energy in East Europe

Issue 218 / July 1, 2011

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PGNiG targets 1,300 MW by 2015

Poland's natural gas monopoly PGNiG is planning to have 1,300 MW of its own generation capacity by 2015, the company's deputy chief executive, Radoslaw Dudzinski, said June 30.

Dudzinski told a news conference that 600 MW would come from the company's equity stakes in jointly developed gas-fired power projects and 700 MW would come from acquisitions. He did not give details about the acquisitions.

PGNiG has a 50% stake in a joint venture with the country's second largest power utility, Tauron Polska Energia, to build a 400-MW gas-fired unit at Tauron's Elektrownia Stalowa Wola in southeast Poland. Dudzinski said negotiations to

build a similar sized unit at Tauron's Elektrownia Blachownia plant in Kedzierzyn were ongoing. A further 100-130 MW would come from small cogeneration plants, he said.

The announcement of its power generation plans follows the company's approval June 29 of an amended budget for 2011-2015, which allocates Zloty 2.9 billion (\$1.05 billion) or 11% of the company's total capex on new business areas, including expanding into the power sector by developing gas-fired projects. In September 2009 PGNiG set up PGNiG Energia to move into the power generation and sales sector. The company is mainly targeting

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Rosatom defends nuke safety tests

Russia's state-owned nuclear industry corporation Rosatom defended this week its assertion that the country's nuclear power plants meet international safety standards, following a newspaper report and comments that a senior company official made in Brussels that Russia would not be adopting EU stress test criteria.

Rosatom has asked the publishers of Norwegian newspaper Aftenposten to show it what the newspaper said was a leaked company report that said Russia's oldest nuclear power plants failed post-Fukushima safety tests and need to be shut. The report, cited in a June 19 article, is a "falsification", Rosatom said in a statement June 24. The company said it has told the newspaper it reserves the right to "defend its honor and integrity in accordance with international standards."

The article, which was later picked up by other news agencies, says an "official report" by Rosatom describes the "allegedly unsatisfactory safety

level of Russian nuclear power plants," Rosatom said. The Aftenposten article said that the post-Fukushima evaluation report was presented to Russian President Dmitry Medvedev earlier this month.

According to Aftenposten, the report's findings conclude that most Russian reactors would not shut down automatically in the event of an earthquake and that the risk of earthquakes has not been assessed according to the location of the nuclear power plants, including plants in earthquake-prone areas near the Urals.

But Rosatom said stress tests carried out at all Russian nuclear power plants in March through May confirmed that the country's plants are safe to operate. The tests were done with the assistance of Russian nuclear inspectorate Rostekhnadzor and participation by the public and foreign inspectors, including representatives of the IAEA, it said. The results of a review

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PGNiG targets 1,300 MW by 2015

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equity stakes in gas-fired generation projects to allow it to sell electricity to industrial and retail customers because PGNiG can increase its margins in Poland's de-regulated wholesale power market. In contrast, Polish gas tariffs are currently set by the country's energy regulator, URE.

The new strategy foresees spending of Zloty 27 billion (\$9.77 billion), over the next four years, more than half of which will be devoted to gas exploration and production projects. The company said it planned upstream expenditure of Zloty 14.7 billion over the next four years to boost domestic gas production from 4.2 billion cubic meters in 2010 to 4.5 Bcm in 2015. PGNiG said it plans to maintain its leadership position in terms of ownership of domestic shale gas exploration licenses and develop this new sector.

The company said it plans to develop its foreign upstream activities. Of the 57% of the budget devoted to upstream, 35% of that will be spent on developing international projects, it said. The company's first foreign upstream production from its 12% stake in the Skarv field in the Norwegian Continental Shelf, is set to begin in the third quarter. The company expects to produce 0.4 bcm of gas and 0.4 million tonnes of oil from its Norwegian fields next year.

The second largest slice of capex, 22% or Zloty 5.8 billion, will be spent on the distribution segment, the company said. PGNiG has also earmarked Zloty 1.4 billion or 6% of the total capex, on expanding its storage capacity from 1.66 Bcm to 3 Bcm. The company reduced its original target of 3.8 Bcm due to uncertainty over legislative changes regulating mandatory natural gas reserves. As a result PGNiG has shelved its plan to increase the capacity of its Wierzchowice underground storage facility by 0.8 Bcm.

Rosatom defends nuke safety tests

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of eight of Russia's 10 nuclear power stations by the World Association of Nuclear Operators will be published in July, it said.

EU stress tests

Kirill Komarov, deputy general director for global business development at Rosatom, said June 27, "We don't want to fulfil the EU stress tests – we've done tests already." Komarov was interviewed on the sidelines of an industry debate on the future of nuclear power in Central and Eastern Europe held in Brussels. Komarov added that Russia's state energy regulator completed its own tests on nuclear reactors in May and will be spending some \$200 million in additional safety measures this year, including additional pumps and generators for the plants, said. Russia is ready to exchange the results of the two independent stress tests it has completed, he added.

Rosatom confirmed Komarov's comments in an e-mail June 28. Company spokeswoman Daria Ozerova said Komarov meant that "we have completed the stress tests already, and these were more comprehensive than European tests. Moreover, all of the tests were carried out with international experts." Vladimir Malyshev, assistant to the chairman of Rostekhnadzor, confirmed that in an interview June 28 in Brussels. When the EU agreed on common criteria in late May, he said, Russia compared them to those it had already developed and implemented. Russia used the EU criteria to supplement its own test scope, which was more comprehensive, he said.

Kirienko's report to PM

Rosatom Director General Sergey Kirienko met with Russian Prime Minister Vladimir Putin in Moscow June

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Rosatom defends nuke safety tests

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24 to report on Rosatom's response to the Fukushima I accident. Rosatom posted a transcript of Kirienko and Putin's meeting on its website the same day.

On March 16, five days after the accident in Japan, Putin ordered Rosatom, the Ministries of Energy and the Environment to analyze the current state of the nuclear industry and its future plans.

Rosatom then conducted more than 100 "comprehensive checks" at Russia's nuclear power plants, Kirienko said. Fukushima showed that the "most important thing" is the reliability of additional equipment for electricity and water supply, he said. Checks on Russia's nuclear power plants included all alarm systems and diesel generators, Kirienko said. "The 112 emergency diesel generators at the plants have been fully checked and 100% tested for operation. And 520 emergency pumps for water supply have been confirmed as fully meeting reliability tests," Kirienko said. "As a second step, we carried out a comprehensive review of operating systems. For this, each station had to pass four checks. After that, Rostekhnadzor was given data for its analysis, which was in addition to the data this authority collects during its routine inspections," he said.

After Fukushima, Russia was the only country to invite WANO to conduct a corporate peer review, Kirienko told Putin. In mid-April, WANO sent to Russia a nine-person team, which included a member of EDF's nuclear safety group, Jean-Paul Kombemorel; the director of WANO's Atlantic Center, David Farr; and the deputy director of WANO's Moscow Center, Sergey Vybornov.

The team checked the safety and reliability of eight plants, assessing whether they met international standards, Kirienko said. "Tests showed that Russian nuclear power plants not only fully comply with national and international standards, but that Russian standards are often tougher than international ones," he said.

"We understand that after Fukushima international standards are likely to be ratcheted up and that is the right thing to do. We should not follow a business as usual approach to national and international norms," he said. "But if you look at the rules that need to be enhanced after Fukushima, then you can see that our new reactor designs meet all these requirements," he said.

Rosatom has created a model that shows that if a plant based on its new designs had been built at the Fukushima site, it would "easily" withstand a 9.0 earthquake on the Richter scale and tsunami waves, Kirienko said. Rosatom is also analyzing other extreme events, including a tornado "sucking all the water from the cooling pond," Kirienko said. Post-Fukushima requirements for new Russian reactors include a double

containment vessel that could "withstand the impact of a heavy aircraft, as well as any explosion, tsunami, or whatever," he said. They also include a passive heat removal system, he said.

"This system means that, even if there is no water, heat is freed by air flow; there is always air at the plant. Analysis has shown that should one of our modern reactors face a Fukushima-style event – and not only in the absence of electricity, but also of water – according to previous IAEA requirements, the reactor should hold on for 24 hours until help arrived. Now it would have to be 72 hours," Kirienko said. "At a Russian plant, if there is no water or electricity and the personnel have left the site for whatever reason, the reactor would be able to go for an infinite amount of time without a core meltdown," he said.

Vladimir Asmolov, another deputy director general of Rosatom, said in an interview June 21 in Vienna that Rosatom's new AES-2006 reactor design, which is being built at Novovoronezh II and Leningrad II, is designed to sustain the crash of an aircraft weighting up to 400 mt. While the containment could be damaged by the impact, the resulting consequences would not lead to a severe accident, he said.

Rosatom has conducted additional analysis work and has allocated more than Rb15 billion (\$536 million) to buy additional equipment this year and next year for Russia's existing reactors, he said. Each Russian unit has three emergency diesel generators, but Rosatom will buy more diesel generators and motor-driven pumps, he said, and will soon install new backup safety systems at all its plants.

Kirienko said that representatives of IAEA states at the ministerial meeting in Vienna last week praised Rosatom for having done the tests and being ready to send Russian experts to participate in peer reviews in the EU and elsewhere. He said Rosatom had told the international colleagues that if their experts see something that the Russian inspectors have not tested, "or if you have additional questions, then we will inspect [our plants] again, and then a third time [if necessary]."

In early June, Kirienko said that Russia could consider early closure of first-generation nuclear power units if post-Fukushima safety assessments "show that too much time and cost are required for modernizing" them. Speaking at the Atomexpo conference and exhibition in Moscow June 8, Kirienko told participants that Russia was collaborating closely with foreign counterparts to conduct "stress tests" of reactor resistance using the lessons of the Fukushima I nuclear plant accident in Japan. Kirienko said "new efforts" are being made to develop Russian nuclear plant safety in the "post-Fukushima world," including providing additional emergency water and electricity supplies. Rosatom subsidiary Rosenergoatom operates 32 nuclear power units, 19 of which are based on designs from the 1970s.

Petrol: A growing force in Slovenia

Slovenia's leading energy group Petrol is set to expand its presence in its domestic and regional electricity market with the acquisition of a controlling stake of at least 53.45% in Istrabenz Gorenje, the local power group, which owns half of GEN-I, the distributor of electricity from the country's share of its co-owned nuclear plant Krsko. The deal will help Petrol meet targets set out in its strategy to 2014, focusing on growth in the power sector, and provide it with access to new markets, Rok Vodnik, a member of Petrol's board of directors responsible for energy, told Platts in an interview June 29.

"GEN-I is involved in wholesale trading in 16 countries while Petrol currently trades in five or six countries so this acquisition will allow us access to new markets," he said. "This is a strategic investment; it is our strategy to grow in the electricity market".

The Ljubljana-based company announced June 21 that it had signed agreements to purchase a 46.55% interest in Istrabenz Gorenje, from Gorenje, a local appliances manufacturer, and between 6.9% and 10% from Robert Golob, chairman of the company's board of directors. The value of the stake was not disclosed but the local daily Dnevnik reported the total market capitalization of the company at €25 million. An informed source said this was close to its true value.

The sales agreements will enter into force after receiving the approval of all shareholders and the competition authorities. Istrabenz holds the remaining 45% stake in Istrabenz Gorenje. As the main shareholder of Istrabenz, with a stake of around 33%, Petrol, which is 30% owned by the Slovenian state, is in a strong position now to buy out its financially troubled rival and secure full ownership of Istrabenz Gorenje, Golob told Platts June 29.

Based in Nova Gorica, Istrabenz Gorenje is essentially an electricity trader and retailer, selling on both the wholesale and retail markets in its domestic market, as well as trading in bordering EU markets and in southeast Europe. The company's major 'asset' is its 50% stake in GEN-I, which is responsible for the sale of half the electricity produced by the 670-MW Krsko nuclear power plant. The plant is co-owned by Slovenia and Croatia.

As a result it supplies roughly 25% of Slovenia's electricity though only 4% of its households. Its international trading activities represent the major part of its business. Last year, the company sold nearly 13 TWh in 16 markets, of which only around a third was supplied within Slovenia.

In addition it has a growing biomass production and trading business, which includes two factories in Bosnia-Herzegovina, and a small power engineering

unit. Last year, Istrabenz Gorenje posted a 40% rise in sales to €347.6 million but net profit slumped from €3 million in 2009 to €138,000 while EBITDA more than halved to €1.9 million.

The acquisition of Istrabenz Gorenje marks another step in Petrol's evolution from predominantly an oil trader and fuel retailer into a supplier along the whole energy chain, Vodnik explained.

"Our core business is and was for many years oil trading and management of the 442 petrol stations that we own in the region, which comprises Slovenia, Croatia, Bosnia-Herzegovina, Montenegro and Serbia. About 15 years ago we started diversifying, beginning first with gas – natural gas and liquefied petroleum gas. We now have 29 concessions to supply natural gas in Slovenia and Serbia and we are one of the main suppliers of LPG in Slovenia and Croatia. Gas supply is now the largest segment of our business in the energy sector".

Petrol entered the electricity market in earnest last year with the launch of its first product for the domestic retail market for both households and business customers. "We bundled our electricity offer together with our gas offer and purchases from our petrol stations; offering our customers a discount," said Vodnik. "We are the first company in Slovenia to offer a bundle of products," he added.

The bundled product has provided some early success for the company, which according to figures published for the first quarter of this year, tripled its retail electricity sales by volume to 253 GWh from 88 GWh in Q1 2010. To put this into perspective, Petrol registered total electricity sales for the whole of 2010 of 357 GWh.

Looking ahead, Vodnik expects this growth rate to continue. "We expect similar growth this year to around 800 GWh," he said, adding that this was still small in national terms. "Slovenia's total annual consumption is around 12 TWh and our goal in our strategy is to reach 1 TWh in 2014 but we are now ahead of plan and expect to reach this target during next year," he stated. According to its strategy to 2014, Petrol has targeted total domestic sales of 2.15 TWh, of which half will be on the wholesale market and half on the retail market.

These targets were set prior to the acquisition of Istrabenz Gorenje and will not be revised to reflect the acquisition since the wholesale and retail electricity businesses of the two companies will continue to operate as separate entities with their established brand names, Vodnik explained. "We will let GEN-I to continue to develop on their own as their

Petrol Group: 2010-2014 results and targets

| | Q1 2010 | Q1 2011 | 2010 | Plan for 2011 | Strategy 2014 |
|--|---------|---------|-------|---------------|---------------|
| Revenues from energy activity | 35 | 53 | 115 | | |
| Total group sales revenues | 607 | 749 | 2,803 | 2,900 | 3,500 |
| EBITDA | 20.5 | 28.7 | 95.0 | 103 | 167 |
| Net profit | 9.2 | 9.8 | 35.5 | 48.9 | 73.1 |
| Net debt/equity ratio | 1.3 | 1.3 | 1.17 | 1.1 | 0.8 |
| Net debt/EBITDA (Adjusted Q1 2010 and Q1 2011) | 5.3 | 5.5 | 5.0 | 4.8 | 3.0 |
| Sales of petroleum products (m tons) | 0.51 | 0.55 | 2.35 | 2.34 | 2.8 |
| Sales of natural gas (m cu m) | 46 | 50.1 | 104 | 108 | 148.0 |
| Sales of LPG (thousand tons) | 12.2 | 13 | | | |
| Sales of electricity (GWh) | 88 | 253 | 357 | 1,011 | 2,150 |
| Number of service stations | 435 | 442 | 441 | 467 | 570 |
| Number of gas concessions | 28 | 29 | 29 | | |
| Number of heat concessions | 3 | 5 | 5 | | |
| Capital expenditure* | 8.3 | 7.8 | 65.9 | 88.8 | 428 |

*Capex in Strategy 2014 is for period 2010 to 2014

Source:Petrol

strategy has proved very successful in recent years and we will support their strategy," he said. "We believe that Petrol is an important brand for certain segments of our business and GEN-I is an important brand for other segments and customers. Today we believe that it makes sense to be present with both brands on the market. In the future we may see it differently," he added.

While the companies will retain their separate identities and brands for now, Petrol aims to maximise synergies between the companies' electricity trading and supply businesses. "We will try to find synergies between these two companies to make them more efficient and successful on the market but not though to impede each companies' business development. We will analyse which parts of each of the businesses are better and try to organize them so that we benefit from the synergies over the next few years," he explained. "Both brands have a minor share on the market. There are five regional distributors in the Slovenian market which are much bigger than both companies; jointly the two companies are smaller than the second smallest distributor in Slovenia so we see good potential going forward for growth for both brands," he added.

The other part of Istrabenz Gorenje which is of particular interest to Petrol is its biomass production and trading business. "This is interesting for Petrol because on the one hand we are going into the biomass heating sector and on the other we also want to have a new product to offer to our customers," he said. The company currently operates a biomass-fired heating plant as well as one 1-MW biogas cogen plant as part of municipal heating concessions and plans to invest in additional biomass-fired cogen capacity in the future.

Petrol also operates four small gas-fired cogen plants, which produce heat for local municipalities and sell power to the national grid, and some small-scale PV systems. In total, the company expects to produce not more than 60 GWh of electricity this year. The company has five district heating concessions and also has a management contract to provide energy services for two industrial zones, which predate its entry last year into the retail electricity market.

In addition to biomass heat and power production and cogeneration more generally, Petrol is focusing on photovoltaics, though not on a scale to make headlines. "Last year we installed 700 kW of roof-mounted systems in Slovenia and this year we plan to install a further 1 MW," he said. "We have installed PV systems on 13 of our petrol stations and this year we will install further panels on four or five more of the larger new retail outlets".

The PV systems are also being installed on some industrial plants not part of the Petrol Group. The company does not plan for now to invest in any major new generating capacity, he added, but through its latest acquisition it estimates that it has much better access to the electricity market, which should fulfil its short-term and medium-term requirements.

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Poland committed to nuclear plans

Poland should not fall victim to “fear mongering” over nuclear power and will push ahead with its plans to build 6 GW of nuclear capacity by 2030, Hanna Trojanowska, the government’s nuclear power advisor said June 17. “Definitely the decisions made in neighbouring countries after the Fukushima accident do not change our policy in this matter,” Trojanowska said in an interview with Platts. “Europe is now vacillating between a sense of urgency to mitigate the reduction of CO2 on the one hand and a nuclear phobia on the other”.

The country has enacted an amended Atomic Law and new legislation governing the construction of the plants themselves was adopted by parliament on June 29. Some say the swift passage of this legislation is evidence there is no significant political opposition within Poland to nuclear.

However, the country’s left-wing SLD opposition party wants a referendum on the issue, as do some members of the junior coalition partner, the People’s Party. Indeed, the party’s leader, Waldemar Pawlak, the Economy Minister and deputy Prime Minister, said earlier this month that nuclear power demands “reconsideration” following Fukushima. Pawlak’s comments may well be partly motivated by the upcoming parliamentary elections in October as opinion polls suggest Poles are now split over the issue. Trojanowska said the government is not planning to hold a referendum.

The construction of two plants likely to be sited in northern Poland, and estimated to cost at least €20 billion, is being led by the country’s largest power utility, PGE, together with one or more strategic partners. The first unit is scheduled to be commissioned by end-2020 but Trojanowska admits it is a “very tough time schedule”.

Speaking at Platts European Nuclear Power Conference in Prague in mid-June Marcin Cieplinski, CEO of PGE EJ 1, a subsidiary of PGE, which has been set up to build the first nuclear power plant, said the company hopes to launch a tender for the technology supplier in the second half of this year. “We assume the vendor will be chosen by the end of 2013 and that first nuclear concrete will be poured in 2016,” he said, which would be in line with the original schedule. Cieplinski, however, admitted that there is a possibility that the investment decision would be made later than is now planned, to take into consideration the lessons of events at Fukushima in Japan in the plant design. PGE also plans later this year to publish a shortlist of three potential sites for the plant, Cieplinski said.

Now that the legislation is in place, and a tender set to be issued, the race is on to win the reactor contract and prominent among the contenders are Areva, GE Hitachi and Westinghouse. The government has said it

will allow construction of only Generation III designs, but that it also wants a “proven” design. Cieplinski acknowledged there are few III or III+ units in operation, saying PGE was working on the definitions of “proven” and Generation III+. Trojanowska said Poland does not exclude any vendors offering third generation reactors although it would be difficult to imagine Russian technology being chosen. “We cannot afford to apply first of a kind technology but definitely we would like to have technology which is proven and commercially viable,” she said. “It’s also very important to have the licensing process finished in the country of origin,” she added.

Some say the smart money is on Westinghouse’s AP1000, currently being built in China, especially if the Obama administration backs it. The company is considering locating its European supply chain centre – for potential projects in the UK, Lithuania, the Czech Republic and Poland – in the recently closed Gdynia shipyard in northern Poland.

“The facility would require a substantial investor. It would support the UK projects too. It needs to be operational by 2015. We would need a facility like the Gdynia shipyard. It would have up to 750 employees and 20 years of guaranteed scope of supply,” Mike Kirst, Westinghouse’s vice president for Eastern Europe and Russia, told Platts.

GE Hitachi is banking on its established presence in Poland, where it already employs 10,000 people. The company is offering its established ABWR reactor, built in Japan in the 90s, and its new ESBWR design. “We’re not in Poland for a transaction. We’re a strategic partner. We’re going to bring state of the art technology. We recognise that Poland is very committed to have these units built in 2020s timeframe and we’re the only ones who have demonstrated we can build it in that timeframe,” Danny Roderick, Senior Vice President for new projects, told Platts.

Areva, the only European vendor in the race, admits that significant overspend and delays on its first EPR reactor in Olkiluoto, Finland, have led some to question the company’s ability to meet Poland’s extremely tight construction timetable. “We know the problems, but we also know we have the experience from Olkiluoto. It’s still the most advanced 3+ site in the world. It’s a European site, it’s close to Poland. We have real experience of European construction,” Adam Rozwadowski, Areva’s managing director in Poland, told Platts. Rozwadowski said, unlike its competitors, Areva is not offering to build “70%” of the plants in Poland, but instead can point to proven cooperation with Polish companies. More Poles – 2,000 at its peak – worked on the Olkiluoto site than any other nationality, he said.

Slovakia to rewrite rules for renewables

Slovakia is seeking to reduce the cost of promoting renewable power after a solar boom contributed to rocketing surcharges for electricity consumers. The boom has focus attention on what the Ministry of Economy describes as a far from satisfactory support system with the ministry tasked by the government at the start of June with designing a new support framework by the end of October.

Some of the suggestions for the new framework have already been outlined by the ministry in its evaluation of the current system put to the cabinet on June 1. These include the scrapping of the existing obligation on the country's three regional distributors to buy electricity produced from renewable energy at the top prices offered for covering grid losses. The state settles this bill at a later date. That contribution to renewable costs has, the ministry complains, led to a cumbersome system, which includes sometimes burdening distributors with excess power which they must sell off on the open market, and wide discrepancies between grid losses and distribution company claims for final compensation.

In any case, the ministry argues that the current support system risks being unsustainable in the short term because: "in the coming years the amount of electricity that must be bought will exceed the distribution network losses." Instead, the ministry is calling for a single body to buy renewable power and sell it on. This would be simpler and allow better coordination to cope with nationwide grid losses, with the ministry recommending the organizer of the short-term electricity market be given the extra responsibility.

National transmission system operator SEPS might have seemed the logical first choice for this task but the ministry is damning in its assessment of SEPS' failure to curb Slovakia's relatively high bill for grid support services irrespective of the recent renewables problem. "SEPS inability to ensure cheap support services in the last years has contributed more than the current support for solar or wind power in the overall rise in electricity prices in Slovakia," the ministry said in its report, adding that support service costs per MWh in Slovakia are around four times higher than Belgium even though the two countries have a similar proportion of nuclear capacity.

Another flaw in the original support system has meant that expensive upgrades to large hydropower plants have been largely paid for from electricity surcharges irrespective of whether they added any new capacity. That expensive loophole, resulting from a parliamentary amendment, was already largely tackled when new rules in February called for new technology to account for at least 50% of recoverable costs but the bill for renovations are still coming in.

The ministry also recommends a wider overhaul of existing renewable rules by calling for reverse auctions to be organized with only the lowest bidders for new solar and wind power capacity receiving approval for construction. Part of its concern is that too much power from fluctuating renewables, such as wind and solar, will put pressure on the grid and increase the cost of support services.

Ironically, solar power companies see the auctions as a way of getting back into a market which has been tightened so much that at the moment permits are only being awarded to roof-mounted panels of less than 100 kW. Such facilities will also after July 1 be the only form of solar power to henceforth benefit from feed-in tariffs.

"We expect that the auctions could allow the return of solar to at least brownfield sites and maybe greenfield sites," the head of the Slovak Association of Photovoltaic Industry (SAPI), Martin Toman, told Platts. "At the moment there are not many details about how the auctions will work, so it is difficult to comment," he added.

One of the main promoters of renewables in Slovakia, the Slovak RE Agency, also favours the existing system being overhauled and auctions introduced. "It should allow the best projects to be built and the most serious companies to stay in the business," director Martina Kolesarova told Platts. She reckons that biomass will be the most favoured form of renewables as a result of these changes.

The Slovak government says the generous support system for renewables is responsible for much of the expected 4.82% electricity price rise for households this year. SAPI's Toman says that figure has been exaggerated with solar, accounting for only around 1% of that rise.

What is not at issue is the solar boom Slovakia has experienced over less than two years. In 2010 the national energy security plan expected an extra 8 MW of solar capacity. Instead installed capacity at the end of 2010 stood at 145 MW with a further 115 MW expected by the end of June, said Toman. "A lot of companies are rushing to get projects completed so they can benefit from the feed-in tariffs and it is quite tight whether they will meet the deadlines," he said.

Slovakia: Cost of renewable energy support (€)

| | 2011 | 2010 |
|-----------------------|---------------|--------------|
| Solar | 116.8 million | 10.4 million |
| Biomass | 27.7 million | 18.8 million |
| Hydro | 25.3 million | 6.1 million |
| Biogas | 21.7 million | 2 million |
| Geothermal | 87,852 | 0 |
| Total renewables | 191.9 million | 37.6 million |
| Cogen with renewables | 43.4 million | 31.1 million |

Source: Office for the Regulation of Network Industries (URSO)

Repsol teams up with Alliance in Russia

Repsol is to form an \$800 million upstream joint venture in Russia with Swedish-listed Alliance Oil and will also team up with Kazakhstan's state oil and gas group KazMunaiGaz to explore the Adai oil block in the Central Asian republic as the Spanish integrated oil and gas group continues to expand outside Latin America.

Alliance Oil and Repsol announced June 18 that the joint venture, in which the former will hold 51% and the Spanish group 49%, will focus on exploration and production projects in Russia. "The agreement seeks to combine Alliance's access to Russian upstream opportunities with Repsol's technical skills to create a long-term exploration and production alliance," the companies said in a joint statement.

Under the deal, Alliance will contribute assets worth \$600 million from the Volga-Urals region in southern Russia bordering Kazakhstan, while Repsol will contribute \$400 million in cash, half to Alliance and half in the form of a capital increase for the new venture.

Final approval of the deal, which is subject to final negotiations on contractual terms, due diligence of the assets to be contributed by Alliance and regulatory approvals, is expected before year-end. The deal follows the signing of a memorandum of understanding during a visit by Spain's Prime Minister Jose Luis Rodriguez Zapatero to the International Economic Forum in St. Petersburg.

Repsol is no stranger to Russia. It already owns a 3.47% stake in Alliance Oil that it received after the merger between Alliance and West Siberian Resources in 2008, as well as a 74.9% stake in Eurotek-Yugra, which holds exploration and production licenses in the Karabashsky 1 and 2 blocks in West Siberia.

Analysts see the move as an important strategic one for Repsol. "Strategically, this fits within the company's objective of using the recent Brazil and YPF sales to try and broaden a geographical footprint that is still heavily dominated by Latin America," Citi said in a note. The investment bank estimated the deal would add around 85 million barrels or 2% to Repsol's resource base, and could generate a post-tax internal rate of return of about 12%.

Pavel Sorokin of Moscow-based Alfa Bank said Alliance's upstream performance would also be improved by the deal. "We see the move as another step toward the enhancement of Alliance's upstream prospects and believe the announcement is likely to be positively perceived by the market at least in the short run," he said.

Alliance has upstream and downstream operations in Russia and Kazakhstan with proved and probable oil

reserves of 638 million barrels. In Russia's Volga-Urals region, the company produces around 20,000 b/d from 10 fields with combined reserves of 171,000 million barrels, according to Alliance's website.

Alliance Oil, which is controlled by the Bazhaev family and is part of OAO Alliance, founded in 1998 by Zia Bazhaev, a Chechen businessman, controls the Khabarovsk oil refinery in Russia's Far East with annual crude throughput of 4 million tonnes, and more than 250 service stations as well as wholesale oil product terminals in far-east regions.

Sorokin said one problem facing the new venture is that some of Alliance Oil's assets are already seeing a tail-off in production. "One of our major concerns is the stability of Alliance Oil's production in the long run, beyond 2015, when [tax] preferences for the Kolvinskoye field are set to expire and the field is likely to enter the declining stage of production," he said.

Meanwhile, the Spanish group will also team up with KazMunaiGaz to jointly explore the Adai oil block in the Atyrau region in western Kazakhstan, and could offer the Kazakh state oil and gas company a role in its international projects, KMG Chief Executive Kairgeldy Kabyldin told reporters June 17 after signing a memorandum of understanding with Nemesio Fernandez-Cuesta, executive director of Repsol's upstream unit.

"If we see that it is a prospective field, we will sign new agreements," Kabyldin said in respect of Adai. "Repsol will offer us the chance to consider participation in their international portfolio of projects," he said. Asked to specify projects which countries that KMG could eventually enter with Repsol, Kabyldin said: "They (Repsol) work in Iraq, and they also work in Iran". He added that KMG would also consider offering Repsol the opportunity to participate in industrial projects linked to Kazakhstan's plan to diversify its economy by 2020. "We, KazMunaiGaz, will offer them the chance to consider taking part in industrial projects in Kazakhstan," he said.

Repsol, meanwhile, has been seeking to develop new projects globally as its main asset base in Argentina declines and in March agreed to commit \$768 million to a major expansion of its exploration in Alaska's North Slope. In the short term, Repsol is banking on a spate of recent oil and gas finds in Brazil's prolific offshore Santos Basin and other overseas exploration plays to turn around its falling oil production.

"This cooperation with Alliance enables Repsol to increase its producing assets and obtain privileged access to assets in the country, home to some of the largest hydrocarbon resources in the world," Repsol chief executive officer Antonio Brufau said in the statement.

Ascent eyes first Slovenia gas by 2012

Stuart Elliott, London

UK-listed Ascent Resources plans to invest some €150 million (\$210 million) to 2015-2016 in its landmark tight gas project in eastern Slovenia, with first output targeted for the end of this year or early 2012, a senior company official said June 27.

The project at the Petisovci field on the Slovenia-Hungary border, is the company's key focus with gas-in-place estimates of more than 400 Bcf, with a further 200 Bcf potentially in lower lying reservoirs, Ascent Finance Director Scott Richardson Brown said in an interview.

Ascent estimates that the resources contained in the Petisovci field could meet Slovenia's entire gas demand in full for ten years. "It should change the dynamics of their gas market; their imports would at the very least reduce quite significantly if we can get it on production as we hope," Richardson Brown told Platts. Ascent holds a 75% interest in the Petisovci project, with 25% held by Geoenergo, which is the holder of the exploitation concession. Geoenergo is jointly owned by Nafta Lendeva, the Slovenian state oil company and Petrol, the country's leading private energy group.

The company's challenge is to "get the gas out of the ground," Richardson Brown said, and there are plans to carry out hydraulic fracturing, or fracking, at two sites in the fourth quarter of this year. "As we've drilled up over the last six months, we are increasingly aware that we probably do need to do some kind of stimulation to it to get the gas out," he said. There is also a need to have a carbon dioxide reduction facility at the field before commercial production can start, he added.

Ascent is currently drilling a second well at the field, and once that is completed it can begin the fracking process. "Once we have two wells, we can frack them both at the same time," Richardson Brown said. "There is a lot of demand for fracks at the moment [in Europe], so trying to do it all in one go will be very beneficial."

Richardson Brown said the company had not encountered any opposition to the fracking technique in Slovenia despite political opposition in other parts of Europe, particularly France and Germany. "There are no issues at all that we're aware of, none of the issues that you see in France," he told Platts. "In Slovenia, they are very dependant on importing energy, so they are very keen on becoming more reliant on domestic production". The Petisovci field, he said, is "more or less the last asset of any quality left in the country." "They have depleted all the shallower targets," he said.

The field is close to existing gas transportation infrastructure, making future gas sales to customers straightforward. "We have to get a gas offtake agreement

in place and we a lot of people jostling for that," Richardson Brown said. "What we have to do is demonstrate we are going to be a stable producer."

Richardson Brown stressed that the key to commercializing the Slovenian gas resources is the technology to produce the gas. "Everyone is very focused on how we get the gas out of the ground. It's not so much is the gas there, it's can we get it out of the ground in a manner that is going to be commercial. We are confident in our ability to do that."

Two wells were drilled in the 1980s at the field using "crude" fracking techniques and flowed at 1,500 Mcf/d and 2,500 Mcf/d. "Two million cubic feet/day is the benchmark, but we're looking at producing a multiple of that using modern techniques," he said.

Ascent is aware it will have to spend a lot of money to commercialize the gas. "I would expect to be spending more than €150 million over the next four to five years," Richardson Brown said.

Asked about the failure of the tight gas project in neighboring Hungary, where the US' Falcon Oil & Gas, ExxonMobil and Hungary's MOL abandoned vast volumes of gas because of the technical difficulty of producing the gas, Richardson Brown said it was a "valid worry".

"But we are confident we can commercialize it. It isn't the smoothest road: in an ideal world you drill it and it flows conventionally. We hoped the lower reservoirs might have been naturally fractured, but it turned out they weren't," he added. But, he said: "We hope on getting at least half of the gas out, so a gross 200 Bcf, potentially more if we can prove up those lower reservoirs too" First production could be around the corner. "Next year is a realistic target – but if everything goes in our favor, it could be the back end of this year."

Ascent Resources Petisovci project



Source: Ascent Resources

Sterling escalates Romanian field dispute

Canada's Sterling Resources has escalated its dispute with the Romanian government over development of the Midia and Pelican blocks in the Black Sea, filing a "Notice of Dispute" with Bucharest under a bilateral Canada-Romania investment treaty.

The Notice of Dispute was filed on June 20 "as a result of deliberate and discriminatory actions" taken against the company's investments at Midia and Pelican, Sterling said in a statement. It said the actions included "media attacks and various actions to block the progress of the company's activities". Under the Notice of Dispute, the parties now have six months to resolve the issues amicably.

"If Sterling is unable to obtain satisfactory resolution on all the issues within this period, the company can then submit the matter to arbitration, if it so desires," it said. Under the arbitration process, Sterling would claim monetary damages that reflect the "entire and significant ultimate" value of its offshore assets.

Mike Azancot, Sterling's CEO, said the decision to step up the legal action against Romania was unfortunate but necessary. "It is with much reluctance that the company has had to take this step in our efforts to continue the exploration and development of oil and gas resources in our offshore license blocks," Azancot said. "Our actions now are focused on taking a proactive approach in the resolution of the current impasse. As a long-standing, loyal and patient investor in the country we continue to reiterate that our intention is to follow through on our business activities and we remain optimistic that, with prompt actions from the government, an amicable resolution can be reached without resorting to arbitration," he added.

In April, Sterling declared force majeure on its operations at the Midia and Pelican blocks saying it had been unable to undertake exploration activity because of the political impasse (*EIEE 214/24*). At the time Sterling said that in its view that [certain relevant governmental] authorities are currently unable or unwilling to provide construction permits for offshore oil and gas activities". "The effect of this situation, which the company views as political in nature, is to render it impossible to undertake petroleum operations at the present time," it said in a statement April 28.

Work at the two blocks, for which Sterling signed a concession agreement in 1992, has been held up for years by a combination of border disputes and political issues. Parts of the two blocks are in an area of the Black Sea that had been disputed between Romania and Ukraine. The International Court of Justice in The Hague drew a new boundary in the Black Sea between Ukraine and Romania in February 2009, freeing up the disputed area for oil and gas exploration, but Sterling was then

held up as the Romanian government opposed approving a farm-out of a stake in the blocks to the UK's Melrose Resources. Sterling finally cancelled the Melrose deal because of the slow progress, vowing to get to work on exploration straight away.

There have been suspicions that some elements in the government are trying to force out Sterling. Sterling has told Platts there was a "whole range of conflicting interests in the government". The Romanian Prosecutor's Office is also undertaking an inquiry into the process undertaken by the government authorities when issuing the concession agreement, Sterling said. "Although we understand that the ongoing investigation is not directed against Sterling, its continued existence and slow pace have given rise to rumours and innuendo which tarnishes Sterling's reputation and have a severely detrimental effect on Sterling's ability to obtain timely and unbiased treatment from governmental authorities," it said.

Azancot, meanwhile, stressed that a major gas find would be a boost to the Romanian economy. "We have always been of the opinion that Romania's Black Sea offers the country the potential to reduce gas imports dramatically, provide for high levels of investment and tax receipts while providing significant employment opportunities. Sterling has until recently been the only non-Romanian operator to have achieved exploration success in the offshore arena. This success has, we believe, had a knock-on effect in encouraging other companies to take offshore licenses with potentially significant future benefit for the country," Sterling's CEO's said. "Sterling intends to be at the forefront of creating the infrastructure and business development to help realize this great potential for Romania," he concluded.

Sterling estimates that the blocks could hold more than 1 billion barrels of oil equivalent in place. Midia, which contains the undeveloped Ana and Doina natural gas fields, is estimated to hold alone gross combined probable reserves of 345 Bcf of gas. Sterling Romania's general manager Mark Beacom told an energy seminar in Bucharest June 23 that the company expected to be able to extract three million cubic meters of gas per day, from the two perimeters, in 2014. By comparison, total daily national consumption of gas in winter, currently reaches some 60 million cubic meters.

In February, Petro Ventures Europe (PVE) and a consortium of Russia's Lukoil and Vanco International signed concession agreements with the National Agency for Mineral Resources of Romania to explore three offshore blocks in Romania's section of the Black Sea. PVE, a wholly-owned subsidiary of Australian-registered Petro Ventures International, holds a 20% interest in the Midia and Pelican blocks, which it acquired from Sterling in October 2007.

ELECTRICITY NEWS

Bosnia-Herzegovina

Investor sought for Upper Drina

The Ministry of Industry, Energy and Mining of the Republic of Srpska has invited bids from international companies to act as strategic partner in the development of the Upper Drina River hydropower project. Expressions of interest are requested by July 28.

The successful bidder will take an unspecified stake in a joint venture company to be established with the Bosnian Serb state-owned utility Elektroprivreda Republike Srpske (EPRS), and Serbia's state power utility Elektroprivreda Srbije to build, own and operate a four plant cascade with a total installed capacity of no more than 250 MW.

The tender does not specify technical details of the so-called Gornja Drina project but previous studies have planned upon the development of four plants with a combined capacity of 238 MW – the 114.64-MW Buk Bijela, 34.95-MW Sutjeska, 51.66-MW Foca and 36.64 MW Paunci projects – at an estimated total investment of around €500 million. The four projects are expected to produce approximately 800 GWh per annum, representing around 15% of the total production volume of EPRS. The projects are being developed with Serbia's state power utility since the two countries share control of the river that forms their border.

Full tender documentation is available from the Ministry of Industry, Energy and Mining upon payment of a non-refundable fee of €2,000.

For further information on the tender procedure or projects, contact: Milan Bastinac or Slavica Bogdanovic, Tel/Fax: 00 387 51 339 581/339 651; m.bastinac@mier.vladars.net; s.bogdanovic@mier.vladars.net; Nenad Radovic, nenad.radovic@ers.ba; Tel/Fax: 00 387 59 277 104/277 194; Vladislav Vladicic, Tel/Fax: 00 387 59 277 107/277 137; vladislav.vladicic@ers.ba

RiTE Ugljevik backs Comsar JV

The shareholders of RiTE Ugljevik, the Bosnian Serb state-controlled coal mine and thermal power plant complex, approved June 21 the establishment of a joint company with the Russian-owned, Cyprus-based company Comsar Energy for construction of a new 400-MW unit at the plant site in the northern part of the Bosnian entity.

The shareholders assembly, which was attended by Comsar Energy's owner, Russian businessman Rashid Sardarov, agreed to set up the joint venture in which Comsar will hold a 90% stake and RiTE Ugljevik the remaining 10%. Construction work is expected to take 30 months, according to a June 21 report by Bosnian Serb state news agency SRNA.

Shareholders agreed to build the so-called TPP Ugljevik 3 project with Comsar, next to the existing plant owned by state power company EPRS, because of unresolved ownership issues at the site of the originally

proposed Ugljevik 2 site. Comsar originally proposed to build two new 300-MW units: one at a site where preparations for the plant's second unit have already started and a greenfield project, should coal reserves at nearby coal fields prove to be sufficient to supply both the existing 300-MW plant and the two new units.

Comsar Energy said in a letter of intent sent to the government this March that it would invest €400 million in the development of TPP Ugljevik 2 and an associated coal mine and proceed subsequently with a further unit at an estimated additional cost of €400 million (EiEE 216/9).

Bulgaria

Household price hike below 2%

Bulgaria's sector regulator announced June 29 its annual adjustments to regulated power tariffs, which will be valid from July 1. The prices that households pay the country's three foreign-owned regional distribution and supply companies rose by under 2%.

Day-time power supplied by CEZ in Western Bulgaria will cost a little over Lev 0.1765/kWh (including VAT), a rise of 1.89%; that provided by Austria's EVN will cost somewhat under Lev 0.1816/kWh (up 1.9%); and household customers of E.ON will pay almost Lev 0.1886/kWh, a rise of 1.92%. The respective night-time rates will be almost Lev 0.1227/kWh (1.86% up), Lev 12.21/kWh (up 1.95%) and a little under Lev 0.1158/kWh (1.91%).

A draft issued earlier in the month by the State Energy and Water Regulation Commission (SEWRC) envisaged considerably steeper hikes for night-time than for day-time power, at least for EVN (2.24% as against 0.5%) and E.ON (8.79% and 0.08%). This will disappoint the country's district heating companies, whose association sees cheap night-time power as unwelcome competition and has recently been arguing for a 10-15% hike in its price. The heat suppliers will be charging an average of about 4% more for heating from July 1, thanks to more expensive gas, though individual rises range from a 2.5% cut in Veliko Tarnovo to an 8.8% hike in Varna – with the tariff of the largest district heat company, serving the capital Sofia, rising 4.55%.

The price hikes have been blamed mostly on green and "brown" (cogeneration-based) power, for which national power company NEK and the discos must pay preferential prices to producers: for instance, the renewables surcharge built into NEK's prices has risen from Lev 3.03/MWh to Lev 3.72/MWh and the cogen surcharge from Lev 2.19/MWh to Lev 2.86/MWh. SEWRC chief Angel Semerdzhiev has warned consumers that prices could rise by as much as 15% when the next adjustments are made. As well as green power, he has cited long-term power purchase agreements and the eventual cost of carbon emission rights for coal-fired power plants as long-term factors driving up power prices.

Meanwhile, businesses entitled to electricity at regulated prices (those with less than 50 employees and an annual turnover of under Lev 19.5 million) will see an average rise of around 5%. Surcharges apart,

NEK will be taking rather more for the regulated-price power it sells to the discos (Lev 74.69/MWh as against Lev 72.24/MWh).

As to the power producers selling to NEK, the picture is mixed. The Kozlodui nuclear power plant will be charging less for power (Lev 15.30/MWh as against Lev 15.75/MWh), but the coal-fired Bobov Dol and Maritza 3 thermal power plants rather more (up 1.4% and 7.1% respectively to Lev 63.10/MWh and Lev 69.54/MWh). The CEZ-owned Varna TPP – dependent on imported coal, whose prices have risen significantly – will enjoy a hike from Lev 70.69 to Lev 83.59/MWh.

Local banks to broker disco sales

Two local financial institutions have been selected to broker the sale of the Bulgarian state's remaining shareholdings in the grid and supply units of the regional power distributors majority owned by Austria's multi-utility EVN and Czech power utility CEZ.

The state Privatization Agency said June 22 that it had picked Bulbrokers, a local financial and investment company, to arrange the sale of a 33% stake in EVN Bulgaria Elektrorazpredelenie and EVN Bulgaria Elektrosnabdyavane, while Central Cooperative Bank, majority owned by the country's largest industrial holding Chimimport, won the tender to sell a 33% stake in CEZ Razpredelenie and CEZ Electro. The stakes are to be sold on the Bulgarian stock exchange.

Earlier this month the privatization agency announced that First Financial Brokerage House had been selected to broker the sale of the government's stake in the E.ON-controlled network and supply units.

Bulgaria's government announced at the end of last year that it would sell its minority stakes in the country's three power distributors to increase liquidity on the local stock exchange and boost revenues as it struggles to cover its widest budget deficit in a decade.

The Balkan country sold 67% stakes in its three distributors to E.ON, EVN and CEZ in 2004. E.ON acquired control of the distribution grid serving northeastern Bulgaria, CEZ purchased the grid serving the capital Sofia and its region as well as parts of western and northern Bulgaria, and EVN acquired control of the southeastern grid.

Bold promises from NEK's new CEO

The new executive director of Bulgaria's state-owned power utility NEK, Mihail Andonov, has promised to turn the company into a "top performer in the Balkans" within the next 18 months.

"A long-term debt settlement program will be prepared and NEK will become a top performer in the Balkans within a year and a half," Andonov pledged in his first statement after the announcement of his appointment June 28 by the Minister of Economy, Energy and Tourism Traicho Traikov.

Andonov, a member of NEK's board of directors and chief accountant of the company since September 2009, succeeds Krasimir Parvanov, who was dismissed this April by the board of directors of parent company,

Bulgarian Energy Holding, for overstepping his mandate by signing an annex to an agreement with Russia's state nuclear power company Rosatom committing the sides to initial a final agreement on the construction of the Belene nuclear power project by this June.

Andonov said that NEK is in good financial health. The company ended 2010 with a profit of Lev 102 million and is expected to register a Lev 60 million profit for the first six months of 2011.

Czech Republic

ERU warns of 2012 price rises

Czech electricity prices could increase by around 10% in 2012 if consumers have to meet the full bill for incentives for renewable power, the country's energy regulator, ERU, has warned.

The sector watchdog said in a statement June 28 that it estimated that the cost of renewables support would rise to Koruna 679/MWh in 2012. This would translate into a 9.7% rise in prices for households and a 13.9% hike for industrial users, according to ERU.

It added that its latest estimates are based on a 0.5% year-on-year rise in baseload electricity prices for 2010, which influences the level of green bonuses; increases in support for biogas installations as well as the massive offtake of solar power in 2010 and the need to still pay some of the support due for 2010 to distribution companies.

The latest estimate does not take into account any moves by the government to cushion that full impact on consumers by coming up with its own lump sum contribution to the payments due to renewable electricity producers. A government decision on such a step should be made by the end of October, the regulatory authority said.

In 2010 the regulator warned of renewable support resulting in a Koruna 578/MWh hike in final electricity prices, or a rise of around 10%, but that was limited to Koruna 370/MWh after the government stepped in with a Koruna 11.7 billion payment.

The government also took a series of measures by the end of 2010 to curb the Czech solar power boom fuelled by some of the most generous feed-in tariffs and bonus payments in Europe. As a result it is now facing arbitration proceedings from foreign investors as a result. Their biggest complaint is a 26% retroactive tax on profits.

The regulator said it would release its final prediction for electricity price rises for 2012 at the end of November.

Contractor sought for small hydro

Czech renewable energy developer RenoEnergie seeks bids by August 1 to build the 180-kW Doudlevice hydropower station on the left bank of the Radbuza River in the Czech Republic. The work is expected to take 10 months at a cost of between Koruna 15-20 million.

The Pízen-based company is also developing the 4.2-MW Roudnice hydropower project on the Elbe

River and recently tendered for the supply of equipment. Last November, it commissioned the 2.65-MW Lovosice-Pistany 1 station also on the Elbe River. The company already operates the 672-kW Libocany and 720-kW Bulhary stations.

Tender documents for the Doudlevice project may be obtained from the address below upon payment of a fee of Koruna 6,000 (\$355).

For further information, contact Josef Rubas, RenoEnergie, Na Lysine 1181/6, Technicka Kancelar, Solni 4, 301 00 Plzen 140 00 Praha 4 Czech Republic; Tel.: 00 420 377320213; E-mail: rubas@renoenergie.cz

Equipment sought for Libechov HPP

Czech renewable energy developer Mercator Energy seeks bids by July 12 for the supply and installation of a Kaplan turbine-generator for the 4.59-MW Libechov hydro project on the Elbe River in the Czech Republic.

Mercator is developing the project at an existing weir on the lower Elbe. The contract is to be completed in April 2013 and has been valued at Koruna 130 million (\$7.7 million).

Tender documents may be obtained from the address below for K 5,000 (\$297). For information, contact Michal Trkal, Mercator Energy, Matousova 515/12, 150 00 Prague. Tel.: 00 420 222364318; Fax: 00 420 222364324; E-mail: michal.trkal@akmt.cz

Estonia

Eesti Energia orders GE turbines

Estonia's state power utility Eesti Energia announced June 21 the signing of a contract with GE Energy for the supply and installation of wind turbines for a new 22.5-MW wind farm it is developing on the Pakri peninsula on the southern coast of the Gulf of Finland.

Under the contract, GE will supply nine of its 2.5-MW turbines for the Paldiski wind park and will also be responsible for construction of the foundations and the assembly of the wind turbines on the site. The value of the contract was not disclosed but Eesti Energia said that the project would cost around €33 million.

The wind park is expected to enter commercial service in the third quarter of 2012, Ando Leppiman, the head of the company's renewable energy unit, told Platts June 21. Work on the foundations is due to start this autumn, with installation of the turbines to start next February, he added. The project's substation, which has been built by Skanska EMV, is nearly ready, while a civil engineering works tender for the wind farm will be finalized over the course of this summer.

The Paldiski wind park, which is located on a limestone plateau over 20 metres above sea-level, is expected to generate average annual output of around 67 GWh, the state-owned utility said.

The 22.5-MW project is part of a larger 45-MW wind park which has been developed in partnership with Paldiski Tuulepark, a project development company

owned by privately-owned wind power developer Nelja Energia (4Energia). The two companies jointly acquired the site in a government-held tender in December 2008. Though it will be a single wind park comprising a total of eighteen 2.5-MW GE turbines, the two owners will each operate their nine turbines separately, with separate substations and grid connections.

Paldiski will be Eesti Energia's second major wind park following the commissioning in 2009 of a 39-MW project at Aulepa on the country's northwestern coast. This is to be expanded by 9 MW later this summer with the commissioning of three 3-MW turbines. By the end of this year, Eesti also expects to have commissioned a 39-MW wind farm on ash fields adjacent to its Balti oil shale-fired thermal power plant, which is part of the Narva power complex in northeastern Estonia.

Wartsila seals Elering plant order

Finnish power engineering group Wartsila announced June 29 the signing of an engineering, procurement and construction contract worth €129 million (\$185 million) with Elering, the Estonian transmission system operator, for two reserve power plants with a total capacity of 250 MW in Kiisa in northwestern Estonia. The contract also includes a two-year maintenance agreement.

Wartsila said the first of the two gas-fired plants is scheduled to be operational in spring 2013, and the second by autumn 2014. The company announced earlier this month that its bid in a tender for the construction of an Emergency Reserve Power Plant launched by Elering had been declared successful (*EIEE 217/13*).

The power plants will be based on Wartsila's 20V34DF engines, which will operate primarily on natural gas but with the option to switch to light fuel oil as a back-up fuel. The new plants, whose capacity will be equal to one-sixth of Estonia's peak demand, are to be built as part of a national electricity sector development plan to have new peaking plant available for operation by 2018 in order to guarantee security of supply.

The Finnish group said in a statement that the 10-minute startup capability of its power plants would provide dynamic generation capacity to meet sudden and unexpected drops in electricity supply as required by Elering. The plants will operate an average of 200 hours per year. Both are to be built near Elering's 330-kV Kiisa substation about 25 km from Tallinn, and will be connected to both the 110-kV and 330-kV grids.

Europe

Gazprom studies powergen options

Gazprom is working on feasibility studies with banks on power station investment in Western Europe, the head of the company's power sector subsidiary, Gazprom Energo Holding, Denis Fyodorov said June 22. The aim was to have a list of specific projects for consideration by the end of the year, he told journalists when asked if Gazprom was content to remain a gas supplier.

The shortlist would likely focus on brownfield and greenfield power projects but could also include Turkey, Sergey Beiden of Otkritie Bank told Platts June 22. Of the developed markets, Germany and the UK are the most likely, he said, while Turkey is also a strong candidate. But he did not think that Central or Eastern Europe were likely sites. Beiden said that for Gazprom, the margins would be very attractive, as it would be involved in the whole value chain. He said the average margin for power generators was 32%. The projects would likely follow the Nord Stream gas pipeline, he said.

In April, Gazprom signed a letter of intent to co-develop gas-fired power capacity in Europe with Dong Energy of Denmark. And according to FT Deutschland, RWE is considering a partnership with Gazprom in the wake of Germany's revived nuclear phase-out plan. Gazprom had been developing a 1.2 GW combined cycle gas turbine plant site in Lubmin, Germany, in a joint venture with E.ON, close to where the Nord Stream gas line is due to land, but the project was suspended in September 2010. E.ON has held on to that site.

Georgia

IFIs to fund Parvani hydro project

The European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC), a member of the World Bank Group, are to jointly provide \$115.5 million in financing for the construction of the 87-MW Parvani hydropower plant in southwestern Georgia.

The two multilateral banks said June 23 that they will lend \$90.5 million directly from their own accounts, and syndicate a further \$23 million with commercial banks, to Georgia Urban Energy, a subsidiary of Turkey's Anadolu Endustri Holding. The EBRD is to lend \$52 million and, as part of the project financing, will also take a \$5 million equity stake in Georgian Urban Energy. The IFC will lend \$40.5 million. The project is the first investment and project financing by IFC and EBRD in the renewable energy sector in Georgia.

The Paravani run-of-river plant, located in the Samtskhe-Javakheti region, will supply power to the domestic grid in winter when Georgia lacks supply and export its output to Turkey when Georgia has excess power and Turkey is traditionally short of supply. It will be connected to a converter substation in Akhaltsikhe, which is part of the Black Sea Transmission Line project also financed by the EBRD. The project, which is expected to cost a total of around \$160 million, is scheduled to enter service in the first half of 2014.

Anadolu Endustri, which is majority owned by Yazicilar Holding, signed a letter of intent in December 2008 with the UK's Energon International to form a joint venture to develop the project. Anadolu Endustri, through its subsidiary Anadolu Kafkasya Enerji, bought out its partner's 49% stake in Georgia Urban Energy in March 2010 in a \$3.5 million deal. Under the deal, Energon has an option to acquire up to 50% in the project at an unspecified future date.

Atac licensed to build hydro plants

Turkey's Atac Insaat has obtained build, own, operate concessions for two hydroelectric plants in Georgia, the company said June 24 in a disclosure to the Istanbul bourse.

A company spokesman confirmed that ATAC had been awarded licenses to build the 20.6-MW Magana and 20-MW Leqarde plants on the Magana River within the next five years, but was unable to specify the exact construction timetables. He said that Atac's current strategy is to export the power from the plants to Turkey, but said that this may change with time.

The company applied in May for concessions to develop the two plants on the Magana River as well as the 15-MW Bakhvi-1 and 20-MW Bakhvi-2 hydropower plants on the Bakhvistskali River in western Georgia. Atac, a civil engineering company specializing in water infrastructure projects, holds licenses for six hydro plants in Turkey totaling 144 MW, of which two have been partly built and are currently operating with a total capacity of 23 MW.

Atac Insaat held an initial public offering earlier this year with 6.16% of its stock now traded on the Istanbul bourse.

Hungary

E.ON inaugurates CCGT plant

E.ON Eromuvek, the Hungarian subsidiary of Germany's E.ON Kraftwerke, held a ceremony June 27 to mark the commissioning of a 433-MW combined cycle gas turbine power plant in Gonyu in northwest Hungary.

The Gonyu plant, which has been in commercial operation since last month, is E.ON's largest power plant in the country and the biggest new power plant built in Hungary since 2000. It has an efficiency rate of 59%, and will act in part as a peaking plant.

"The renewal of Hungary's power plant fleet with more efficient units is very much a necessity; in that sense, and also in its role as a peaking plant, the Gonyu plant fills an important gap," Janos Bencsik, state secretary in charge of energy affairs, said at the inauguration ceremony.

The Gonyu plant was built and fully equipped by Siemens at a total cost of €400 million under a turnkey contract signed in December 2007. Construction started in early 2009.

The power plant's infrastructure was built to be able to accommodate another similar-sized unit, which could potentially expand total capacity to more than 800 MW. E.ON Eromuvek managing director Zoltan Katona told Platts that no decision has yet been made on a second unit in Gonyu. "We are constantly monitoring market developments to see if we can invest profitably in a new unit," Katona said.

E.ON has also built smaller CCGT plants in Debrecen (95 MW) and Nyiregyhaza (49 MW) in eastern Hungary over the past decade. Together with the Gonyu plant, E.ON has invested €600 million in power generation in Hungary, E.ON Hungary chairman Konrad Kreuzer said.

MVM set to auction off 2012 power

MVM Trade, the wholesale trading arm of state-held Hungarian power group MVM, said June 16 it is planning to sell a total 1.47 TWh of electricity for delivery in 2012 at a July 6 capacity auction.

MVM will auction 150 MW of baseload capacity for daily delivery throughout 2012, equating to 1.32 TWh, and 50 MW or 151 GWh available on working days throughout the year between 0800-2000 hours.

As a significant market player and former monopoly, MVM Trade must auction off almost half of its 20 TWh annual wholesale portfolio. This will be MVM Trade's first auction of 2012 power, to be followed by several others later this year and in 2012.

MVM offers power plant for sale

Hungarian state-owned power holding MVM has put up for sale the site and facilities of the former Inota power plant near the city of Varpalota in western Hungary.

The 120 MW lignite-fired plant was built in 1950-51, and was expanded with two 85-MW gas turbines in 1975, allowing it to operate as a peaking plant. It was decommissioned in 2001.

Tender documentation is available from MVM until July 4. For further information, contact: +36 1 304 2655; Email: jregos@mvm.hu

Montenegro

A2A may not take up EPCG option

Italy's A2A may not take up the option to acquire a majority stake in the country's vertically-integrated power company, Elektroprivreda Crne Gore (EPCG), Montenegro's Prime Minister Igor Luksic said at a June 17 press conference broadcast by the Montenegrin government.

Luksic said that his government intends to sign a new Memorandum of Understanding with Italy's third largest utility before the end of the year, to define the future direction of EPCG and the relationship between the state-controlled utility and its Italian partner. "I recently held talks with A2A's director general Renato Ravanelli after which we have remained in communication. I expect that we will soon be able to prepare a MoU very soon, which will define the next steps. Our ambition is to precisely define all activities that need to be done in order to sort out the relationship with A2A," said Luksic.

A2A holds a 43.7% stake in EPCG as well as management control with a 55% stake held by the government. The Italian utility acquired an 18.3% stake in EPCG from the government through a simultaneous equity sale and capital increase in September 2009, and raised its stake through a subsequent buyout offer to minority shareholders. Under the share purchase agreement signed with the government, A2A was awarded the right to secure majority ownership in the company after a

period of five years assuming it achieved a number of objectives under a separate agreement with EPCG for management rights of the utility.

Luksic said that should A2A not take over a majority stake in EPCG the government could extend its management contract as it is satisfied with its performance to date. A2A has been frustrated in its attempts to raise the profitability of EPCG, due to the strict pricing policies pursued by Montenegro's energy regulator, REGAGEN.

EPCG seeks bids to install meters

Montenegro's state-controlled vertically integrated electricity company Elektroprivreda Crne Gore (EPCG) invites bids by July 29 for the installation of meters and auxiliary equipment as part of a nationwide metering campaign co-financed by the European Bank for Reconstruction and Development (EBRD).

Bids are invited for one or more of three lots for the installation of a total of 175,000 meters in three regions as follows: Lot 1 – installation of 18,000 meters in northern region between 2012 and 2014; Lot 2 – installation of 104,000 meters in central region (2010-2014) and Lot 3 – installation of 53,000 meters in the coastal region between 2011 and 2014.

The tender announcement follows a solicitation launched this March for the supply of 30,000 single phase meters, 144,000 three phase meters, 1,500 units CT meters as well as 1,200 data concentrators to be delivered in batches starting from August 2011 and continuing through July 2013.

The EBRD approved last October a corporate loan of up to €38 million towards the cost of the purchase and installation of around 69,000 meters and the associated infrastructure and software. The metering project is aimed at reducing electricity losses in the distribution network from 24% to 14% and increasing bill collection from the current level of 90%.

For further information, and to inspect and acquire the tender documents, contact: Mira Radunovic, Supervisor of Procurement Department, EPCG, Vuka Karadzica Street, 81 400 Niksic. Tel.: +382 40 204 143; E-mail: mira.radunovic@epcg.com, cc: nada.bojanic@epcg.com

Poland

Dalkia and Penta vie for SPEC

Only France's Dalkia and Czech-Slovak investment company, Penta Investments, remain in negotiations to acquire an 85% stake in Warsaw's district heating company, SPEC, after Kulczyk Investments, an investment vehicle for Poland's wealthiest businessman, Jan Kulczyk, pulled out, the daily Puls Biznesu, reported June 21.

The daily added that Kulczyk does not believe the privatization will go ahead this summer prior to October's parliamentary elections. Labour unions, meanwhile, are opposed to the privatization.

SPEC's owners, Warsaw City Hall, invited binding bids by June 2 for the company, which owns the largest heating network in the EU. The 85% stake has a book value of around Zloty 1.5 billion (\$541 million). SPEC's 1,650 km (1,025 miles) heating network is supplied by Vattenfall's cogeneration plants in the Polish capital which the Swedish company is selling to concentrate on its core markets.

Market participants say investors would ideally wish to acquire both SPEC and Vattenfall's cogeneration assets in view of the synergies such an acquisition would create. Vattenfall's three hard coal-fired combined heat and power plants and two district heating plants in the Polish capital produce 2.4% of the country's power and 24% of its heat.

Parliament adopts nuclear law

The lower house of the Polish parliament, the Sejm, passed June 29 a new law regulating the construction of nuclear power plants in Poland.

Lawmakers voted to accept five amendments proposed by the Senate, the upper house of Parliament, including conditions attached to the location of the future plant and the way in which negotiations with a strategic investor are conducted. To become law the bill, which defines the principles for the construction of the plants and associated infrastructure, must now be signed by the Polish president, a formality given that he is not opposed to it.

The vote completes the passage of the so-called 'Nuclear Package' of laws. President Bronislaw Komorowski has already signed an amended version of the country's Atomic Law, which will take effect July 1.

In 2009, the Polish government tasked the country's largest power company, Polska Grupa Energetyczna (PGE), to lead an investment, with one or more partners as strategic investors, to construct 6 GW of nuclear capacity in two plants by 2030. The first unit is scheduled to be commissioned by the end of 2020. PGE plans to launch a tender to select the reactor technology in September to allow for construction of the first unit to start in 2016. The whole investment is estimated to cost at least €20 billion (\$28.8 billion).

EBRD to fund PKN CHP retrofit

The European Bank for Reconstruction and Development (EBRD) announced June 24 that it is provide a loan of €250 million (\$354.5 million) to Poland's largest refiner, PKN Orlen, to finance environmental and energy efficiency improvements at one of its combined heat and power plants at the company's main refinery in Plock in central Poland.

The London-based bank said the loan would enable PKN to meet EU emissions standards due to come into effect in January 2016.

The project will include the replacement of an obsolete boiler while other boilers at the plant will be modernized. As a result, PKN said total emissions would be reduced by 90% while its installed electricity capacity

would be increased by 20% and heat production capacity by 7%. With installed capacity of 345 MWe and 2,024 MWth, the Plock plant is the country's largest cogeneration plant.

Bids approved for ZEW Niedzica

Poland's Treasury Ministry has approved bids from eleven companies including France's GDF Suez and local state-owned power groups Tauron Polska Energia, Enea, and Energa in a privatization tender for ZEW Niedzica, a group of hydropower plants with combined installed capacity of 98.5 MW on the Dunajec River in southern Poland.

The other bidders are Polish natural gas company, PGNiG, Polish copper miner KGHM; Polish investment fund MCI Private Ventures; Polish company Polski Bazalt; Poland's RE-Inwest and a consortium including ZEW Niedzica employees, Luxembourg-listed KI Energy and Kulczyk Holding, an investment vehicle of businessman Jan Kulczyk. The shortlisted companies will now enter a second round of bidding.

The Treasury invited bids on April 21 for its 100% stake in the power generator, based in Niedzica, Malopolska province, near the Slovak border in the Tatra mountain range. ZEW Niedzica incorporates the 92-MW pumped-storage plant Elektrownia Wodna Niedzica, and three run-of-river stations: the 2.5 MW Elektrownia Wodna Laczany, 2 MW Elektrownia Sromowce Wyzne and 2 MW Elektrownia Smolice.

Energa starts Elblag biomass unit

Northern Polish power company, Energa, laid June 28 the foundation stone for a 25-MWe, 30-MWth biomass-fired unit at its Elektrociepownia Elblag combined heat and power plant in northern Poland.

The new unit, which will cost an estimated Zloty 200 million (\$71 million), is being built by local contractor Mostostal Warszawa. It is expected to produce more than 200 GWh of electricity and 796,000 GJ of heat annually from the burning of 135,000 mt of agricultural biomass and will cut the equivalent of 155,000 mt of CO2 emissions at the hard coal-fired plant, Energa said in a statement.

It is scheduled to be commissioned in December 2012. The unit will replace some hard coal-fired capacity at the 49-MWe, 242-MWth plant, which supplies heat and power to the city of Elblag.

Rafako wins Kozenice FGD order

Polish power equipment supplier, Rafako, has signed a contract with the country's third largest power company, Enea, to install flue gas denitration systems at its Elektrownia Kozenice hard coal-fired power plant in southeast Poland.

Rafako will install "selective catalytic reduction installations" to remove nitrogen oxide from the flue gases of the OP-650 boilers in units 4-8 of the 2,905-MW Kozenice plant, the companies said in a statement June 28. The total investment cost is estimated at Zloty

235 million (\$84 million) and will be carried out in five stages for each boiler between 2011 and 2016. The installations will reduce flue gas NO emissions by 80%.

Elektrownia Koziernice, which is located in Swierze Gorne, 75 km southeast of Warsaw, is the country's largest hard coal-fired plant.

Romania

Termoelectrica to expand Doicesti

Romanian state thermal power producer Termoelectrica is planning to begin construction by the end of next year of two new coal-fired units totaling 500 MW at the company's Doicesti thermal power plant.

A feasibility study for the €700 million project was completed in October of last year and shared with an undisclosed Chinese company, Termoelectrica general director Florin Marza told Platts June 15.

According to Marza, Termoelectrica is planning on forming a joint venture to develop the project with a private investor taking at least a 30% stake with Termoelectrica holding the majority 70% share.

Termoelectrica had previously negotiated unsuccessfully to form the joint venture with Russian metals group Mechel as well as Belgium's Electrabel, and has most recently been linked in the local press to Chinese firm Huadian Corporation. No timetable has been set for the completion of the project, which would supplement the Doicesti plant's existing installed capacity of 320 MW.

Petrom test fires Brazi CCGT plant

Petrom, Romania's largest oil and gas producer and supplier, said June 21 that it had started supplying electricity to the national grid as part of tests being run at its new Brazi combined cycle gas turbine power plant.

The 860-MW CCGT plant at the site of its Petrobrazi refinery in Ploiesti in southern Romania is scheduled to enter full commercial service during the second half of this year.

Petrom, which is majority owned by Austria's OMV, said that 'cold' commissioning of the plant first started during the second half of 2010 and so-called 'hot' commissioning began this month with the first firing of its two gas turbines. During the hot commissioning period, the plant supplies electricity to the power grid and a part of it is being used for the plant's internal consumption, it said.

"In June we started the hot commissioning, which represents a major milestone in the plant's construction," Hilmar Kroat-Reder, a member of Petrom's executive board, and head of its Gas and Power division, said in a statement. "In fact, this is the final testing stage before starting the commercial operation of the plant".

The Brazi plant, which comprises two 9FB gas turbines supplied by GE, two heat recovery steam generators and a steam turbine, has been built by a consortium of Greece's Metka and GE Energy under a €400 million (\$631 million) engineering, procurement

and construction contract signed in March 2008. Total investments in the construction of the power plant would amount to around €500 million, it said.

Petrom said that the plant would have efficiency of 57%, which would be double that of other power plants currently operating in Romania. About 20% of the plant's output will be used to supply Petrom's own refining and upstream activities with the rest to be supplied to the national grid.

The Brazi plant will be the cornerstone of Petrom's plans to become a major player in Romania's power sector, with the aim of supplying 8-9% of the total electricity produced in the country. The company is also developing a 45-MW wind park in the eastern province of Dobrogea. It acquired the rights to the Dorobantu wind park from local developer SC Wind Power Park in April 2010.

EBRD, IFC fund EDPR wind parks

The European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC), a member of the World Bank Group, are to lend €114.8 million to co-finance the construction and operation of the 138 MW Cernavoda I and II wind farms in Romania's southeastern province of Dobrogea.

The two multilateral banks said in a joint statement June 22 that they will each lend €57.4 million to the project developer Cernavoda Power, of which €42.2 million will come from their own accounts with €15.2 million each to be syndicated to commercial banks. This is the first project financing by the EBRD and IFC in Romania's renewable energy sector.

Cernavoda Power is 85% owned by EDP Renovaveis (EDPR), the renewable energy arm of Portugal's power company EDP, and 15% by EDPR's local partner, the privately-held Renovatio Group. EDP Renovaveis said in a June 21 statement that it expects to achieve financial closure on the long-term contracted debt facility in the third quarter of 2011.

The Cernavoda wind farms, located in Constanta County, will comprise a total of 46, 3-MW turbines supplied by Vestas. Cernavoda I, with capacity of 69 MW, came on line in the first quarter of this year, while Cernavoda II, which will also have installed capacity of 69 MW, is being commissioned and is scheduled to be in full production before the end of the year, a company official told Platts June 22.

The project will add to EDPR's growing wind portfolio in Romania. Late last year, it commissioned a 90-MW wind park in Dobruja, 10 km west of the Cernavoda wind farms. The Pestera wind farm features thirty 3-MW turbines also supplied by Vestas.

The three projects with a combined installed capacity of 228 MW will have been developed at cost of under €300 million, he said, adding that capex was within EDPR's target of €1.3 million per MW.

EDP Renovaveis secured the rights to the projects in October 2008 through the acquisition for €8.4 million of 85% of local project developers Renovatio Power and Cernavoda Power, which owned wind projects in Romania totalling 736 MW in different stages of maturity.

Romania: Major wind park projects 2011-14

| Name of wind park | Location | Developer | Owner/Operator | Installed capacity | Project status | Commissioning date | Turbine type |
|--|----------------------------|--|---------------------------------|--------------------|-----------------|--------------------|----------------------|
| Agighiol | Tulcea County, Dobrogea | Enel Green Power | Enel Green Power | 34 | Operational | Q1 2011 | Gamesa – 17 x 2 MW |
| Salbatica I | Tulcea County, Dobrogea | Enel Green Power | Enel Green Power | 30 | Operational | Q1 2011 | Gamesa – 15 x 2 MW |
| Pestera | Constanta County, Dobrogea | Monsson Alma/ Continental Wind Partners | EDP Renovaveis, Renovatio Power | 90 | Operational | Q1 2011 | Vestas – 30 x 3 MW |
| Fantanele* | Constanta County, Dobrogea | Monsson Alma/ Continental Wind Partners | CEZ | 347.5 | Operational | Q1 2011 | GE – 139 x 2.5 MW |
| Cernavoda I | Constanta County, Dobrogea | Cernavoda Power | EDP Renovaveis, Renovatio Power | 69 | Operational | Q1 2011 | Vestas – 23 x 3 MW |
| Babadag | Tulcea County, Dobrogea | Eviva Nalbant | Martifer | 42 | Construction | H2 2011 | Suzlon – 20 x 2.1-MW |
| Dorobantu | Tulcea County, Dobrogea | SC Wind Power Park | Petrom OMV | 45-54 | Construction | H2 2011 | Vestas V90s |
| Cernavoda II | Constanta County, Dobrogea | Cernavoda Power | EDPR, Renovatio Power | 69 | Construction | Q4 2011 | Vestas – 23 x 3 MW |
| Mihai Viteazu I, II, III, IV | Constanta County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Iberdrola Renovables | 80 | Construction | Q4 2011 | Gamesa – 40 x 2 MW |
| Corugea | Tulcea County, Dobrogea | Enel Green Power | Enel Green Power | 70 | Construction | Q4 2011 | Vestas – 35 x 2 MW |
| Salbatica II | Tulcea County, Dobrogea | Enel Green Power | Enel Green Power | 40 | Construction | Q4 2011 | Vestas – 20 x 2 MW |
| Cogealac | Constanta County, Dobrogea | Monsson Alma/ Continental Wind Partners | CEZ | 252.5 | Construction | Q1 2012 | GE – 101 x 2.5 MW |
| Auseu-Borod | Bihar County, Transylvania | Eoliana | Alerion Cleanpower | 65 | Fully permitted | H1 2012 | Vestas – 36 x 1.8 MW |
| Casimcea | Tulcea County, Dobrogea | Alpha Wind | Verbund | 150 | Construction | Q1-Q4 2012 | n/a |
| Serbotesti | Vaslui County, Moldavia | Monsson Alma/ Continental Wind Partners | Verbund | 150 | Fully permitted | Q3 2012 | n/a |
| Pestera | Constanta County, Dobrogea | Sorgenia Romania | Sorgenia | 50 | Applied | H2 2012 | n/a |
| Falcui I, II and III | Vaslui County, Moldavia | Sorgenia Romania | Sorgenia | 196 | Fully permitted | 2012-13 | n/a |
| Zephyr** | Constanta County, Dobrogea | Elcomex EOL | Enel Green Power | 272 | Fully permitted | 2012-13 | n/a |
| Cogealac XII, XIII, XIV, XV | Constanta County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Iberdrola Renovables | 108 | Applied | 2012-13 | Gamesa – 54 x 2-MW |
| Baia I, II, III | Tulcea County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Iberdrola Renovables | 102 | Applied | 2012-13 | Gamesa – 51 x 2-MW |
| Istria I, II, S | Tulcea County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Iberdrola Renovables | 84 | Applied | 2012-13 | Gamesa – 42 x 2-MW |
| Chirmogeni | Constanta County, Dobrogea | EP Global Energy | EP Global Energy | 30 | Applied | Q2 2013 | Nordex – 12 x 2.5-MW |
| Independenta | Constanta County, Dobrogea | Continental Wind Partners | EP Global Energy | 50 | Applied | Q2 2103 | Nordex – 20 x 2.5-MW |
| Independenta I | Galati County, Moldavia | Continental Wind Partners | EP Global Energy | 226 | Fully permitted | H1 2013 | n/a 113 x 2-MW |
| Harsova | Constanta County, Dobrogea | Holrom Renewable Energy | EDPR, Eveithesis Holdings | 40 | Applied | Q3 2013 | Vestas – 20 x 2 MW |
| Independenta II | Galati County, Moldavia | Continental Wind Partners | EDPR, Eveithesis Holdings | 150 | Applied | 2013-14 | n/a 50 x 3-MW |
| Sacele I, II, III, IV, V, VI | Constanta County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Iberdrola Renovables | 164 | Applied | 2013-14 | Gamesa – 82 x 2-MW |
| Piatra I, II, III | Constanta County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Iberdrola Renovables | 64 | Applied | 2013-14 | Gamesa – 32 x 2-MW |
| Cogealac I, II, III, IV, V, VI, VIII, IX | Constanta County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Eolica Dobrogea (Schweiz) AG | 214 | Applied | 2013-14 | n/a |
| Casimcea I, II, III | Constanta County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Eolica Dobrogea (Schweiz) AG | 112 | Applied | 2013-14 | n/a |
| Baia IV | Tulcea County, Dobrogea | Eolica Dobrogea (Schweiz) AG | Eolica Dobrogea (Schweiz) AG | 30 | Applied | 2013-14 | n/a |

* 300 MW of the total 347.5 MW is operational; remaining 47.5 MW to be commissioned during 2012

** Enel did not confirm installed capacity of Zephyr; EGP signed agreement with Elcomex in July 2010 for rights to 272-MW park

Source:Platts

New FGD unit for Rovinari

A new flue gas desulphurization unit has been put into operation at unit 3 of the Rovinari lignite-fired power plant near Targu Jiu in western Romania, the owner-operator of the plant, state-owned Complexul Energetic Rovinari, announced June 16.

The wet limestone FGD unit is one of four to be supplied and installed at the plant by Alstom Power, under a contract awarded in late 2007, and will allow the plant to meet national and EU environmental requirements and thus enable continued operation after 2013, the company added. Work is continuing on a new FGD facility being installed at unit 4, it added.

Rovinari is a major supplier of baseload supply to the Romanian power system. It comprises four 330-MWe units, which were commissioned between 1976 and 1979, and fire on local lignite coal with a sulphur content that ranges between 0.5 and 1.35%. The lignite is supplied by the adjacent Rovinari, Tismana and Pinoasa fields, which are part of the integrated state-owned company, Complexul Energetic Rovinari.

Consultants sought for Stejaru rehab

Romania's state-owned hydropower producer Hidroelectrica seeks expressions of interest by July 15 from international consultants to assist it with preparing and implementing the rehabilitation and modernization of the 210 MW Stejaru Bicz hydrowater plant on the Bistrita River in the northeastern region of Moldavia.

The selected consultant will be required to assist a Project Implementation Unit to be set up and staffed by experts from Hidroelectrica, throughout the project from the preparation phase including tender evaluation and finalization of contracts to implementation covering site supervision, monitoring and reporting; commissioning and operational acceptance, and monitoring and reporting of the Environmental and Social Action Plan.

The assignment is expected to run from November 2011 until December 2019, though the input of the experts is expected to be intermittent during this period. The contract, for which a maximum budget of €2 million (exclusive of VAT) has been fixed, will be financed by the European Bank for Reconstruction and Development (EBRD). The London-based bank approved in May a loan of up to €110 million, representing around 80% of the project's estimated cost of €137 million, in an A/B loan framework. The EBRD will provide an A loan of up to €70 million.

The project will involve the replacement of old hydraulic, electro-mechanical and hydro-mechanical equipment at the plant's six units, which were commissioned in 1962. The modernization of the peaking plant, which is one of the most efficient generators in the Romanian power system, aims to extend its operating lifetime by at least 30 years and increase its availability, efficiency and safety in operation. It will also increase its flexibility and allow it provide reliable ancillary services across the region, which will allow for closer integration and cooperation of neighbouring grid operators.

Stejaru is the first and largest of a cascade of hydropower plants on the Bistrita River with a combined capacity of 450 MW. The cascade is fed from the Izvorul Muntelui reservoir, which is impounded by a 127 m-high reinforced concrete dam, which allows the annual regulation of the river, which is also used for irrigation in the area.

For further information, contact: Aurel Cocioran and/or Gabriela Rusu, S.C. Hidroelectrica, 3 Constantin Nacu Street, Sector 2, 020995 Bucharest, Romania; Tel.:00 40 21 3032541; Mobile: 00 40 729 700 170 Fax: 00 40 21 3032573; E-mail: aurel.cocioran@hidroelectrica.ro; gabriela.rusu@hidroelectrica.ro. The full procurement notice is available for viewing on the EBRD's website: www.ebrd.com

Russia

TGK-2 forms JV with China Huadian

TGK-2, the northwestern territorial heat and power producer, has formed a landmark joint venture company with China's Huadian Power International Corporation to build, own and operate a 450-MW combined cycle gas turbine power plant in Yaroslavl. An agreement to this effect was signed last month, a company official told Platts June 23.

It is the first such joint venture set up with a Chinese investor in the Russian power sector. Hong Kong-listed Huadian Power International Corporation is a subsidiary of China Huadian Corporation, one of China's five major state-run power generation groups. HPIC will hold a 51% stake in the joint venture with 49% held by TGK-2. TGK-2 is controlled by the Sintez Group, which has a 44.84% shareholding in the regional power producer through its subsidiary Kores Invest. The investment by HPIC was approved by the Chinese state authorities in May but, contrary to local media reports, will not need the approval of the Russian authorities, the company official said.

Construction of the 450-MWe, 306 Gcal/hr project is scheduled to start in March 2012 and will cost a total of more than Rb 20 billion (\$707 million) with 30% of the investment to be financed by the two partners proportionate to their respective stakes with the remaining 70% to be funded by debt, the official said. Russia's RBC daily quoted Andrey Korolev, the deputy director of the Sintez Group, as saying that a Chinese bank would open up a credit line to help finance the project.

The plant will feature two 160-MWe gas turbines supplied by Leningrad Metallichesky Zavod, a subsidiary of Power Machines, with SGen5-100A-2P air-cooled turbogenerators supplied by Siemens, a 150-MW steam turbine, and two heat recovery steam generators supplied by Ziomar.

As the main shareholder of TGK-2, the official said that Sintez Group was participating in the generator's investment program, which is currently estimated at over Rb 25 billion. In addition to the Yaroslavl CCGT project, the program envisages the development of a 110-MWe CCGT unit in Vologda, a 210-MWe unit in Novgorod as

well as the reconstruction of the heating networks in Arkhangelsk, Severodvinsk and Tver. The company is also the main investor in a new 250-MWe CCGT being commissioned in Skopje in Macedonia, as well as a 110-MWe CCGT plant being developed by Slovakia's Istro Energy Group in an industrial park near Zeitz in the German state of Saxony-Anhalt.

TGK-2, which was formed in April 2005, owns and operates 15 combined heat and power plants and 13 district heating plants with a combined capacity of 2,531 MWe and 12,286 Gcal/hr in the regions of Arkhangelsk, Vologda, Kostroma, Novgorod, Tver and Yaroslavl.

Inter RAO seeks control of Quadra

Russia's state-controlled power sector holding company Inter RAO UES has sought anti-monopoly approval to acquire a 75% stake in Quadra, the western territorial heat and power producer, currently controlled by Mikhail Prokhorov's Onexim Group, according to a June 20 report by Interfax.

Local business daily Kommersant reported June 21 that Inter RAO would like to acquire the stake in Quadra in exchange for 5% of its own shares as part of its large share placement.

The news follows media reports in early May that Onexim Group, the private investment holding company owned by Russian oligarch Mikhail Prokhorov, which owns a 49.9% stake in the genco formerly known as TGK-4, was in talks to sell its stake in Quadra to Inter RAO (*EiEE 215/17*). Quadra's management admitted at the time that it had received an offer from an unspecified bidder but said that it had no intention of selling at present. Inter RAO did not wish to comment on its reported interest but the acquisition would allow it to extend its operations within Russia to a region expand it currently has no presence. Quadra operates 24 power plants with a combined installed capacity of 3,403 MWe and 15,756 Gcal/hr, in the regions of Bryansk, Voronezh, Kaluga, Kursk, Lipetsk, Orel, Tula, Ryazan, Smolensk, Tambov and Belgorod.

Analysts at Renaissance Capital commented June 21 that the deal would be negative for competition in the country's restructured and liberalizing power market and would run counter to the president's, if not the government's, public statements calling for an end to state involvement in the economy.

Interfax quoted a Federal Tariff Service spokesman as saying that the period of consideration for the application had been extended as the transaction could be deemed to restrict competition. "Removing the state's influence from the competitive business of power generation has been declared a fundamental aim of Russia's power sector reforms," noted Renaissance Capital. "Moreover, as recently as June 17, President Dmitry Medvedev publicly reaffirmed his commitment to privatization by calling for an end to state capitalism and for a sharp reduction in the state's role in the economy. Nevertheless, Quadra has now become the latest addition to the state-controlled Inter RAO's shopping list for 2011, which already includes OGK-1 and OGK-3. If

the Quadra deal proceeds, state ownership of generation companies would rise to 54% of the national total – marginally higher than the state's shareholding in the now defunct state power sector holding company RAO UES," it said.

Zorlu to complete Moscow projects

Turkey's Zorlu Enerji is close to resolving a "partnership dispute" which will allow it to proceed with the completion and commissioning of two 170-MWe combined cycle gas turbine plants it is developing close to Moscow, company CEO Arif Ozonan told Platts in mid-June.

Ozonan said that both projects had suffered long delays due to the dispute with its partners and that he expected the Tereshkovo combined heat and power plant, construction of which has been completed, to begin generating in the second half of this year, as soon as negotiations with the relevant authorities have been completed. "Once that plant is operational we will restart work on the Kozhukhovo plant," he said, explaining that it was 80% complete and the plant could enter commercial service in little over a year.

Zorlu has been developing the two projects in a consortium with US investment group, Invar International. The consortium known as Rosmiks, in which Zorlu owned a 51% stake, won a tender held in 2005 by the Moscow government to build, own and operate the two plants. Ozonan declined to comment on the nature of Zorlu's dispute with Invar beyond confirming that it was financial in nature.

He also confirmed that the licenses for both plants allowed for the installed capacity of each to be doubled to 340 MW and that Zorlu would be interested in expanding the plants, but had no plans to undertake any other projects in Russia. "For the next couple of years our main focus will be on Turkey," he said. Zorlu is part of Zorlu Holding, one of the biggest corporate groups in Turkey.

Alstom, RusHydro finalize JV

French engineering giant Alstom and Russia's state-controlled wholesale hydropower producer RusHydro announced June 21 the signing of a shareholder's agreement to establish a joint venture to produce hydropower and auxiliary equipment in Russia.

The agreement sets out the fundamental principles and mutual obligations for both companies and represents a major step towards the creation of the joint venture, Alstom said in a press statement. The agreement was signed during the visit to France of Russian Prime Minister Vladimir Putin. The joint venture was established in a strategic co-operation agreement that was signed by the parties in Moscow in December 2010 during a visit by French Prime Minister Francois Fillon.

Alstom will hold a 50% (minus one share) stake in the hydropower equipment manufacturing facility that the partners plan to build in Ufa in the Republic of Bashkortostan in south central Russia. The plant will produce hydropower equipment for smaller hydropower plants with a capacity of 25 to 100 MW and pumped

storage plants of up to 150 MW, as well as equipment for automatic process control systems and integrated security systems. According to a preliminary assessment, the manufacture of automatic process control systems will start by the end of 2011 with the first hydropower equipment to be produced at the plant in 2013.

The future manufacturing facility could produce equipment for the Kubansky hydropower cascade on the Kuban River, which is to be rehabilitated under a contract signed last month between a consortium of Alstom and Russia's civil engineering contractor United Energy-Construction Corporation (OEK) and RusHydro (*EiEE 215/18*).

Rosatom forms foreign business unit

Russian state nuclear corporation Rosatom has created a new business unit, Rosatom Overseas, to act "as customer, general contractor and owner of nuclear generation abroad," Kirill Komarov, deputy general director for development and international business, said June 8.

During the Atomexpo conference and exhibition held in Moscow, Komarov said Rosatom "has not only positioned itself in the global trend to change the organizational model for implementation of nuclear power plant construction projects in [foreign] countries, but [has already] signed the first build-own-operate contract" in Turkey.

Nikolay Solomon, first deputy general director for corporate functions at Rosatom, outlined changes that have occurred in the "institutional development" of the company over the past year. Rosatom has adopted a corporate strategy to 2030 to reach the goal of being among the top three global leaders in its core activities, he said. Those activities include construction of nuclear power plants, uranium mining, nuclear fuel production and provision of uranium enrichment services, he said, adding that the strategy also aims to "actively develop new business". The company plans for new products and services to account for 20%-25% of its earnings by 2030, he said.

Leonid Vanyan, head of the energy department of Sberbank, Russia's largest lender, said that the state-controlled bank plans soon to open a credit line of up to \$5 billion for the completion of units at the Khmelniiski nuclear power plant in Ukraine and up to \$10 billion for construction of the first nuclear power plant at Akkuyu in Turkey. Both projects are being developed by Rosatom. "We can double this sum, putting up to \$20 billion toward the Akkuyu project, if we work in a consortium with other banks," Vanyan said. "We are ready to provide Rosatom with long-term loans of at least 15 years," he said.

Alstom to cooperate with Renova

French engineering giant Alstom announced June 21 the signing of a framework cooperation agreement with Russia's privately-owned industrial conglomerate, the Renova Group, as well as agreements for the supply of gas turbines with subsidiaries of its power sector arm Integrated Energy Systems Holding.

The agreements were signed during the visit to France of Russia's Prime Minister Vladimir Putin, and mark the beginning of cooperation between both companies in the energy sector, Alstom said.

Alstom said that the agreement with Renova "aims to create and localize state-of-the-art power generation equipment for applications in thermal power plants". "Alstom and Renova will assess available capabilities and technologies of both companies and set up broad areas of cooperation," it added in a statement.

In addition, Alstom said it had signed three agreements with territorial generating companies (TGKs), majority owned by Integrated Energy Systems Holding, to deliver, between 2012 and 2013, five of its GT13 gas turbines for the Akademicheskaya, Nizhneturinskaya and Novogorkovskaya combined cycle gas turbine projects.

Alstom said it would supply a single gas turbine for the 200-MW Akademicheskaya project being developed as a greenfield project by TGK-9 in Yekaterinburg in the region of Sverdlovsk in the Urals. It will also supply two gas turbines for the 460-MW Nizhneturinskaya project in Nizhnyaya Tura also being developed by TGK-9 in the Sverdlovsk region and two gas turbines for the 330-MW Novogorkovskaya project in the western central region of Nizhny Novgorod.

The Renova Group, which in addition to the power sector, has significant interests in the oil and gas, metals, mining, chemicals and construction industries, is owned by Russian billionaire Viktor Vekselberg. It has minority interests in among other companies TNK-BP, Russia's third largest oil producer; the world's largest aluminium producer RusAl, Swiss technology group Oerlikon and Swiss engineering group Sulzer and a 100% interest in Avelar Energy Group, which was formed to focus on renewable energy and the gas business.

Turkey

Zorlu targets portfolio of 3 GW

Turkey's Zorlu Enerji is moving ahead with plans to increase its generation portfolio in Turkey, with the aim of ultimately having 3,000 MW of capacity, CEO Arif Ozonan told Platts in mid-June.

Ozonan said that the company has wind, hydro and geothermal capacity under development and would participate in the privatization of Turkey's state-owned power assets. "We would like to add coal or lignite fired plant to balance our portfolio, which we would like to see eventually reach around 3,000 MW," he said.

The company, which is part of Zorlu Holding, one of the biggest corporate groups in Turkey, currently has a generation portfolio of 340 MW comprising seven hydro plants with a combined capacity of 115 MW, a 135-MW wind power park, a 50-MW gas-fired plant as well as a small fuel oil-fired plant and a small geothermal plant.

However he said that Zorlu has no interest in the ongoing sale of assets by Turkish generation company Akenerji, which is jointly owned by Akkok Holding and Czech power group CEZ. "We prefer to grow organically

through greenfield developments and privatization [of state-owned assets],” he said. Ozonan also confirmed that Zorlu is not interested in entering the power distribution sector in Turkey.

“The tenders held last year were price driven and the prices paid were very high for companies which are just service providers,” he said, pointing out that Turkey’s power distribution companies will lose their monopolies over retail sales in four years.

Darenhes secures \$415m loan

Darenhes Elektrik, a joint venture company between Turkish industrial concerns Limak Holding and Bilgin Enerji, has secured a credit of \$415 million from a consortium of local banks towards the cost of building two hydropower projects in Eastern Anatolia, an official at TSKB, the Industrial Development Bank of Turkey, one of the participating banks, told Platts June 23.

A loan agreement was signed June 23 with Is Bankasi, Ziraat Bankasi TSKB and Yapikredi. The loan has a 12-year tenor with repayment to start after a three-year grace period. TSKB is providing a loan of \$100 million with the three other banks to provide \$105 million each.

The loan will help finance the estimated \$600 million cost of developing the 130-MW Tatar and 130-MW Pembelik hydropower plants and dams on the Peri River, a tributary of the Euphrates, which forms the border between the provinces of Elazig and Tunceli in the Eastern Anatolia region of Turkey.

Darenhes Elektrik launched construction of the Pembelik project in late 2010 with commissioning currently scheduled for early 2013. The project will involve the construction of a 77 m-high concrete-filled dam and a powerhouse with two turbine-generating units. It is projected to produce average annual output of 410 GWh. Construction of Tatar was launched in 2008 and is due for commissioning later this year. The project will generate average annual output of 400 GWh. Civil works at both projects is being carried out by Limak Insaat.

Darenhes Elektrik holds 49-year generating licenses for both hydro schemes, which are due to expire in 2054, as well as for the Seyrantepe dam and hydropower plant on the same river, which was commissioned in 2008. The 59-MW plant produces average annual output of 180 GWh. With the commissioning of the next two projects, Darenhes will have a total annual production of close to 1 TWh.

Turkey plans pumped storage

Turkey is planning to construct up to 10 pumped storage hydropower plants in mountainous areas of the country with the aim of storing power produced by wind and solar power capacity, a spokesman for Turkey’s energy ministry told Platts June 29.

The spokesman confirmed that the ministry has been working with an unnamed Japanese company to design pumped storage facilities with a total capacity of around 800 MW, which could be operational between 2018 and

2030. Areas under consideration for the plants include Isparta, Kayseri, Bursa, Antalya, Denizli and Samsun.

Turkey currently has 1,500 MW of wind plant in operation and no commercial solar capacity. Official projections envisage 20,000 MW of wind plant being operational by 2022. No projections have yet been announced for expected solar power capacity. Turkey’s new renewable energy law, passed in December last year, limits the volume of solar plant that can be licensed by the end of 2013 to 600 MW.

Approval for GAMA Enerji’s first wind project

A joint venture between Turkey’s GAMA Holding and GE Energy Financial Services has received approval from the Ministry of Energy and Natural Resources for commercial operation of its first wind park in Turkey, the companies announced June 21.

The 22.5-MW Sares wind farm, located near the city of Canakkale on the southern Asian coast of the Dardanelles in the northwest of the country, began producing power in December 2010. The wind park, which comprises nine GE 2.5-MW turbines, is owned and operated by Garet Enerji, a subsidiary of Ankara-based GAMA Enerji, the joint venture company of GEEFS and GAMA Holding. Electricity from the wind farm is currently being sold to AGE Energy, under a one-year power purchase agreement. The wind park is projected to produce average annual output of around 90 GWh.

The GE-GAMA joint venture is also developing the 10-MW Karadag wind farm, 350 kilometres south of Sares. Project construction is expected to start in the third quarter of this year, with completion expected in the second quarter of next year, the companies said. Karadag will also feature four GE 2.5-MW turbines. GAMA Enerji estimates that the two wind farms will generate enough power to supply 59,000 Turkish households and avoid 80,000 tons a year in greenhouse gas emissions.

The two projects will be developed at an estimated combined cost of \$72 million, with TSKB, the Industrial Development Bank of Turkey, acting as lead arranger for about \$59 million in debt financing.

The two wind projects are the first to be developed by their joint venture in which GE Energy Financial Services acquired 50% of the equity in December 2007. They are, however, not the first power projects to have been developed by the partners. The two companies have acted in consortium to develop a series of combined cycle gas turbine projects across Europe, with Gama Power Systems acting as EPC contractor and GE responsible for the supply of the main generating equipment.

To date they have commissioned 2,000 MW of gas-fired capacity including late last year the 450-MW Whitegate plant in Ireland and the 400-MW Shaturskaya plant in Russia. This January, they were awarded a contract by Akenerji, co-owned by the Akkok Group and Czech utility CEZ, to build a 900-MW CCGT plant in the district of Erzincan, in Turkey’s Mediterranean province of Hatay.

Prices slip on weaker commodity markets

Czech power for delivery next year moved up to a fresh 30-month high in early June as coal and crude prices remained firm. However, that bullishness was shortlived as prices quickly moved below their 100-day moving average towards the end of the month as EUAs were hammered and oil prices eased.

On June 14 Cal 12 baseload was assessed at €57.90/MWh. The contract then embarked on a 5-day losing streak in which it lost about €2 of its value to €55.80/MWh as oil prices and EUAs trended lower. Prices then found support just north of €54/MWh as commodities began to recover.

Meanwhile, prompt prices were relatively strong at the start of the month as lower renewable output put pressure on supply margins, however retraced the upward move and began trending lower June 14 as wind output increased, German plant availability improved and regional demand receded for a public holiday. On June 28 Czech day-ahead base was assessed at €52/MWh and peak €59.60/MWh.

On the mid-curve the month-ahead (July) and quarter-ahead (Q3) contracts came under sustained selling pressure throughout the month, with both looking seemingly destined to close at the lows ahead of delivery. "July and Q3 base are trading at the German level. There is more rain, solar and wind forecast so I think these are fair prices. If we were to get forecasts for drier

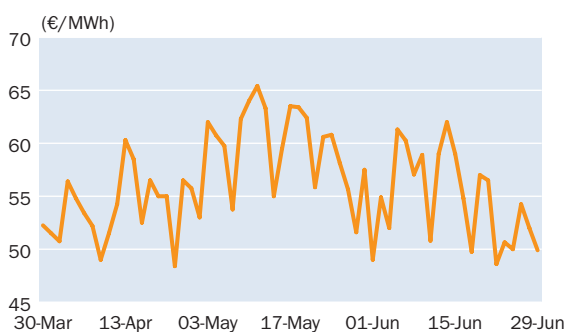
weather then buyers will likely reappear," a utility trader said June 28. July baseload was assessed at €51.65/MWh June 28 and Q3 base at €52.95/MWh.

In Poland, the market saw spot prices surging June 6 to Zloty 225.40/MWh (€56.18/MWh) on the back of high temperatures. Baseload power for next-day delivery fluctuated in line with power exports, however fell to Zloty 194/MWh (€48.35/MWh) June 23 for the Corpus Christi national holiday.

The high spot on June 6 caused prices on the curve to spike, reaching record levels for the year. Contracts on the curve began falling steadily towards the end of the month following the crash in EUA prices, which fell steadily from 17 June until hitting a two-year low June 25. "It's a reaction to events beyond the border, mainly in emissions," said a trader.

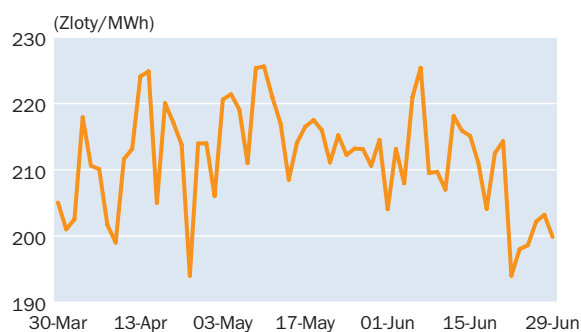
July baseload traded marginally higher mid-month to Zloty 213.20/MWh (€53.14/MWh), but fell to Zloty 205/MWh (€51.10/MWh) by June 28. Q3 11 baseload reached a peak of Zloty 212.50/MWh (€52.96/MWh) on June 6 – then traded sideways before falling to Zloty 203.50/MWh (€50.75/MWh). On the back end, Cal 12 reached its highest level for 2011 with baseload peaking at Zloty 206.30/MWh (€51.44/MWh) on June 6 before receding steadily to Zloty 204/MWh (€50.87/MWh) on June 27 on the back of plunging EUA prices.

Czech day-ahead baseload



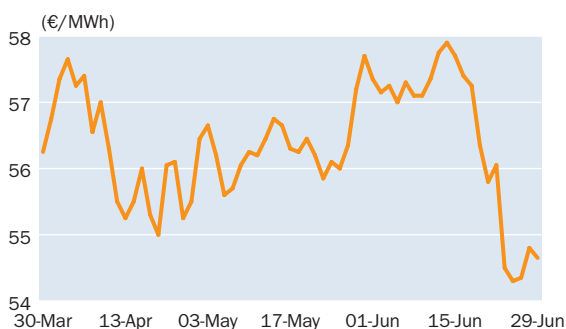
Source: Platts

Polish day-ahead baseload



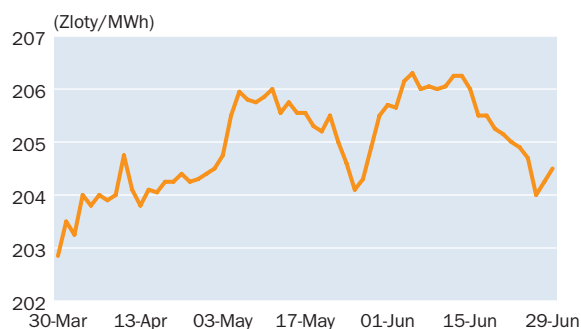
Source: Platts

Czech year-ahead baseload



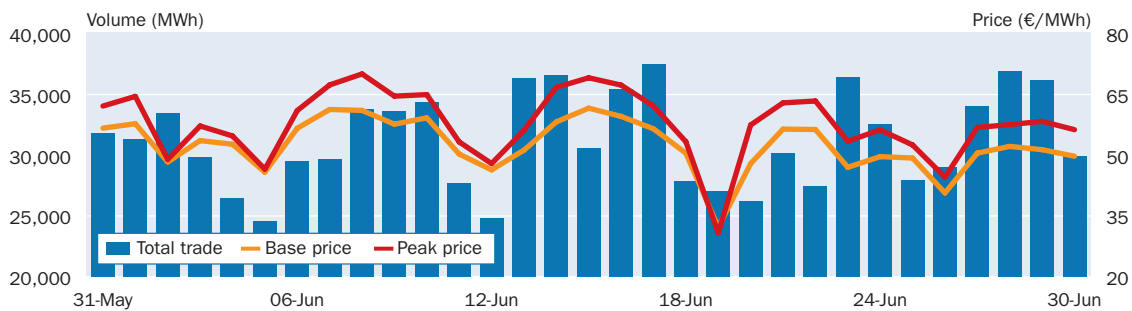
Source: Platts

Polish year-ahead baseload



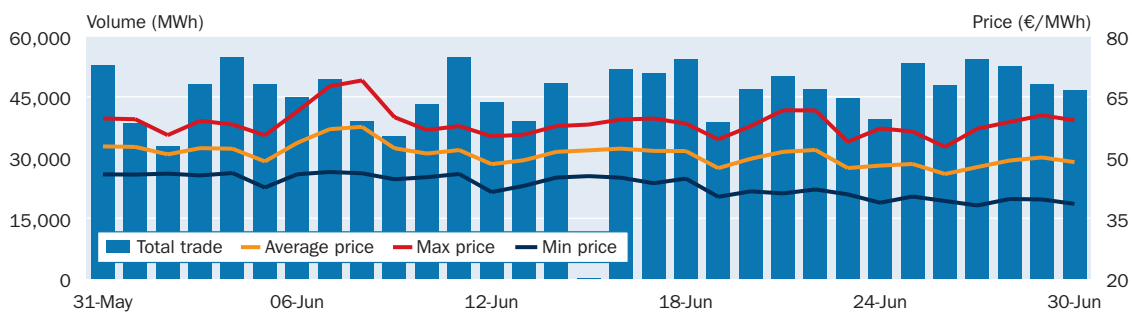
Source: Platts

Day-ahead trade on the Czech Power Exchange, May 31 – June 30, 2011



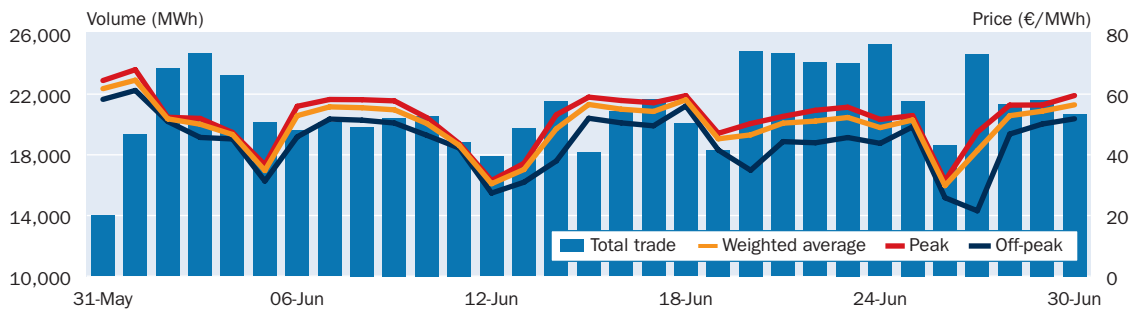
Source: OTE

Day-ahead trade on the Polish Power Exchange, May 31 – June 30, 2011



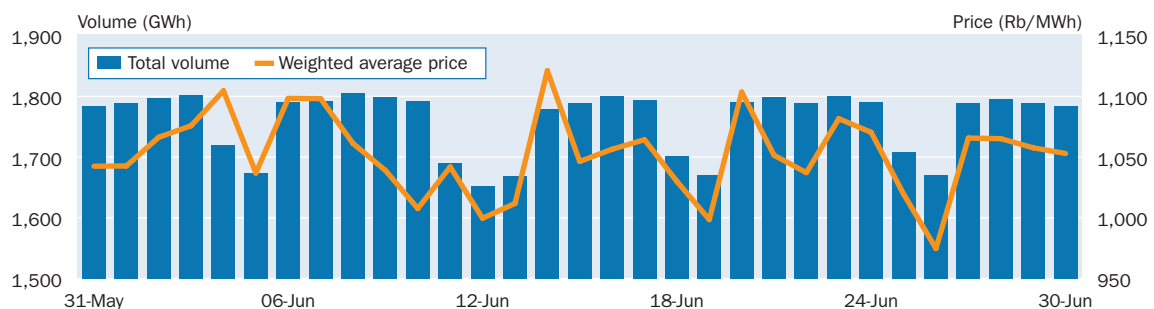
Source: PolPX

Romanian day-ahead market, May 31 – June 30, 2011



Source: OPCOM

Western Russian wholesale power market, May 31 – June 30, 2011



Source: Trading System Administrator

OIL & GAS NEWS

Bulgaria

Chevron wins shale gas permit

Chevron has been awarded a five-year permit by the government of Bulgaria to explore for shale gas at the Novi Pazar block in the northeast of the country. "Chevron Bulgaria Exploration & Production was selected as the holder of the permit after a bidding process," the government said in a June 15 statement on its website.

Chevron was reported to have offered €30 million for the license, beating a rival bid from the UK's BKN Petroleum. The Novi Pazar shale gas deposit is estimated to contain between 300 billion and 1 trillion cubic meters of shale gas. The concession area is located on the territory of the oblasts of Razgrad, Silistra, Dobrich, Shumen and Varna and covers an area of nearly 4,400 sq km.

Sofia said Chevron would invest some €50 million (\$71 million) at the site, and would spend €4 million on environmental measures. Bulgaria's economy and energy minister Traicho Traikov was quoted as saying by the Sofia News Agency June 16 that Chevron would take on all the risk for shale gas exploration at the block, including whether "sufficient quantities of shale gas will be discovered or whether a potential extraction will receive a positive environmental assessment".

Chevron said June 16 it was pleased to have been awarded the license. "We now look forward to working with the Bulgarian authorities and bringing our experience in exploration and environmental protection to progress this opportunity," a spokesman said in a brief statement.

Traikov was quoted as saying that Bulgaria's shale gas deposits "should be able to guarantee its domestic consumption of gas for the next 1,000 years". Bulgaria is almost 100% dependent on Russian gas imports and has stated its ambitions to diversify away from Russia.

Two other shale gas license tenders are still under way, and bidders have until the end of June to submit bids. Denver-based Direct Petroleum, US-based Integrity Towers and Canada's Park Place Energy have previously won licenses to drill for shale gas in Bulgaria.

The Bulgarian license is the latest in a string of shale gas licenses won by Chevron in Eastern Europe. In Poland, considered Europe's most prospective country for shale gas, Chevron has four exploration concessions in the southeast of the country. It has contracted Polish drilling rig operator, PNiG Nafta Pila, to drill shale gas exploration wells, scheduled for the fourth quarter of this year.

Chevron also has shale gas acreage in Romania. In July 2010, it was awarded three onshore exploration licenses in the country's 10th licensing round. It has

also bought the Barlad onshore concession in Romania from the UK's Regal Petroleum for \$25 million.

Chevron is also said to be considering investing in shale gas production in Ukraine. Ukraine's Prime Minister Mykola Azarov said in this February Chevron was ready to make investments if it is assured of political stability and that the current taxation structure will not change.

Croatia

MOL denies corruption charges

Hungary's top oil and gas company MOL has denied charges that its chairman-CEO Zsolt Hernadi bribed former Croatian Prime Minister Ivo Sanader to obtain his approval for MOL taking control of Croatian national oil company INA.

MOL said in a June 21 statement it was "shocked but not surprised" by the allegations, which the company said fit a recent pattern of attacks "launched by those whose interests are threatened by...INA's reorganization". MOL stressed that no illicit payments were made to Croatian policymakers either during or after INA's privatization, and that MOL has no official information of any investigations to this effect.

According to a report by Croatian daily Vecerni List, quoted by Hungarian news portal index.hu, Hernadi is suspected by Croatian prosecutors of having paid €10 million to then-PM Sanader in 2008-2009 to ensure MOL was able to take control of INA. Sanader was arrested in Austria last December on unrelated corruption charges. Allegations against Hernadi were brought up during subsequent investigations, according to the report.

The allegations come at a time of considerable tension between MOL, which holds a 47.75% controlling stake in INA with an option on a further 1.6%, and the Croatian state, which owns 44.8%, and is keen to prevent the Hungarian company from acquiring a majority stake in its strategic oil and gas company.

MOL sought and failed to secure majority control in a public buyout last December, which irked Zagreb, claiming that it had not been advised in advance of MOL's intentions. In May, Croatia's financial market regulator HANFA brought criminal charges against MOL and unnamed officials for alleged manipulation of the market in purchasing shares of INA after the public bid – allegations vehemently denied by MOL.

Europe

Gazprom sees 14% rise in exports

Gazprom expects natural gas exports to Europe, excluding the former Soviet Union, to rise to as much as 158 billion cubic meters in 2011, up 14% from 139 Bcm in 2010, deputy chief executive Alexander Medvedev said June 20.

“Our conservative estimate to Europe is 155 Bcm and the more optimistic scenario is 158 Bcm,” Medvedev said at a press conference in Moscow, adding that Gazprom’s exports to the region in the first five months were 7 Bcm above the company’s plan. Exports to Europe in the first five months were 17% higher than the same period of 2010 and June exports are also up on the same period last year, although the rate of growth was lower, he said.

“Net sales to Europe are projected at over \$60 billion, on the same level as 2008,” Medvedev said, referring to the last year before the global financial crisis, when Gazprom exported a record amount of gas. When the economic crisis hit, Gazprom’s production and exports plummeted in line with European demand.

Medvedev also reiterated Gazprom’s support for the current pricing system, which uses long-term oil-indexed contracts. “We would never do anything to disrupt the traditional system of pricing not because we are so conservative, but because we first of all care about our consumers,” Medvedev said.

Gazprom is in ongoing talks with several major customers, including Eni, E.ON and GDF Suez, about reducing the percentage of the contracts based on the price of oil and increasing the weight of spot gas prices, Medvedev said. The gap between prices for oil-indexed contracts and on spot markets narrowed in Q4 2010 and Q1 2011, which will dampen enthusiasm for increasing the role of spot prices in long-term contracts, Medvedev said.

Gazprom earned \$7.2 billion in 2010 in “virtual exports” of gas under take-or-pay contracts for volumes that were not delivered, Medvedev said. In 2011, it has received \$1.2 billion in payments for undelivered gas and expects to receive another \$2.2 billion by the end of the third quarter as an advance from Turkey, Medvedev said.

Europe remains Gazprom’s main export market, but the company still hopes to close a deal to supply China despite its failure to sign on the dotted line during the St. Petersburg Economic Forum last week.

Medvedev said the next round of talks on the gas supply deal with China’s CNPC would take place after Gazprom’s annual shareholders’ meeting June 30. He said there was “a good chance” the deal would be closed by the end of 2011. Medvedev said if a deal is reached by the end of the year, gas supplies can still begin by the end of 2015.

Recent talks between Chinese President Hu Jintao and Russian counterpart Dmitry Medvedev failed to yield an agreement and the fate of the long-expected gas supply agreement remains in limbo.

In September 2010, Gazprom and CNPC signed a legally binding agreement on the supply of up to 30 Bcm per year of Russian gas to China but the two sides have yet to agree on a price formula. Moscow and Beijing signed an initial agreement on gas supplies in 2006, when they agreed to build two gas pipelines. The system would comprise an eastern and a western route, through which nearly 70 Bcm of gas could be exported to China.

Novatek eyes LNG, storage in Europe

Russian independent gas producer Novatek is considering building import terminals for liquefied natural gas as well as underground storage facilities in Europe, a spokesman told Platts June 22, confirming remarks made by its chief executive Leonid Mikhelson.

He did not provide more details, such as whether the new facilities would be for Novatek’s own use.

The news follows a call in late May by the EU’s Energy Commissioner Gunther Oettinger for an end to Gazprom’s monopoly on exports. At the moment, the only exporter of Russian gas is Gazprom, which has a legal monopoly on pipeline and liquefied natural gas exports. The Russian government has hinted in recent months that this could change with Novatek expected to build its Yamal LNG export terminal in Russia’s far north.

The independent gas producer is due to make a final investment decision by the end of next year but it has now emerged that the terminal’s planned output of 15 million mt per year, is to be marketed by Gazprom, in exchange for an agency fee of 1%. “Yamal LNG will be exported through Gazprom Export, thus preserving Gazprom’s monopoly,” Novatek CFO Mark Gyetvay said June 21.

Nord Stream sections connected

Underwater connection work on the three sections of the first line of the Nord Stream natural gas offshore pipeline project has been completed. The underwater hyperbaric tie-in connection work of the sections was done in two offshore locations off the coast of Finland at a depth of 80 meters and another off the Swedish island of Gotland at a depth of 110 meters, the operating company said June 21.

The work is part of a precommissioning period that will run up until September and also involves cleaning, connecting with the route’s onshore landfalls in Russia and Germany, and pressure testing.

The first of the 1,224 km-long pipeline’s two lines was completed in May 2010, and will begin receiving gas for delivery this autumn, while pipe-laying work for the second line is expected to be completed in April 2012 in order to be operational by autumn 2012. Piping for the second line is presently being laid at a rate of about 6 km a day. According to the operating company, more than 230 km of the second line has been constructed to date.

The pipeline, which will have a transport capacity of 55 billion cubic metres when completed, is being developed by a consortium led by Gazprom, which holds a 51% stake. E.ON Ruhrgas and BASF/Wintershall each hold 15.5% stakes, with 9% stakes held by both Nederlandse Gasunie and GDF Suez.

Meanwhile, Germany’s chancellor, Angela Merkel, said June 21 that Germany will deepen the Nord Stream pipeline on the Baltic Sea bed if Poland decides to develop its ports in Szczecin and Swinoujscie on the German border. Speaking after the signing of an agreement on maritime access as part of a wider

cooperation deal held to mark the 20th anniversary of the signing of a 1991 cooperation treaty between the neighboring countries, Merkel said should access to Swinoujscie become difficult “then we are obliged to lay this pipeline deeper so that there will be no problems accessing the port”.

Poland has long complained that the pipeline would block access to the ports for larger ships if it wanted to deepen them in future. Poland is building its first liquefied natural gas terminal in Swinoujscie and expects to start receiving its first shipments of LNG in July 2014.

Montenegro

Consultancy services sought for offshore concession

Montenegro's Ministry of Economy has invited bids by July 22 from qualified consultants to assist with the implementation of a tender procedure for exploration and production of hydrocarbons in the Montenegrin offshore. The estimated value of the contract amounts to €0.4 million, including VAT, according to a ministry statement.

Tender documents are available from the Ministry of Economy, Rimski Trg 46, Podgorica, upon payment of a non-refundable fee of €100 to the Montenegrin Budget a/c no. 832-978-76, and accompanied with the note: For tender documents under invitation no. 10/11.

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Poland

Four shortlisted for Lotos

Poland has shortlisted four bidders in the sale of a 53.2% stake in the country's second-largest refiner Grupa Lotos, the Polish Treasury Ministry said June 16, without naming the companies involved.

The four companies now have until November 16 to submit a binding offer for the controlling stake in Lotos, which owns the 210,000 b/d Gdansk refinery on Poland's Baltic coast. One of the four bidders was chosen “conditionally”, the ministry said in a statement. The stake is valued at an estimated Zloty 3.19 billion (\$1.1 billion).

Initially, six companies, including four from Russia said to include TNK-BP, Gazprom Neft and Rosneft, made preliminary offers for the stake, though two of the six have now been ruled out of the process.

Analysts believe both Russian and non-Russian companies made the shortlist, with a Chinese bidder likely to be among the four. Earlier this month, Russian-Anglo joint venture TNK-BP said it had submitted a preliminary offer for Lotos, while media

reports have named Gazprom Neft and Hungary's MOL as potential buyers.

Poland's Prime Minister Donald Tusk has said previously that all companies are welcome to bid but has cautioned that the sale conditions regarding the strategic state importance of Lotos might make the offer unattractive for the Russians. Although relations between Russia and Poland have improved in the last three years it would still be politically difficult, if not impossible, to sell such a strategically important energy company to the Russians.

Some analysts believe the privatization is unlikely to go ahead in its current form and that the government will be forced to sell off a minority stake via the stock exchange. Tusk has also said the government does not expect the deal to be completed until 2012.

In March, Lotos completed a \$2 billion modernization of its refinery to increase throughput capacity by 75% to 10.5 million mt per year.

Earlier this month, it signed a letter of intent with the country's crude oil pipeline network operator, PERN Przyjazn, to jointly build new underground crude storage near the Gdansk refinery (*EIEE 217/28*).

PERN owns the Polish section of the Druzhba pipeline which ships around 30% of Russian crude exports via Belarus to refineries in Plock and Gdansk. The crude also is sent to the Naftoport lifting terminal in Gdansk for export and to refineries in Germany.

3Legs drills first shale gas well

UK-based 3Legs Resources announced June 21 that its wholly-owned subsidiary Lane Energy Poland had drilled and cased the first horizontal shale gas well in Poland.

The AIM-listed company, which has teamed up with ConocoPhillips to explore for unconventional gas in Poland, said the Lebien LE-2H well in the Lebork concession in Pomerania, northern Poland, encountered high gas saturations throughout the horizontal section and supported the company's existing regional geological interpretation.

“We are pleased to have finalized the drilling and casing of our first horizontal well which is, to the best of our knowledge, the first horizontal shale gas well to be drilled in Poland,” Peter Clutterbuck, chief executive of 3Legs Resources, said in a statement. “We are very encouraged by the excellent gas shows encountered while drilling this horizontal well and we look forward to the results of the well stimulation and test programme later this year,” he added.

The company said that the Lebien LE-2H well would shortly be made ready for an extensive well stimulation program, scheduled to take place in the third quarter of 2011, following which the well will be put on test. The drilling rig will now move to a new location for the company's Warblino LE-2H horizontal well on its Damnica licence, scheduled to spud in the third quarter of 2011, it said.

Lane spudded the vertical Lebien LE1 test well in June last year and carried out a single stage fracture stimulation in November followed by testing which

included limited gas flaring. Last August it spudded its second well, Legowo LE1 in Cedry Wielkie, south of Gdansk, and began drilling its third well in the Lebien area in May.

3Legs Resources, through Lane Energy, was one of the first companies to secure shale gas licenses in Poland ahead of the rush witnessed in the past two years. In August 2009, it teamed up with ConocoPhillips to jointly evaluate the company's six exploration concessions in the onshore Baltic basin region which includes Silurian and Ordovician shales, considered to be one of the most promising shale gas areas in Europe. Its sister company, Lane Resources Poland, also has three exploration concessions covering 620,000 acres near Cracow in the south of the country. 3Legs Resources also has two licenses covering 630,000 acres in the Baden Wurttemberg region in southern Germany.

PGNiG to drill at Kutno

Poland's dominant natural gas producer PGNiG said June 28 it plans to start drilling a first test well at its Kutno natural gas concession in central Poland in August.

Kutno is estimated to contain up to 100 billion cubic meters of reserves, which would make it by far the country's largest gas field. Currently the largest conventional gas field is the Przemysl deposit with 21 Bcm of reserves. According to the environment ministry, Poland has recoverable conventional natural gas reserves of 147 Bcm.

PGNiG holds a 50% stake in the 706,000 gross acre Kutno concession which is a Rotliegend play in the Northwest European Permian Basin, stretching eastwards from the UK across continental Europe to Poland. The operator of the concession is independent exploration company FX Energy, which holds the remaining 50% stake.

"The deposit has the same parameters as the richest ones in Holland and the North Sea," the daily *Rzeczpospolita* quoted Piotr Gliniak, PGNiG's exploration department director, as saying June 28.

Russia

Novatek, Gazprom agree on Yamal LNG fee

Novatek, Russia's largest independent natural gas producer, has agreed with Gazprom Export the terms of an export agreement for LNG from its planned Yamal LNG terminal project, allowing Novatek to send LNG to international markets while preserving Gazprom's monopoly on the export of Russian gas, Novatek CFO Mark Gyetvay said June 21.

Speaking at an oil and gas conference in London, Gyetvay said a deal had been signed this month that would see Gazprom Export take a 1% agency fee for LNG exported from Yamal LNG. "Yamal LNG will be exported, through Gazprom Export, thus preserving Gazprom's monopoly, minus the 1% agency fee," he said.

The monopoly is governed by Russia's Law on Gas Exports, which came into force in July 2006, and guarantees that Russian gas can only be sent out of the country by Gazprom. The Russian Customs Service went further in October of that year, clarifying that the legislation covered both pipeline gas and LNG.

Novatek is expected to make a final investment decision on the Yamal LNG project, which will involve the construction of an LNG terminal on the Yamal Peninsula with capacity of 15 million mt per year, by the end of 2012. If approved, the first of three 5 million mt/year trains is expected to be commissioned in 2016. Novatek estimates the Yamal LNG project will cost between \$15-20 billion.

To assist with the cost of the project, Novatek is looking to bring in investors. In March, Novatek announced that France's Total would take a 20% stake and Gyetvay said the deal was expected to be closed on July 1. Novatek, which is to keep at least a 51% stake in the Yamal project, also has said it intends to invite two or three other international partners to join the project by the end of the year.

Gyetvay also said Yamal LNG would be shipped to both the European and Asia Pacific regions. Exports to Asia would be made easier by the opening up of the northern route, made possible by the melting of Arctic ice. The company last year shipped a cargo of condensate via the route, using an ice breaker, and now intends to send more cargoes to Asia. "We plan to deliver six or seven cargoes through the northern route this year, cutting the navigable time by 50% and the nautical miles by 50%," he said.

Russia to cede control of Rosneft

Russia's government will reduce its holding in some of its national companies, including the country's biggest oil producer Rosneft, to less than a controlling stake within the next three to five years, Alexei Kudrin, Russia's finance minister, said June 27.

"Within the next three to five years, the state is to withdraw from holding a controlling stake in all companies that are key for their industries," Kudrin told a Renaissance Capital investment conference in Moscow. "This is our final decision." The reasoning behind the move is to improve the corporate governance of the companies and attract more private investment for their development, Kudrin said.

Arkady Dvorkovich, economic adviser to Russian President Dmitry Medvedev, said the government's decision was based on concerns that the country's previous policy for the development of its major companies did not allow for significant growth of the national economy. "We need new investments, a new class of investors, hundreds of new companies," Dvorkovich told the conference, adding that the Russian economy needs to find ways to grow irrespective of what is happening on the US and European markets.

The government will prepare an updated list of companies in which it is to reduce its stake by August 1,

Dvorkovich told reporters on the sidelines of the forum. He said the key changes to the list would be changes in the size of the government's stakes in Rosneft and VTB Bank. Kudrin also highlighted the privatization of state stakes in tanker fleet operator Sovcomflot and the biggest airline Aeroflot.

The actual size of stakes to be sold off and the deadlines for sales will be known after the new list is prepared, Dvorkovich said. "In those sectors where there is competition and a sufficient number of investors, the state could eventually cut stakes to zero," he said.

In sectors where competition is absent or not significant, such as infrastructure or industries related to national security, state control is not a hindrance for investment and will be preserved in the foreseeable future, Dvorkovich said.

For example, the government is not considering a reduction in the state's stake in gas giant Gazprom, which owns all the country's high-pressure pipelines and also has a monopoly on gas exports. "Gazprom has a major infrastructure element so there will be no hurry regarding Gazprom," he said. The same applies to oil pipeline operator Transneft. "The government is not discussing the possibility of reducing its stake in Transneft to below a controlling stake," he said.

In November, the government approved a privatization plan for state-owned property to be sold by 2015 that included a 25% minus one share stake in Rosneft. The government said at the time that it was considering selling up to 15% of its stake in Rosneft on the stock market, with another 10% stake minus one share to be sold via swaps. Rosneft President Eduard Khudainatov said at the time the company's management believed 2014-2015 would be the "optimal" time frame for attracting a foreign strategic investor within the governmental privatization program.

When asked June 27 if the government was likely to sell more than 25% of Rosneft, Kudrin said: "Yes." This would take the state's holding in the company to below 50%. The government currently owns a 75.16% interest in Rosneft.

Kudrin said the recent global economic crisis, which Russia managed relatively smoothly thanks mainly to the strength of its oil and gas sectors, highlighted the need to restructure the national economy as the hydrocarbon industry was unlikely to continue being "the engine" of the national economy. "Oil output is expected to remain at the current level for the next 10 years. In a situation where our key industry is not going to grow we need to find new [areas] for growth," he said.

Novatek set for new Yamal licenses

Novatek, the country's largest independent gas producer, expects to be awarded four gas licences on the Yamal peninsula in Russia's far north that will contribute to the Yamal LNG project, company CFO Mark Gyetvay said June 21.

The blocks, for which Novatek was the only qualified bidder, have resources estimated at some 20 billion barrels of oil equivalent of gas and condensate, Gyetvay

said, and would enable Novatek to add new resources for Yamal LNG and also allow it to supply liquids into the Russian market. "Next week, Novatek will be awarded four licenses-two on the Yamal peninsula and two on the neighboring Gydan peninsula," he said.

The resources, he said, would "allow us not only to add new resources to the LNG project, but also to build a pipeline to take natural gas liquids and condensate to process in our existing facilities," Gyetvay said. The four licenses were designated as additions to the resource base for Yamal LNG in a government order signed by Prime Minister Vladimir Putin on December 1, 2010.

News agency Interfax reported June 23 the head of Rosnedra, Russia's subsoil agency, as saying that it had recommended that the government award the licenses to Novatek. Novatek was the only valid bidder in the auction after Yakutskaya Toplivno-Energeticheskaya Company and Itera had their bids rejected by the auction's commission. However, in line with established practices, Rosnedra recommended that the licenses be transferred to Novatek, for an initial payment of Rb 6.7 billion (\$240 million), which equates to under \$0.05 per boe of gas.

The four fields (Salmanovskit, Geophysicheskii, Severno-Obskiy and Vostochno-Tambeisky) hold approximately 2.8 trillion cubic metres of gas (approximately 978 bcm of C1+C2, the rest classified as resources) and 655 million mt of potential oil. Alfa Bank said that the four fields would add over 30% to Novatek's reserves on the basis of only the C1+C2 reserves, or more than double the independent's gas reserve base if all the resources are considered.

Rosneft to ramp up output by 2020

Russia's largest oil producer Rosneft expects its oil and gas output to increase to 170-180 million mt per year of oil equivalent (3.4-3.6 million boe/d) by 2020, a senior company official said June 22.

"The growth will be [achieved] mainly through gas projects and new oil projects," the company's acting upstream chief, Gani Gilayev, told reporters on the sidelines of an oil and gas conference in Moscow.

Gilayev provided no separate figures for the company's crude and gas production outlook, but said he did not expect a decline in the company's crude output, which was 2.32 million b/d in 2010. Rosneft produced a total of 2.52 million boe per day in 2010, so Gilayev's forecasts imply output growth of more than 33% over the next 10 years. Rosneft expects crude output at its main production unit, West Siberia-focused Yuganskneftegaz, to remain at the level of at least 65 million mt per year over the period 2011-2015, he said.

Rosneft is also looking to the Russian offshore to boost output, and Gilayev said the company is likely to decide together with partner BP whether to proceed with exploration work at the offshore Sakhalin 5 project in Russia's Far East next year.

Rosneft is currently interpreting available geological data for Sakhalin 5, Gilayev said.

Asked whether BP is likely to leave the project amid doubts over the commercial reserves in the project's license area, Gilayev said: "We have no information on the issue". But he pointed out that Rosneft specialists believe there are "certain structures in place".

Gilayev said the partners are likely to decide on the future of the project in 2012 once the data's interpretation is completed. The partners conducted 3-D and 2-D seismic at the Kaygansko-Vasukansky license block of the Sakhalin 5 project in 2009. In late 2009, BP and Rosneft returned the license for the East Schmidt block, which was also a part of the Sakhalin 5 project, to the government after evaluating seismic data. East Schmidt was the second block developed by Elvay Neftegaz – the 51:49 joint venture between Rosneft and BP – that the partners have decided to pass on. At the end of 2008, Elvay Neftegaz decided not to extend the license for West Schmidt following the drilling of two dry wells.

Gilayev said Rosneft also plans to spend Rb 91.1 billion (\$3.25 billion) on its associated gas program to 2014 to increase its utilization rate to 95-98%. "The gas will go into processing plants, electricity generation and be used on site," he said. Rosneft's associated gas utilization rate was just 52% in 2010, Gilayev said, representing a sharp drop from its 65.3% utilization rate in 2009 as production at its giant Vankor field ramped up to 255,000 b/d from 73,000 b/d in 2009. Russian oil producers are expected to achieve a 95% associated gas utilization rate by January 1, 2012, according to government regulations. However, few producers are expected to make the deadline and therefore may face fines.

SurgutNG to raise capex by 15%

Surgutneftegaz, Russia's fourth largest oil producer, intends to increase investment this year in its upstream business by 15% year-on-year to increase production, chief executive Vladimir Bogdanov said at the company's annual general meeting June 24.

The company said it invested Rb 120 billion (\$4.24 billion) last year in its upstream operations out of a total investment of Rb 140 billion.

Bogdanov said that the company has targeted crude production this year of 60.7 million tonnes and aims to maintain output at 61-62 million tonnes per year over the next five years, thanks to growth at Talakan and a reversal in declines at core fields from the use of new technologies and an expanded drilling plan. Its production has declined steadily over the past few years from 65.5 million tonnes in 2006 to 59.5 million mt in 2010. Gas production, however, could fall 2.2% to 13.1 billion cubic metres this year from 13.4 bcm in 2010.

The company also announced plans to participate in all major upstream auctions to be held by the government. Analysts at Alfa Bank said June 27 that Surgutneftegaz may bid for Severo-Rogozhnikovskoye

(90 million mt C1+C2 reserves), Imilorskoye (280 million mt), Gavrikovskoye (124 million mt), Ereginskoye (73 million mt) and Nazimskoye (58 million mt). Any potential purchases could be financed with the €1.88 billion it raised from the sale of its 21.2% stake in Hungary's oil and gas company MOL last Month (*EiEE* 216/3).

Bogdanov also said the profit margin on the company's East Siberian Talakan oil field dropped 67% after the government suspended a preferential export duty on the field. After enjoying a much lower export rate for more than a year, the company had to start paying the full duty on crude extracted from Talakan in May.

Lukoil expects gradual growth

Lukoil, Russia's second largest oil producer, may be able to produce 100 million tonnes per annum in Russia by 2017-2018, according to a June 24 report by the daily *Vedomosti* quoting the company's vice president Vladimir Mulyak. Mulyak said that production at its fields will stabilize by 2013 and rise by 1.6% annually thereafter.

Analysts at Alfa Bank said the production targets appear "too optimistic". "We note that in its latest presentation to investors, Lukoil said it intends to stabilize its production decline in West Siberia, its core region of operations, at -1.5% per year. Considering that in the first quarter of this year, Lukoil's cumulative production declined by 4.1% year-on-year, and taking into account uncertainty surrounding new upstream projects, the announced production targets appear "too optimistic", the Moscow-based brokerage said in a daily briefing June 24.

"Given the sharp production deterioration in Lukoil's core regions and the recent disappointment at Timan-Pechora, we believe the portfolio of existing projects (Caspian fields and the partnership with Bashneft on the Trebs and Titov field), even following implementation of advanced oil recovery techniques, will likely only stabilize output at best. Oil production is unlikely to rise, meaning that new projects will have to be brought online in order to reach this," it added.

Tatneft secures \$550m club loan

Tatneft, Russia's sixth largest oil producer, said June 27 it had secured a \$550 million unsecured club loan.

The vertically-integrated oil and gas company, which develops mainly depleted reserves in the Volga republic of Tatarstan, said in a statement that the fixed rate loan has an interest rate of 3.5% per annum with a six-month interest period and a bullet repayment after three years.

The loan was arranged by BNP Paribas, The Bank of Tokyo Mitsubishi UFJ, Commerzbank Aktiengesellschaft, ING Bank, Natixis, Nordea, Sumitomo Mitsui Banking Corporation and WestLB AG, London Branch.

Earlier this month, the company reported strong first quarter results with net income rising 111% year-on-year to Rb 24.5 billion. Revenues rose 25% to Rb 131.7 billion, but below market consensus due

to a 13% year-on-year fall in crude sales by volumes, most notably to the CIS.

Overall costs increased only 17.6% year-on-year, mainly due to less-than-expected export duties and mineral extraction tax payments. As a result, EBITDA increased 56% year-on-year to Rb 30.1 billion.

The company's main shareholder is the Republic of Tatarstan through its holding company Svyazinvestneftekhim, which holds a stake of 34%. The government of Tatarstan holds also a golden share in the company.

Serbia

NIS explores in Banat

Serbia's vertically-integrated oil and gas company NIS announced June 16 that it had started drilling exploration wells in the region of Banat in the country's northeast which borders Romania and Hungary.

The drilling of the Majdan h-2 well is the second this year in Serbia, and will be followed before year-end with exploratory drilling at three further wells, the company said. Further drilling is planned at the Melenci North well in the Banat region, as well as at Jelica-1 and Ostrovo North-1, south of the Sava and Danube rivers.

Slovakia

SPP expects losses on regulated sales

Slovakia's dominant gas company Slovensky Plynarensky Priemysel (SPP) said June 16 that it would lose money on gas sales to domestic regulated customers in 2011, following a loss of over €70 million (\$99 million) on sales to regulated gas customers in 2010.

The company said it had been served notice by the Regulatory Office for Network Industries of an increase in prices for gas supply to households and heat generators to apply from July 20, 2011 but that this new price hike would still result in losses. "New prices of gas will cover only a part of SPP's costs that are connected with gas supplying the regulated segments," it said in a statement.

"The currently valid price regulation as set by the Office for Regulation of Network Industries does not reflect economic reality and is not built on principles of fair price regulation," SPP said. "For any company, including SPP, it is not sustainable to report a long-term loss in one of the market segments".

The energy sector watchdog approved a 4.47% rise in household gas prices in December 2010 but it fell short of that demanded by SPP. In addition it is coming under pressure from new market entrants in the retail market, which is expected to see it lose further market share.

SPP is 51% state owned but managed by a consortium of E.ON Ruhrgas and GDF Suez, which share the remaining 49% stake in the company.

Ukraine

Tymoshenko warns Ukraine may cede gas network

Ukraine's former Prime Minister Yulia Tymoshenko, speaking June 24 at a trial for allegedly negotiating an unfavourable natural gas deal with Russia in January 2009, accused Ukrainian leaders of planning to "surrender" the country's national gas network to Gazprom.

Tymoshenko is accused of exceeding her authority in ordering the signing of a 10-year agreement in January 2009 that set prices for Ukraine that are now criticized as being excessively high. The case is the first of three investigations underway against Tymoshenko, now leader of the opposition. The probes began after she lost the presidential election to Viktor Yanukovich in February 2010.

Tymoshenko rejected the probes as an attempt to silence Yanukovich's political opponents, and accused the president and Prime Minister Mykola Azarov of manipulation that may lead to surrendering Ukraine's gas pipelines to Russia. "I believe that both Yanukovich and Azarov are deliberately creating hysteria over gas prices because they want under this cover to surrender the country's key asset, the gas transportation system," Tymoshenko claimed. "Collusion is underway behind the backs of the Ukrainian people to surrender our pipelines".

Tymoshenko also attacked Yanukovich and Azarov for the rising gas prices: "When I signed the agreement in 2009, the price of one barrel of oil was at a record high price of \$147. Now, the [oil] price is \$110-115. I don't understand why they declare the [gas] price at \$500/1,000 cu m". Azarov said recently the gas price for Ukraine exceeded prices that Russia has been charging other countries in Europe, including Germany and Slovakia. Ukraine is buying Russian gas at about \$297 per 1,000 cu m in the second quarter, compared with \$264/1,000 cu m in the first quarter, according to Naftogaz Ukrainy.

Eni, Cadogan deepen upstream ties

Italian oil major Eni and UK-listed Cadogan Petroleum have entered into a cooperation agreement to identify new upstream opportunities in Ukraine following an agreement in April for Eni to take stakes in two of Cadogan's existing Ukraine gas licenses.

"Cadogan and Eni are working together to identify other upstream opportunities in Ukraine and to facilitate this, we recently entered into a cooperation agreement," Cadogan Chairman Simon Duffy said in a statement June 16.

Duffy added that "good progress" had already been made between the two companies at the Pokrovskoe and Zagoryanska fields in eastern Ukraine, and government approvals for the deal had been granted. "Since the announcement of the anticipated investment in two of our eastern Ukraine assets by Eni, good progress has been made in fulfilling the conditions

precedent for completion of the transaction,” Duffy said. “The Ukraine anti-monopoly commission has given approval for the transaction to proceed and the internal restructuring necessary has been largely completed,” he said. He added that he expected the transaction to be completed in early July.

Duffy also said that a drilling and services contract has been awarded to Saipem to deepen the Pokrovska 1 well at the Pokrovskoe field, which was suspended in December 2010. Site preparation has been completed, with drilling operations scheduled to start in July.

This April, Eni agreed to take a 30% interest in the Pokrovskoe license from Cadogan, with an option to take a further 30%, and a 60% stake in the Zagoryanska license. In return, Eni agreed to pay Cadogan \$38 million and to fund a \$30 million work program including drilling and seismic reprocessing. If the exploration work is successful and production licenses are awarded, Eni said it would pay further amounts of up to \$90 million within the next year.

Cadogan has working interests in 11 license areas covering 14 fields in Ukraine with a combined area of about 1,150 sq km. It started first commercial gas output from the Zagoryanske 3 well in late 2010.

VTB raises stake in JKK

VTB Capital, a subsidiary of Russian state bank VTB, announced this month that it has increased its shareholding in the UK-based JKK Oil & Gas, one of the largest private oil and gas producers in Ukraine, to 6.4%.

The deal makes VTB Capital, the fourth largest shareholder in the company. Ralkon Commercial, which is owned by Ukrainian businessman Igor Kolomoyskiy, remains the largest shareholder in JKK with a stake of 27.06%. Kolomoyskiy is the co-owner of Privat Group. Ukraine’s state oil and gas company Naftogaz holds a 5.8% stake.

As of this February, other major shareholders in the upstream explorer and developer, which operates in Ukraine through its wholly-owned subsidiary Poltava Petroleum Company, are Glengary Overseas with

11.45%, Interneft with 6.62%, Aberforth Partners with 5.81% and Blackrock Investment Management UK, which holds a 4.26% stake.

PPC produces oil and gas at four fields located within the Novo-Nikolaevskoye complex located in the Poltava region of Ukraine. In addition it holds exploration licenses for the Zaplavskoye and Elizavetovskoye fields, which are located adjacent to its existing producing fields and cover an area of nearly 210 sq km.

JKK pre-paid swap with Credit Suisse

JKK Oil & Gas said June 17 that it had secured \$50 million for capital expenditure and other purposes through a pre-paid swap transaction with Credit Suisse International.

The UK-based upstream operator said that the deal would provide it with the flexibility of additional funding in advance of starting production in Russia. JKK expects to start production at the Koshekhablskoye gas field, located in the Republic of Adygea in southern Russia, this autumn.

The transaction has been structured to enable repayment by JKK from future sales of oil. Under this structure, JKK has hedged forward sales of Urals Med crude oil at \$94.00 per barrel while retaining value if prices rise above \$130 per bbl. The company said that the Urals Med index is the closest international benchmark for the range of oil and gas produced by JKK and delivered in local markets. The volume allocated represents approximately 10% of the group’s current daily production on a barrel of oil equivalent basis. The \$50 million is repayable over an eighteen month schedule commencing in September 2011.

JKK acquired Yuzhgazenergie, which holds the licence to redevelop the Koshekhablskoye gas field, in 2007. JKK said that a new gas plant is being commissioned with production due to commence in autumn 2011. It said the aim is to have three wells in production at start-up with further wells brought on stream in the second phase in 2012. The field is estimated to have oil and gas reserves of 44.8 million m barrels of oil equivalent as of the end of 2010.

East European currencies, June 29, 2011

| Country | Currency | £ | \$ | Eur | Country | Currency | £ | \$ | Eur |
|--------------------|----------|---------|---------|---------|-----------|----------|--------|-------|--------|
| Albania | Lek | 157.30 | 98.16 | 141.31 | Macedonia | Denar | 68.55 | 42.78 | 61.59 |
| Belarus | Rouble | 7956.16 | 4965.00 | 7147.61 | Moldova | Leu | 18.72 | 11.68 | 16.82 |
| Bosnia Herzegovina | Marka | 2.18 | 1.36 | 1.96 | Poland | Zloty | 4.45 | 2.77 | 3.99 |
| Bulgaria | Lev | 2.18 | 1.36 | 1.96 | Romania | New Leu | 4.70 | 2.93 | 4.22 |
| Croatia | Kuna | 8.20 | 5.12 | 7.36 | Russia | Rouble | 44.91 | 28.03 | 40.35 |
| Czech Rep. | Koruna | 27.13 | 16.93 | 24.37 | Serbia | Dinar | 113.62 | 70.91 | 102.08 |
| Estonia | Kroon | 1.11 | 0.69 | 1.00 | Slovakia | Euro | 1.11 | 0.69 | 1.00 |
| Hungary | Forint | 296.15 | 184.81 | 266.05 | Slovenia | Euro | 1.11 | 0.69 | 1.00 |
| Latvia | Lats | 0.79 | 0.49 | 0.71 | Turkey | New Lira | 2.61 | 1.63 | 2.34 |
| Lithuania | Litas | 3.84 | 2.40 | 3.45 | Ukraine | Hryvna | 12.80 | 7.99 | 11.50 |

Source: Financial Times

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